BNG BANK ANNUAL REPORT

2022

Together towards tomorrow

BNG BANK

Driven by social impact

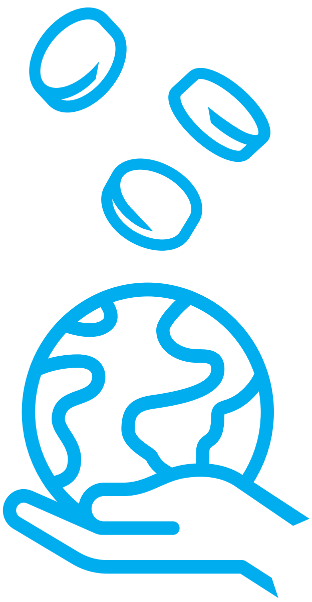
This document is the PDF/printed version of the 2022 Annual Report of BNG Bank and has beenprepared for ease of use. The 2022 Annual Report was made publicly available pursuant to section 5:25c of the Dutch Financial Supervision Act (Wet op het financieel toezicht), and was filed with Netherlands Authority for the Financial Markets in European single electronic reporting format (the ESEF package). The ESEF package is available on the company's website at https://www.bngbank.nl/Over-BNG-Bank/Kerncijfers-enjaarverslagen/Jaarverslag-2022 and includes a human-readable XHTML version of the 2022 Annual Report. In any case of discrepancies between this PDF version and the ESEF package, the latter prevails.

ANNUAL REPORT BNG BANK 2022

2022

Together towards tomorrow

DIRECTORS' REPORT



Maximising our impact on society

That is what drives us. To this end, we support our customers and we want to help them achieve their social objectives with our financing. We are on this journey together and together we set ambitious goals.

Ingrid Hoogstrate

'BNG Bank offered an initial solution in the form of prepaid debit cards. You could tell that they were keen to solve this problem.'

➤ more about prepaid debit cards p 34

Heimen Visser

'In 2022, Renkum became the first municipality to combine public lighting with electric vehicle charging.'

➤ more about multifunctional street lights in Renkum p 62

Mark Canjels

'BNG Bank combines the digital facilities of a modern bank with bespoke customer relationship management. We feel seen as well as heard.'

➤ more about Samenfoort p 76

Mark Janssen

'This is a bank that is interested in more than just numbers.'

➤ more about Radboudumc p 80

Merlien Welzijn

'BNG Bank have been our principal banker for many years, so they are familiar with our portfolio.'

➤ more about Woonpartners Midden-Holland p 94

FOREWORD

2022 was a year with many faces. It started on a hopeful note. The COVID-19 pandemic was on the wane and society was opening up. The economy was recovering and there was relief that two difficult years were now behind us. This positive sentiment was dashed at the end of February, when Russia invaded neighbouring Ukraine with a military force. This large-scale military conflict in Europe has had a major effect on all of us. Freedom and safety proved not to be self-evident.

In the months after the Russian invasion, great concerns arose about energy security, bottlenecks in production chains and soaring energy prices. Inflation ran into double figures, which had not happened in a long time.

It was also the year of increasing concerns about the climate. The view that the situation is urgent gained greater support. There are ecological boundaries which we as a society have crossed. This has caused the climate to change. The consequences are becoming increasingly noticeable. It turned out that effective measures can no longer be postponed.

Especially in turbulent times like the present, BNG Bank finds it important to exude calmness and be a predictable and reliable partner. BNG Bank is well aware of its responsibility. We know what drives us and we know what we stand for. We are the bank for the public domain, and we are there to help our clients make an impact and achieve their objectives. I am very pleased that we performed our tasks well also in 2022. BNG Bank has stayed on course, and despite the unrest and turmoil around us we did what we are good at.

First of all, we properly executed our core task, which is primarily to provide funding on favourable terms. In this way, our clients can perform their social tasks and make the desired impact. During the reporting year, we also took new steps in connection with our strategy *Our Road to Impact*. In the interest of our clients, we want to further optimise and streamline our operations. In 2022, we made significant investments in systems and in people. We need to do so in order to be and remain a robust and reliable partner for our clients. ‘Our Road to Impact’ is a multi-year programme and will be continued in 2023.

We also presented our climate plan during the reporting year. With this plan, BNG Bank is taking the next step on the road to energy transition and CO2 reduction. The plan sets out the goals we wish to achieve with our clients in order to make the Netherlands more sustainable, more future-proof and greener. The point of departure here is that BNG Bank is the bank *of* and *for* the public domain. The energy transition and CO2 reduction are social challenges to which our clients are to make a substantial contribution. The climate plan sets out how BNG Bank proposes to help clients in this regard.

BNG Bank is market leader in the public domain. Rather than sitting back complacently, we keep challenging ourselves to understand and serve our clients even better. The municipalities, housing associations, healthcare institutions, educational institutions and energy companies have rewarded our efforts with a large number of loan applications. This is proof that they regard us as a reliable and attractive partner in the transitions they are facing. I am proud of this and commend our teams for their work.

Financial results

From a banking perspective, 2022 was a good year with healthy financial results. BNG Bank realised EUR 12.3 billion in new long-term loans. This figure exceeded our target. The net interest income was EUR 481 million, which is EUR 73 million more than the net interest income for 2021. The increase can partly be attributed to one-off circumstances and to the rise in interest rates. BNG Bank considers its interest rate results as structurally healthy. Fof the year 2022 we realised a net profit of EUR 300 million. BNG Bank is satisfied with this result.

BNG Bank is robustly capitalised. At year-end 2022, the Common Equity Tier 1 ratio and the Tier 1 ratio were 35% and 37% respectively. Rating agencies Fitch, Moody's and S&P all assign BNG Bank their highest respective ratings. This means that BNG Bank is among the safest banks in the world. Based on this fact, we were able throughout the year to attract funding in various currencies and at attractive rates, for both the short and long term. BNG Bank increasingly uses ESG bonds to attract funding. As a percentage, this was still below 30% in 2021, but grew to 36% in 2022.

In line with its current policy, BNG Bank proposes to distribute 50% of the net profit, adjusted for the additional Tier 1 capital payout. This represents a dividend distribution of EUR 139 million.

Outlook 2023

In 2023, we will continue on the course we have set. It will again be a year in which it is important to stay on track, despite the turbulence around us. The ‘Road to Impact’ will remain the guideline for our strategy. We will keep making every effort to reduce the carbon footprint of our loan portfolio and to increase our social impact. We will do this together with our clients. In addition, BNG Bank will continue to invest in the quality of its staff and in process optimisation. This is important for efficient and high-quality service provision.

In closing

The good results achieved in the reporting year would have been impossible without our staff members. They are indispensable, also when it comes to realising our future ambitions. Our staff members are our strength because of their commitment and their drive to make a social impact. They deserve our thanks. On behalf of BNG Bank, I would also like to express my thanks to our clients, shareholders, Supervisory Board members and other stakeholders for their valuable contributions to our overall performance.

I would like to extend particular thanks to Kees Beuving, who stepped down as a member of BNG Bank's Supervisory Board this past year. The bank derived much benefit from his expertise and we are grateful for his constructive contribution to BNG Bank’s development.

Gita Salden

CEO BNG Bank

2022 KEY FIGURES

Market leader in the public domain

Volume of lending

€ 12.3 billion

Balance sheet total

€ 112.1 billion

Interest result

€ 481 million

Long-term loan portfolio

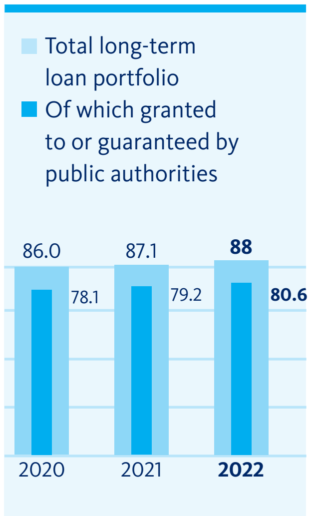
€ 88 billion

Net profit

€ 300 million

Proposed dividend

€ 139 million



Common Equity Tier 1 ratio

35%

2020	2021	**2022**
33%	32%	**35%**

Tier 1 ratio

37%

2020	2021	**2022**
39%	38%	**37%**

Leverage ratio

13%

2020	2021	**2022**
3.5%	10.6%*	**13%**

*Increase as a result of the new Capital Requirements Directive

1 DRIVEN BY SOCIAL IMPACT

1.1 Our Road to Impact

In 2022, BNG Bank took further steps towards implementing its updated strategy: ‘Our Road to Impact’. As the bank of and for the public domain, we are there to help our clients make an impact and achieve their objectives. In 2022, we measured our clients’ impact for the first time. Our target is a 10% increase in our clients' impact in 2023 compared to 2021. Although we realise that this is an ambitious goal, we feel we need to establish clear milestones. In the interest of our clients, we continue to invest in our operations and staff members.

Purpose

BNG Bank has traditionally been the bank of and for the public domain and the public interest in the Netherlands. BNG Bank’s purpose is ‘Driven by social impact’. This purpose is leading for all BNG Bank’s activities.

The aim is to ensure that clients see BNG Bank as the go-to partner for funding the resolution of social issues, and that the bank is successful in achieving and demonstrating this. The bank engages with its clients about this purpose and helps them achieve their social objectives. In doing so, the bank provides its clients with funding on the most favourable terms possible.

BNG Bank is dedicated to serve the public domain in the Netherlands. The public domain includes:
- central government, provinces, municipalities and water boards;
- organisations that carry out a public service, such as housing associations, healthcare and educational institutions; and
- organisations that have half or more of their share capital supplied by the government and/or activities that are fully guaranteed by the government.

In addition to organisations in the public domain, BNG Bank also finances projects in the energy, environment, mobility and networks sectors, provided they are part of the public domain.

Sustainable, reliable and professional

BNG Bank is driven by three core values:
- **Sustainable** indicates that BNG Bank’s actions are focused on making an impact, both now and in the long term. The bank is aware of developments in society and consequently focuses on solutions and building strong relationships with clients.

- **Reliable** is manifested in transparency in actions and communication. BNG Bank is clear and honest about what it can do and honours its agreements.
- **Professional** defines how BNG Bank works, how the bank develops itself, and how it conducts itself when it engages with other parties in a professional context. BNG Bank runs an effective operation and is continuously developing. The bank shows respect for others, listens carefully, speaks out about issues and learns from mistakes.

Our Road to Impact

The strategy project started in 2021 under the name *Our Road to Impact* was continued in 2022.

A key objective is to enhance the bank's social impact. In measuring social impact, five Sustainable Development Goals (SDGs) are used as the point of reference. BNG Bank has selected five SDGs which correspond closely to the activities that BNG Bank finances:
- SDG 3: Good health and well-being;
- SDG 4: Quality education;
- SDG7: Affordable and clean energy;
- SDG 11: Sustainable cities and communities;
- SDG 13: Climate action.

SDG 11 SUSTAINABLE CITIES AND COMMUNITIES:
- As a partner of social housing associations, BNG Bank contributes to better and liveable communities.
- As a partner of municipalities, BNG Bank contributes to affordable and better public provisions.

SDG 3 GOOD HEALTH AND WELL-BEING:
- BNG Bank contributes to affordable health care for everyone.
- BNG Bank is a partner in improving sustainability of hospitals and other health care facilities.

SDG 4 QUALITY EDUCATION:
- BNG Bank contributes to affordable and high quality school buildings.
- BNG Bank is a partner in improving sustainability of schools and other educational buildings.

SDG 7 AFFORDABLE AND CLEAN ENERGY:
- BNG Bank contributes to a larger share of renewable energy in the energy mix.
- BNG Bank contributes to energy savings and more energy efficiency.

SDG 13 CLIMATE ACTION:
- BNG Bank contributes to the reduction of greenhouse gases.

Strategic priorities

In 2022, the following four strategic priorities guided BNG Bank's activities.

1. Meer focus

BNG Bank maintained its position as market leader in the public domain. Loans worth EUR 10.9 billion in the solvency-free segment and EUR 1.4 billion in the segment subject to solvency requirements fulfilled the objectives. The scoring percentage for solvency-free turnover was 67.5% in 2022.

A baseline measurement for the five SDGs impact measurement, including the measuring method used, was published on BNG Bank's website in March 2022. Subsequently the first regular impact measurement was placed on the website in the first quarter of 2023. BNG Bank aims to increase its social impact, via its clients, by 10% in 2023 relative to 2021. The steps which BNG Bank proposes to take in order to achieve the objectives of SDG 7 and SDG 13 are set out in the 'Going Green' climate plan, which was published on the website in December 2022.

2. Operational excellence

To provide the public domain with the best possible services, BNG Bank needs operational excellence. In 2022, the bank invested in improving the client and credit processes, including the further development of its gatekeeper function and the review process. These are labour-intensive processes, and the bank aims to improve the turnaround time without loss of quality.

BNG Bank commits itself to good data quality. Several measurements were performed with regard to data quality, whereby the bank will further develop its methods for measuring. The reference point in this context is the guidelines laid down in laws and regulations.

3. Enhancing client partnerships

BNG's objective is to reduce both its own CO_2 emissions and those associated with its loan portfolio. Sustainability in general has a central role in BNG Bank's client partnerships. The bank aims to help its clients with important transition issues, such as increasing the sustainability of real estate. In 2022, this was set out in more detail in the 'Going Green' climate plan.

4. Strengthening the organisation

Dedicated and competent staff and appropriate leadership are preconditions for the successful implementation of our strategy. In 2022, we professionalised our recruitment and selection process and were happy to welcome a large number of new staff members. In order to retain and develop talent, we invested in development and training opportunities, including an unlimited learning management platform. Our managers together drew up the leadership profile 'Leadership with impact'. This profile makes explicit what they stand for: leaders realise the strategy, help others to be successful and stimulate performance.

Impact measurement

For BNG Bank, making social impact is the driving force behind everything it does. The bank aims to ensure that clients regard it as a natural partner for financing social issues, and that it is successful in achieving and demonstrating this.

BNG Bank reports annually on the impact made by its clients. We are one of the first financial institutions in the Netherlands to do this because we are driven by social impact.

In 2020, BNG Bank expressed its ambition to make more social impact through its clients. In 2021, BNG Bank has started the development of a methodology for measuring this impact. This methodology was tested in 2022. Preliminary measurements shows an increase in BNG Bank's impact on the five SDGs between early 2021 and early 2022. An explanation of the methodology and the results of the measurement can be found on the website.

Impact Measurement 2022

SDG	Social effect	Explanation
3 GOOD HEALTH AND WELL-BEING	Improving air quality	- Decrease in road traffic and use of consumer fireworks due to COVID-19. - Stricter rules on use of wood-burning stoves in homes. - Increase in NMVOC emissions due to increased use of hand disinfectants is slowing down improvement of air quality.
	Reducing waiting lists	- Huge staffing shortages in the healthcare sector. - Increase in number of patients as a result of technological advances and ageing of population. - Additional pressure on healthcare due to COVID-19 pandemic.
4 QUALITY EDUCATION	Upgrading or renovating educational buildings	- As part of the 'fresh air in schools' programme, schools have made a start with measures to improve the indoor climate and save energy.
7 AFFORDABLE AND CLEAN ENERGY	Decrease in energy consumption of rental housing, educational institutions and healthcare institutions	- Strong focus on the energy transition in all sectors.
	Increase in number of households that use renewable energy	- Strong focus on the energy transition in all sectors.
11 SUSTAINABLE CITIES AND COMMUNITIES	Increase in affordable rental housing	- Currently, few people are moving house. - Due to the housing shortage, people are unable to move and forced to stay in the same home for a longer period.
	Increase in number of homes	- Due to the increased focus on reducing the housing shortage, a larger number of homes will be built in the Netherlands in the coming years.
	Increase in sustainable public transport	- Strong focus on climate effects of pollution from public transport and other transport.
	Decrease in municipal waste	- New protocols for pre- and post-collection waste sorting, and (stronger) focus on raising awareness of waste separation and reducing consumption.
13 CLIMATE ACTION	Decrease in our clients' greenhouse gas emissions	- Strong focus on the energy transition in all sectors.
	Reinforcing inhabitants' resilience and adaptability	- Focus on the beneficial effects of green roofs. - Flooding in the south of the Netherlands. - Focus on the risks to and resilience of the environment and the people.

CO_2 emissions associated with the loan portfolio

The climate commitment that BNG Bank has signed together with virtually the entire Dutch financial sector will contribute to reducing CO_2e emissions. One of the elements of the 'Commitment of the financial sector' is making the impact of lending and investments on climate change measurable. To this end, BNG Bank has joined PCAF, the Partnership for Carbon Accounting Financials. In the PCAF methodology, the customer's direct and indirect emissions are attributed to the bank on the basis of a series of overarching valuation rules. The PCAF methodology is used by 96% of the signatories (52) of the climate commitment.

BNG Bank has been reporting on CO_2e emissions associated with lending since 2018. Due to the availability of data, the reporting is always for the year preceding the bank's reporting year.

In November 2022, BNG Bank presented its action plan for the reduction of CO_2e emissions associated with the loan portfolio. This is again an important part of the commitment signed in 2019. With this, BNG Bank provides insight into the science-based CO_2e reduction paths for four main segments: housing associations, municipalities, healthcare and education. Progress on these action plans is intended to become part of the annual report. BNG Bank also aims to verify the reduction targets via the Science Based Targets Initiative (SBTi) and will submit its action plans for assessment to this end. The emissions from own operations are also part of this submission. The emissions that are in scope for the action plan deviate from the total emissions of the portfolio. This is due to the focus on the four main segments and the fact that the scope 3 emissions of municipalities have not been taken into account. BNG Bank is committed to fine-tuning this calculation in collaboration with its external advisor Het Pon Telos, so that these emissions will also form part of the action plan in the future. For more details, see the action plan.

This annual report discusses the CO_2e emissions associated with the 2021 loan portfolio, calculated on the basis of the position as at 31 December 2021. Compared to the previous measurements, a number of refinements have been made to the calculation of the GHG emissions. For social housing, actual energy consumption data at building level was used instead of an estimate based on building characteristics to calculate GHG emissions. For the healthcare sector, actual energy consumption data at building level has also been used instead of a calculation of GHG emissions based on the costs incurred for natural gas and electricity consumption. For municipalities and provinces, use was made of energy consumption data by the government sector. Subsequently, the consumption of municipalities and provinces was determined on the basis of the number of employees at municipal and provincial level in relation to the number of employees at government sector level. For the water authorities, the GHG emissions from the sewage treatment plants and the joint regulations have been added to the total GHG emissions. These and other less impactful adjustments are described in detail in the PCAF report, per sector under 'Adjustments in methodology' and have been calculated for the three reporting years 2019, 2021 and 2022.

This recalculation has led to a downward adjustment of the CO_2e emissions for reporting years 2021 and 2019. This year data quality is expressed directly in PCAF scores, instead of stars based on PCAF scores. This is more in line with how data quality is determined in the PCAF methodology. The details of this can be read in the PCAF report (15.2, Data quality per sector), which also reflects on the data quality scores awarded last year.

The CO_2e emissions associated with BNG Bank's loan portfolio have decreased in 2022. Total emissions in an absolute sense were lower than in 2021, while the amount involved in the measurements grew. For more details on the issues of the loan portfolio, we refer to the PCAF report 2022.

A description of the methodology and sources used for the calculation is included in the Reporting Principles section, and terminology is explained in the Glossary. This section includes a total overview of the calculated CO_2 emissions of the various client sectors for 2019, 2021 and 2022. A detailed report on the CO_2 emissions associated with the loan portfolio is published on the website.

CO_2 emissions associated with loan portfolio

	Public Sector	Social Housing	Healthcare Institutes	Education	Drinking Water Utilities	Mobility	Other
Emissions (in tons/million EUR)	57,6	13,2	43,5	42,1	44,3	16	3,4
Part included in measurement BNG Bank portfolio as of 31-12-21 (= EUR 500 million) — **Totaal 79.539** million EUR	28.460	42.782	5.962	623	593	1.058	61
Total 2.533 kTon — Emissions attributed to credit loans by BNG Bank (kTon)	1.641	564	259	26	26	17	0
% change in CO_2 emissions measured in tons/million EUR compared to 2021	-6,3%	-5%	-4,8%	-21,5%	-10,3%	-16,7%	-19%
Development of CO_2 emissions of selected client sectors ('19 / '21 / '22)	67,2 / 61,5 / 57,6	17,3 / 13,9 / 13,2	56,5 / 45,7 / 43,5	54,1 / 53,6 / 42,1			
% portfolio included in calculation	91%	99%	87%	63%	88%	86%	19%

Development of CO2 emissions total loan portfolio BNG Bank
(in tons/million EUR)

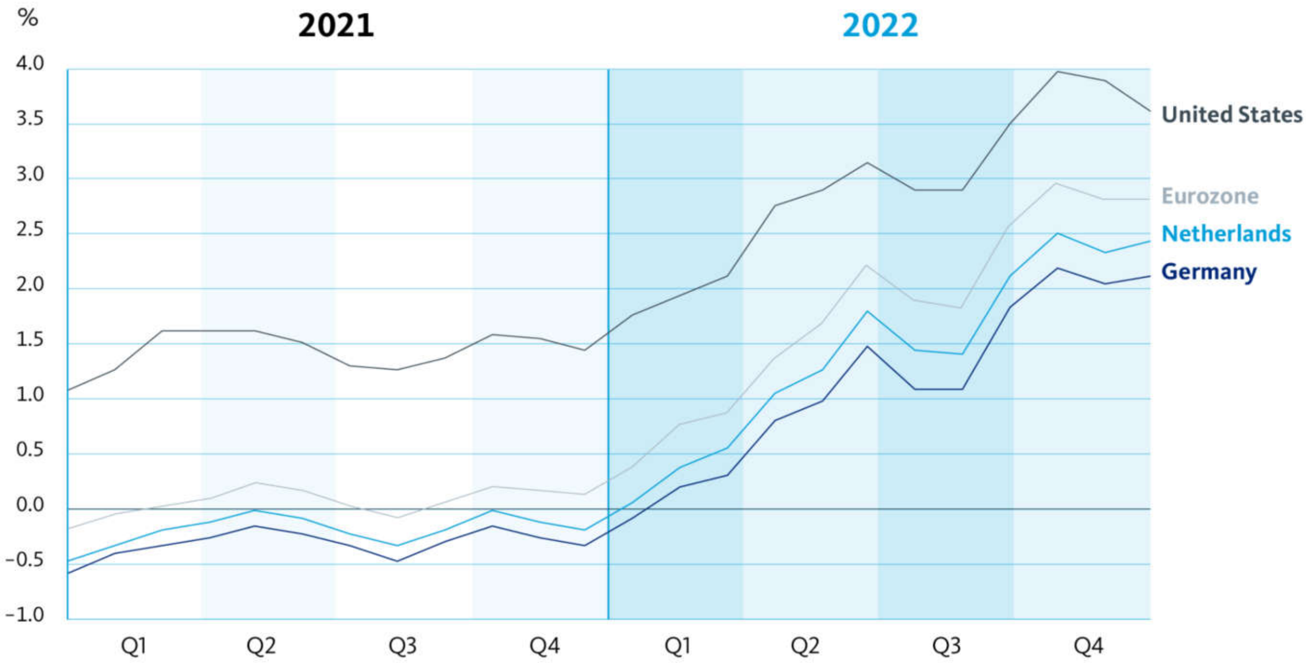
2019	2021	2022
39,1	34,2	31,8

1.2 Economy under pressure

2022 was a year with two faces. The lockdowns and restrictive measures in connection with the COVID-19 pandemic were lifted worldwide early in the year. This caused a recovery of the economy. However, business declined in the course of the year. This was due entirely to the war in Ukraine and the further rise in inflation. Clients of BNG Bank were affected as well. In addition, the scarcity in the labour market became more noticeable in 2022 in the various sectors.

Economic recovery
The recovery of the economy that had begun in 2021 continued. The Dutch economy grew by more than 4% in 2022. The lifting of the restrictive measures in connection with COVID-19 resulted in a further increase in consumption. This benefited the services sector in particular. People went out for a meal again or visited a theatre, museum or cinema. The recovery in exports also continued in 2022. There was greater demand for our products, because other European countries were also easing their COVID-19 measures. And because people had more to spend, imports went up as well.

Interest on 10-year government bonds



Source: Macrobond

Increasing inflation and rising interest rates
The outbreak of the war in Ukraine in February caused a turnaround. Uncertainty about economic developments increased, while rising prices of energy and raw materials in particular held back spending. In the euro zone, inflation rose to more than 8%. The

inflation figure in the Netherlands according to the harmonised consumer price index was even higher, amounting to 11.6%. In 2021, inflation in our country was 2.8%. The European Central Bank (ECB) tightened its monetary policy. The deposit rate was raised incrementally from -0.5% to 2.0%. In addition, the ECB decided to end its securities purchase programme. Interest rates in the United States were raised as well. In the financial markets, these policy changes led to sharp interest rate rises across the board.

As compensation for these price increases, governments introduced measures to support purchasing power for all households. Although these measures are legitimate in themselves, they also cause problems in an economic sense: a rise in purchasing power stimulates economic growth and pay rises. This keeps inflation levels high for longer, which means that central banks have to raise interest rates for longer.

These macro-economic developments obviously have consequences for BNG Bank's clients. Because of the interest rate rises, investments are declining. This is felt especially in the housing market. The price increases for energy and raw materials in particular affect sectors such as healthcare and education.

Nitrogen crisis

The nitrogen issue continues to grip the Netherlands. In the summer, the government presented plans to reduce emissions. These caused great turmoil. Combined with the increased construction costs and a lack of locations, the uncertainty about the nitrogen regulations is expected to have a negative impact on investments by housing associations in the coming years.

Scarcity in the labour market

Partly because of the measurements by the government measures to support purchasing power, employment continued to grow in 2022. As a result, the scarcity in the labour market persisted unabated. This affects healthcare and education in particular, two sectors in which BNG Bank is active. In the healthcare sector, the number of vacancies in the third quarter of 2022 was nearly 70,000, while in the same period there were around 12,000 unfilled jobs in the education sector.

The scarcity in the labour market is also a problem in the civil service. Because of the shortage of workers and higher energy and raw material prices, the government is unable to implement its plans in full. According to the Netherlands Bureau for Economic Policy Analysis (CPB), there was an underspend of EUR 4.1 billion, half of which at local authorities. Pay rises increased during the year. This applied in particular to the public sector, where wages went up by 5% in the second half of the year.

Government finances in order

Even though the government introduced regulatory price measures, figures published by the CPB show that the government deficit fell from 2.6% of GDP in 2021 to 1.1% of GDP last year. This decrease is the result not only of underspending but also of better-than-expected natural gas revenues. Local authorities recorded a collective budget deficit of EUR 1.0 billion in 2022, which is equivalent to 0.1% of GDP. In 2021, these authorities still recorded a surplus of EUR 1.5 billion. The gross debt decreased to 50% of GDP last year. At this figure, the gross government debt is still considerably lower than that of other Western countries. In the euro zone, the total gross debt of national governments amounted to 94% of GDP according to the most recent official estimates. The main rating agencies maintained the highest level for the Netherlands (AAA and Aaa). Partly for this reason, BNG Bank's credit ratings also remained at the highest possible levels.

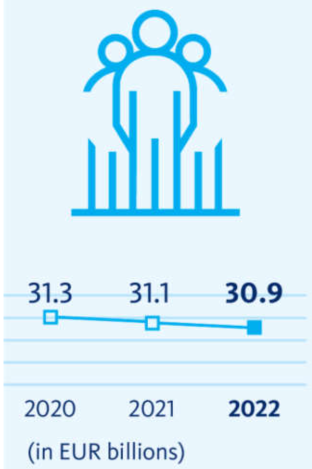
1.3 Partnership in client sectors

BNG Bank was able to meet the credit needs of its clients and share ideas about their current and future needs. The bank maintained its position as market leader in the public domain.

Local authorities

Long-term loan portfolio

€ 30.9
billion



New long-term loans

€ 3.5
billion

With its financing, BNG Bank helps local authorities to work on SDGs 3 (Good health and well-being), 4 (Quality education), 7 (Affordable and clean energy), 11 (Sustainable cities and communities) and 13 (Climate action).

Lending to decentral governments was lower in 2022 than in the previous year but above target. The volume of credit applications decreased. During the COVID-19 pandemic the Dutch State has provided liquidity to the decentral governments. Also, competition by nonbank financial insitutions increased. Investments were influenced negatively by a series of new uncertainties. Existing problem areas in the social domain and the aftermath of the COVID-19 pandemic were complemented by the Russian invasion of neighbouring Ukraine. The war put further pressure on the availability of people and financial means. Inflation and staff shortages backlashed on the level of amenities to the citizens.

The past year entailed both familiar and new uncertainties. Existing problems, such as the aftermath of the COVID-19 pandemic and the tasks of municipalities in the social domain (work, participation and self-sufficiency, healthcare and youth) were supplemented by the Russian invasion of neighbouring Ukraine. Combined with inflation and staff shortages, this put further pressure on the availability of people and financial resources.

BNG Bank as a financier and sparring partner

During conversations with municipalities, BNG Bank discusses the support it can offer to help them meet their financial challenges. Amongst others, the bank provides advice on potential financing structures of current and future investments. BNG Bank believes becoming the principal bank of a client is an important part of the partnership. Thanks to the solid government framework, with anchors such as the Grants to Local Government Act (Financiële-verhoudingswet) and horizontal and vertical supervision, there has been no deterioration of creditworthiness.

In 2022, BNG Bank was in regular contact with clients on subjects such as district heating networks, smart street lighting, payment transactions, lending and Customer Due Diligence (CDD).

Developments at local authorities

The first half of the year was characterised by a large number of new loan applications in an environment of rising interest rates. This was primarily because funding was brought forward and short-term loans were converted into long-term loans. This trend reversed in the rest of the year.

Consequences of COVID-19

In 2022, the consequences of the liquidity support in connection with COVID-19 were still noticeable. Combined with a lower level of investment, this resulted in an improvement of the financial ratios in some municipalities.

Impact of war in Ukraine

Assisting refugees from Ukraine proved a challenge for municipalities. BNG Bank became closely involved in the secure payment of living allowances to the refugees. By now, around 200 municipalities use a system of payment cards which we helped to develop.

Rising energy prices

The conflict with Russia caused energy prices to soar. This translated into rising energy costs of government buildings and buildings of subsidised institutions. The result was a deterioration in the operation of these buildings. A part of the cost increase could be passed on via local taxes. Many municipalities also incurred significantly higher costs because they were forced to swap their contract with Gazprom for one with a more expensive supplier.

Inflation

One consequence of inflation was that many municipal projects were more expensive than forecast. In particular, this applied to investments in new developments and buildings maintenance. It also made investing in collaboration with public or semi-public parties less attractive for market parties. The same trend can be perceived in the expected resolution of the housing shortage. While the start of new projects was already postponed during the pandemic, high costs, lack of staff and lack of materials have now led to further delays.

New funding methodology

Local and central authorities will have to make arrangements about municipalities being allocated sufficient funds to perform their extended range of tasks. In order to create a more stable basis for the funding of municipalities, the coalition agreement provides that a new funding system will be developed in the coming years for the period after 2025. Because the details of this new system are not clear yet, it is possible that investment plans will be scaled back. Central government made a one-off EUR 1 billion available for the year 2026 in order to absorb this decline to some extent and on a non-recurrent basis. However, central government is obliged under the Grants to Local Government Act to provide compensation for the financial consequences.

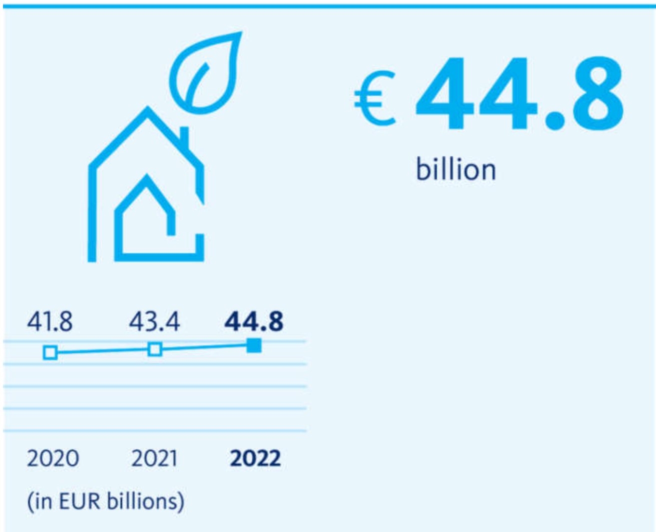
The practical problem now arising in 2023 is that the multi-annual budget cannot easily be balanced in structural and material terms because this budget includes the financial year 2026. This means that municipalities are forced to exercise restraint in drawing up the multi-annual budget for 2023-2026. This is expected to have an adverse effect on future credit demand.

Energy transition
The energy transition is one of the greatest social challenges facing the Netherlands. If the public sector wants to fulfil its leading role in improving sustainability, it will need more funding from central government. Central government provides the municipalities primarily with funding for staff and associated tangible costs. This leaves the question whether sufficient funds are available for public investments in tangible assets. In 2022, BNG Bank started identifying the climate risks in the area for its own loan portfolio.

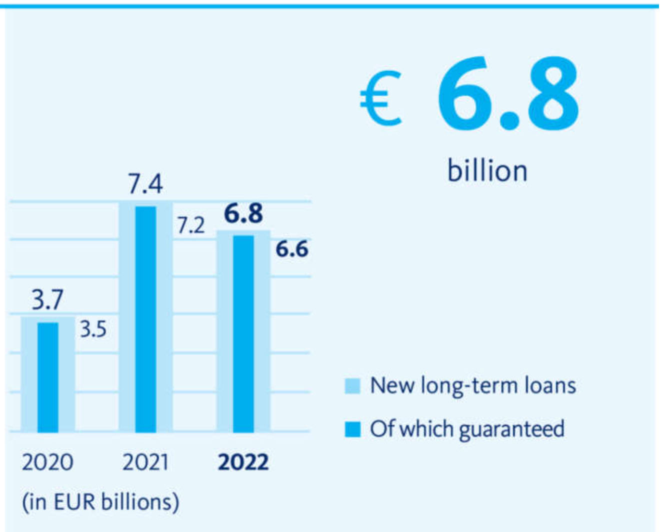
Tenders
Various tenders relating to payment transactions were won in 2022. In 2022, we became the payment bank of clients such as West Brabant Tax Cooperation (Belastingsamenwerking West Brabant), the municipality of Veldhoven, the Real Estate Information Partnership for Tax and Valuation (Samenwerkingsverband Vastgoedinformatie Heffing en Waardebepaling (SVHW)), the Municipal Tax Office of Twente and the municipality of Zoetermeer.

Housing associations

Long-term loan portfolio



New long-term loans



With its financing, BNG Bank helps housing associations to work on SDGs 7 (Affordable and clean energy), 11 (Sustainable cities and communities) and 13 (Climate action).

BNG Bank's outstanding loans to housing associations increased further in 2022. This was a continuation of the development which started in 2019 and could also be perceived in 2020 and 2021. In the preceding years, on the other hand, there had been a decrease in lending to housing associations. The growth of the loan portfolio is related entirely to the increasing investments by housing associations.

BNG Bank as a financier and sparring partner
Most of the loans which BNG Bank provides to housing associations are guaranteed by the Social Housing Guarantee Fund (WSW). The guarantee from the WSW enables housing associations to obtain funding from BNG Bank on favourable terms, at the lowest possible cost.

Developments at housing associations

Consequences of COVID-19

In 2022, the adverse effects of the COVID-19 pandemic were hardly noticeable at housing associations. At the start of this crisis in 2020, housing associations were concerned about the economic effects of the pandemic, which might cause unemployment among tenants and consequently rent arrears. The latter rarely happened. The performance of maintenance work still entailed practical challenges initially, in view of the social distancing measures. However, this too was hardly a problem in 2022.

Impact of war in Ukraine

The war in Ukraine made a strong impact on housing associations. In 2022, housing associations were involved in accommodating refugees who had fled the war. The rising energy costs, inflation and other cost increases partly due to the war have had two effects on the finances of housing associations. A *direct effect* in that the construction costs and staff costs of housing associations have risen. An *indirect effect* in that tenants, because of inflation and rising energy costs, have difficulty paying their rent. Until now, however, this has not led to major rent arrears at housing associations.

National performance agreements

By the middle of 2022, what are known as *national performance agreements* were made between Aedes, the National Union of Tenants (Woonbond), the Association of Dutch Municipalities (VNG) and the Minister for Housing and Spatial Planning. The agreements cover the public housing challenges up to and including 2030. They constitute a joint agenda comprising the social challenges with regard to the availability of sufficient affordable homes, greater sustainability of the built environment, quality of life in communities and neighbourhoods and affordability of housing.

If the ambitions in the *national performance agreements* are actually realised, this will mean a substantial increase in loan applications for BNG Bank in the coming years. Because of the abolition of the housing association tax with effect from 1 January 2023, housing associations will have additional funds to realise the investments they committed themselves to make. On the other hand, however, (construction) costs have increased in the meantime, while interest rates have soared. Housing associations cannot just pass on these cost increases to their tenants, because the possibility of a rent increase is limited by law. They may also be prevented from achieving these ambitions by the shortages of building materials and capacity throughout the construction industry, and by the lack of building locations.

Investing in mid-range rental homes

A key element of these performance agreements is the realisation of mid-range rental homes. Whereas this aspect was primarily left to market parties in the past, the political tide has turned: housing associations are expected to invest more in mid-range rental homes. These investments require a different type of funding, because the WSW guarantee does not apply here. In 2022, BNG Bank provided several loans of this type. In addition, we receive a growing number of requests for information about this type of funding.

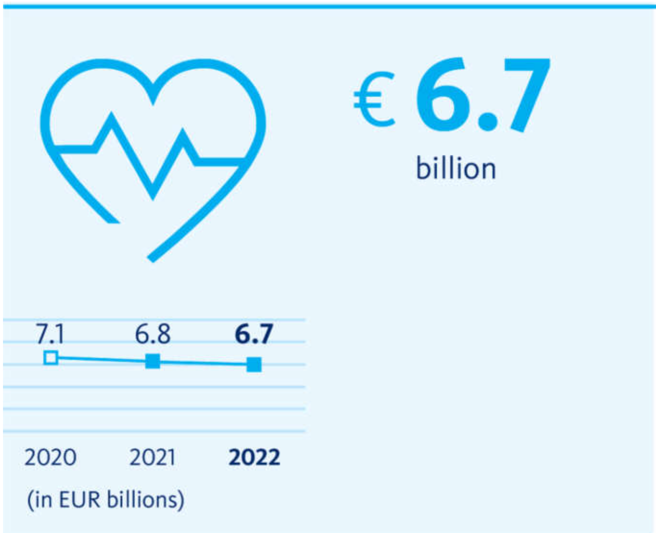
BNG Bank advocates that projects in the mid-range rental segment should also be covered by a form of guarantee. In the bank's opinion, not all the projects referred to in the performance agreements can be financed by banks in the end. The WSW would be the most obvious party to provide that guarantee. This will result in greater availability of funding and lower rents, so that mid-range rental homes will remain affordable for future tenants as well. The fact that this will become a regulated rental segment is another argument in favour of a larger government role.

BNG Bank wants to help housing associations realise the ambitions laid down in the performance agreements and is therefore willing to further extend the loan portfolio, both under and outside the WSW guarantee scheme. We will handle applications positively and constructively, but always in a manner that is responsible from a banking perspective.
In addition, the sector's ambitions in the area of sustainability are in line with the bank's own climate ambitions.

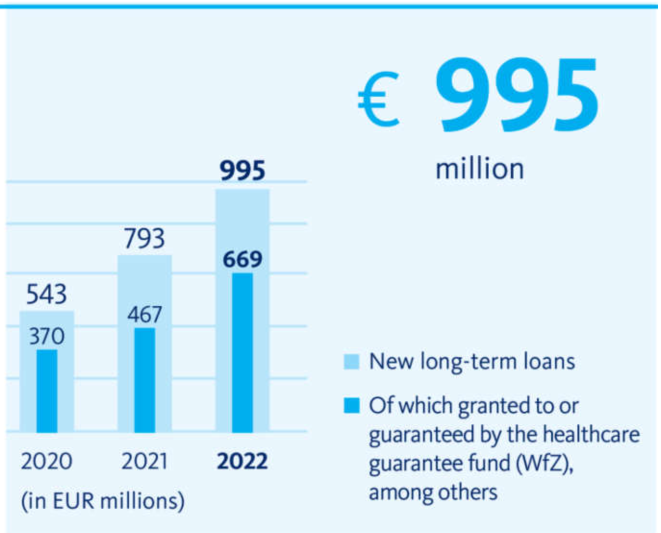
The fact that investments by housing associations have both a social and a sustainable character also fits in seamlessly with an increasing need in the capital market for this type of investments. One of the bank's objectives is therefore to bring this social and sustainable profile of the sector more prominently to the attention of its capital providers.

Healthcare

Long-term loan portfolio



New long-term loans



With its financing, BNG Bank helps healthcare institutions to work on SDGs 3 (Good health and well-being), 7 (Affordable and clean energy) and 13 (Climate action).

BNG Bank's clients include institutions operating in the healthcare sector, including in the areas of mental health, elderly care, youth care and care for the disabled. For these institutions, 2022 was not an easy year. In the spring, it became clear that the healthcare sector had been affected more severely than most by rising inflation and personnel shortages. The sector's risk profile was put under pressure because these factors came on top of other risks and developments. The bank's long term loan portfolio to health providers decreased slightly in 2022. This reflects the tendency to smaller new constructions that is connected to the transition that the sector goes through regarding the offering of care.

BNG Bank as a lender and sounding board for the healthcare sector

BNG Bank has built up a strong market position with a relative sound and stable risk profile. Clients know they can approach us with financing questions. Every year, we perform an analysis to monitor changes in the credit risk profiles of healthcare institutions. The bank has positioned itself as a partner of clients in the healthcare sector, and its aim is to grant loans. Given the deteriorating economic conditions, a good risk assessment is more important than ever.

Developments in the healthcare sector

In spite of the challenges facing the sector, 2022 was a good year for BNG Bank in terms of its lending business. Expectations for 2022 were initially tempered by the COVID-19 pandemic, but turnover was ultimately higher than forecast.

Starting in the summer, concerns were raised about the impact of inflation on the annual results for 2022. The government implemented a number of measures, but these provided only limited relief. There is a high chance that many healthcare institutions will record a loss for the 2022 financial year. This will have an impact on investment capacity within the sector. Construction work that has already received a green light will be carried out in 2023. However, in some cases, it will be more difficult to get new projects approved.

The biggest challenge in the healthcare sector is the availability of personnel. This will continue to be an issue next year. Healthcare institutions are dealing with high levels of absences due to illness, and there are too few personnel to fill the gaps. This leads to the large-scale hiring of external personnel (contractors) at higher rates, which in turn leads to massive increases in staffing costs. The shortage of healthcare personnel is expected to become a structural, if not a social problem.

Consequences of COVID-19

The COVID-19 pandemic continued to make its presence felt in 2022. Growing waiting lists could not be addressed due to a shortage of personnel. There was growing pressure on negotiations for a new collective agreement, which raised the risk of wage increases exceeding the available funding capacity. The uncertainty around the aftermath of the compensation and safety-net scheme in 2020 and 2021 continued for hospitals that had applied for assistance under the scheme's hardship clause and were still waiting for a decision. The hardship clause was an additional safety net for hospitals that remained in the red even after receiving the standard compensation under the COVID crisis scheme.

Impact of war in Ukraine

The war in Ukraine led to strong upward pressure on energy prices. This in turn caused a rise in inflation. Healthcare providers were initially compensated for inflation, but the procedures set up to handle the compensation were only really suited to moderate inflation. In 2022, inflation increased at a much faster rate than institutions could compensate for with future price rises. Consequently, their profits for 2022 appeared to evaporate. In addition to the risks mentioned above, interest rates increased. This made new investments more difficult.

Comprehensive Healthcare Agreement

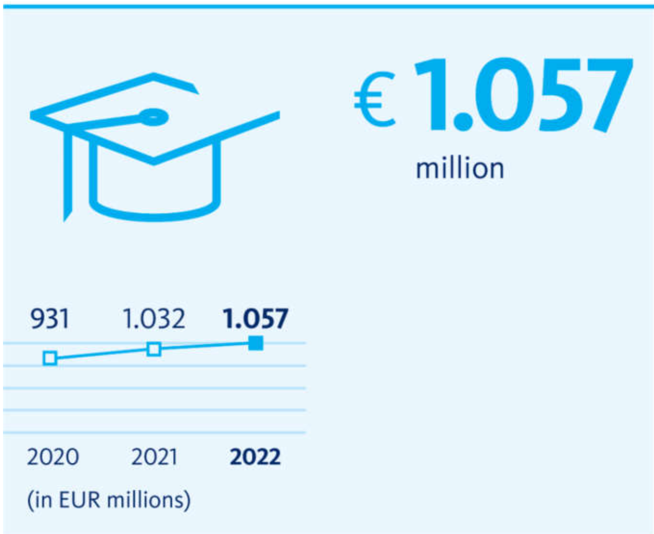
Healthcare providers have relatively few options for making adjustments. They cannot cut back on staffing costs because they already have huge staff shortages. The social function of healthcare institutions plays a role in this regard. Nor can they ramp up production, because of the commitments made in the Comprehensive Healthcare Agreement (Integraal Zorgakkoord), which was signed in September 2022. The purpose of the agreement is to monitor efforts to curb the growth in expenditure. In the agreement, healthcare providers and healthcare purchasers promised the government that they would implement a different way of working and of providing 'appropriate care', to bring the continuously increasing healthcare expenditure under control.

Green Deal for Sustainable Healthcare 3.0

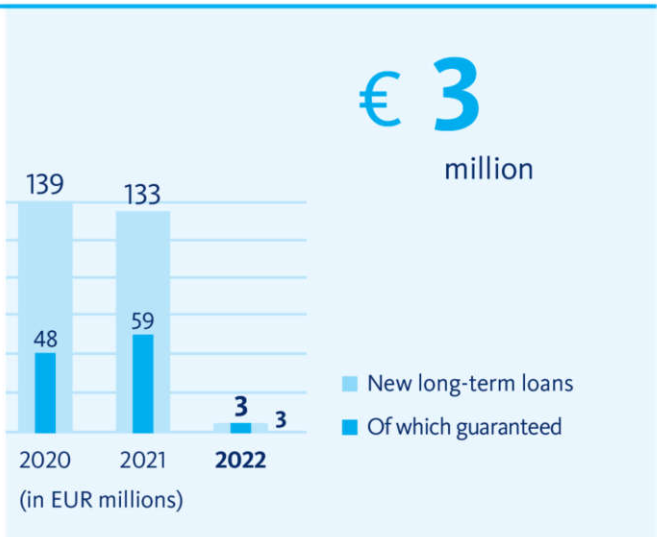
In late 2022, a large number of stakeholders and healthcare providers signed the Green Deal for Sustainable Healthcare 3.0 (Green Deal Duurzame Zorg 3.0). The goal of the Green Deal is to make health care more sustainable. A key element is the reduction of carbon emissions in healthcare buildings, to comply with the commitments made under the Climate Agreement.

Education

Long-term loan portfolio



New long-term loans



With its financing, BNG Bank helps educational institutions to work on SDGs 4 (Quality education), 7 (Affordable and clean energy) and 13 (Climate action).

BNG Bank contributes to affordable, high-quality buildings for educational institutions. We act as a lender and sounding board for educational real estate development and sustainability improvements. For primary and secondary schools, we typically finance investments via municipalities. For property investments by vocational education institutions and universities, BNG Bank provides financing directly. Lending by BNG Bank to the education sector fell short of expectations in 2022. The pandemic, inflation and the consequent uncertainty caused delays in the already lengthy preparation phases for construction projects in the education sector.

BNG Bank as a financier and sparring partner

As well as providing financing to the education sector, BNG Bank wants to share its knowledge and expertise. We aim to team up with municipalities and school boards by acting as both lender and sounding board. For this reason, we are considering ways in which BNG Bank can provide a fresh boost to the development of educational real estate. In this regard, the primary focus is on investing in sustainability and a healthy indoor climate for school buildings. We have also had discussions with the Ministry of Education, Culture and Science regarding the role we see for ourselves and the new initiatives we could develop together. One idea discussed in this context concerned the efficiency of the process of obtaining a loan. This may lead to greater convenience for clients and lower financing costs.

In the final quarter of 2022, BNG Bank held several meetings with municipalities authorities about the bank's role in financing buildings for educational institutions. We explained how BNG Bank can provide support when a new school is going to be built.

Developments in the education sector

Consequences of COVID-19

In 2022, the quality of education in the sector was under pressure. This was an ongoing consequence of the COVID-19 pandemic. Over the course of the year, it became increasingly clear that students had fallen behind in their learning, and that helping them catch up would not be easy due to the shortage of teachers. COVID-19 also increased the rate of absences due to illness, exacerbating staffing shortages. The government provided large, one-off sums of money to improve educational quality and to help students .

Many educational institutions are dealing with a backlog of issues related to the quality of their buildings. Improving the indoor climate in schools was already a challenge, and the pandemic has increased the urgency of this task. This is on top of the huge challenge of improving the sustainability of educational buildings, particularly in the primary and secondary sector. For various reasons, the average, characteristically Dutch primary school building does not meet the current legal requirements. Accordingly, there is still a great deal of work to be done.
The volume of work is enormous, but it looks like obtaining financing will be an even bigger challenge. The government did not give any indication in 2022 that it would step in and provide funding. In addition, sustainability is still playing an important role in 2022, and will continue to do so in the years ahead.

Impact of war in Ukraine

School-age children from Ukraine must be able to receive an education in the Netherlands. The government provided additional funding to help meet this extra challenge. We have seen no indication that this has led to any reduction in educational quality.

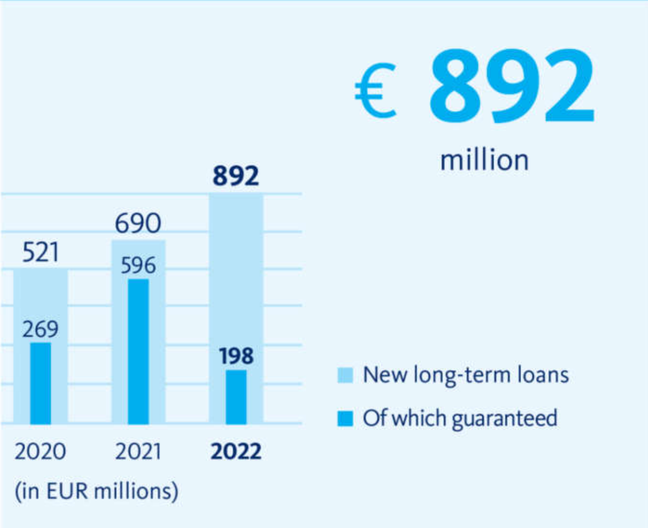
The war in Ukraine has led to high inflation and higher energy prices. The high inflation has pushed up costs across the board. In the first half of the reporting year this was cause for concern, but ultimately there were no negative consequences for educational institutions. The sector's risk profile did not have to be adjusted.

Rising interest rates have forced a recalculation for project investments that were still in the decision-making phase. This could result in the postponement or even cancellation of investments. This situation may continue over the coming year. However, there is a high societal interest in school buildings, and providing school buildings is a statutory function of municipal authorities.

Public companies and infrastructure

Long-term loan portfolio

New long-term loans



With its financing, BNG Bank helps public companies and infrastructure to work on SDGs 7 (Affordable and clean energy) and 13 (Climate action).

Last year was a turbulent one for publicly owned companies and infrastructure. The significant rise in energy prices and inflation as a result of the war in Ukraine had a mixed effect on our clients. In the NEEM sectors (Network, Energy, Environmental and Mobility companies), BNG Bank had a good year in terms of turnover, which exceeded excpectations. However, this picture is somewhat skewed by a number of very large transactions. BNG Bank's total outstanding capital in this sector decreased from 4.2 billion euros to 4.0 billion euros in 2022. As may be expected with such a varied client portfolio, the loans granted by the team were extremely diverse.

BNG Bank as a financier and sparring partner

BNG Bank arranged for a loan to the national rail transportation company to be increased from 200 to 400 million euros. Also, a financing arrangement of 400 million euros to the Port of Rotterdam Authority was extended.

An special transaction took place in the municipality of Westland. As part of a consortium, BNG Bank granted a loan of 90 million euros that will be used to finance three geothermal doublets and a large-scale heating network. This is expected to help eighty greenhouse operators become less reliant on gas. BNG Bank's share of the funding was 30 million euros. BNG Bank has been involved in numerous geothermal projects for many years, and has built up a great deal of knowledge and experience in this area.

The municipality of Veenendaal has been aware of the importance of heating networks for many years. Over the next few years, the municipality's heating company will increase the sustainability of more homes and businesses by connecting them to a smart, green heating network. BNG Bank provided the financing for the latest project.

We provided a loan of 31 million euros to the waste processing company Twence BV for the construction of a new CO_2 capture facility that can capture up to 100,000 tons of CO_2 per year. The captured CO_2 will be supplied to the greenhouse horticulture industry to help crops grow.

Developments in the sector

Energy prices
For certain clients – particularly the ones generating sustainable energy – the higher energy prices resulted in higher income. By contrast, energy consumers, such as public transport companies, were badly affected by the higher prices and saw their costs rise significantly. They were not always able to pass on the cost increases to their customers.

Waste processing companies produce more energy than they consume. For them, the price rises were positive. Waste collection companies had to deal with higher fuel costs.

As a consequence of the energy transition and droughts, energy network companies and drinking water companies have been confronted with a need for major investments. They are having to contend with a shortage of contractors and higher material prices.

Inflation
For some clients, inflation has led to a postponement of investment and thus the postponement of new loans. For most clients in our existing portfolio, rising interest rates are less significant, either because they have already obtained fixed-interest loans or because they had a contractual obligation to hedge against interest rate increases.

Collective heating
We expect to see significant developments in 2023 in the area of heating networks and heating infrastructure. In his letter to Parliament dated 21 October 2022, Rob Jetten, Minister for Climate and Energy, wrote that he intends to place responsibility for the heating network in the hands of the public sector. He also wrote that the Ministry is working with existing public lenders such as BNG Bank to investigate what financial solutions may be possible to enable the construction of collective heating networks within the next few years. Discussions on this topic between the Ministry and BNG Bank are ongoing.

Notable events in 2022

January

First of five new ESG bonds issued in 2022: **EUR 1.75 billion in loans to municipalities**

Gita Salden reappointed CEO of BNG Bank

March

First prepaid debit cards for Ukrainian refugees released to municipalities

EUR 50 million loan issued to the municipality of Sittard-Geleen to make a sports complex in Born more sustainable

April

Carmien Michels wins BNG Bank Literary Award 2022

Marlies van Elst reappointed as member of the Supervisory Board

June

Municipality of Eindhoven wins **BNG Bank Heritage Award**

BNG Bank imposes making sustainability improvements as condition for issuing pubic real estate loans

July

Prolongation of the funding of EUR 400 million to the Rotterdam Port Authority for general business purposes

EUR 44.2 million loan issued to Sint Jacob for payment transactions and to fund nursing homes

Final of five new ESG bonds issued in 2022: **EUR 1 billion in loans to housing associations**

September

Presentation of interim figures: **half-year results**

Knowledge exchange between BNG Bank, HVC, the municipality of Alkmaar (district heating systems) and the municipality of Purmerend (biomass power plant) about **the energy transition**

October

Government approves taking district heating systems into public ownership; BNG Bank and VNG were advocates

Extraordinary general shareholders' meeting approves renovation works on BNG Bank office building, premised on increased sustainability

November

BNG Bank **named third most secure bank in the world**

BNG Bank proposes designating the financing of middle-income rentals a service of general economic interest to speed up its social task of reducing the housing shortage

December

BNG Bank present **Going Green climate plan**

EUR 125 million loan issued to UMC Groningen for a new building

Loan of 130 million to Woonstad Rotterdam for the realization of a non-DAEB rental housing strategy

1.4 Strong position in money and capital markets maintained

Thanks to its excellent credit rating (Moody's: Aaa; FitchRatings: AAA; S&P Global: AAA), BNG Bank was able to raise short-term and long-term funding in various currencies at attractive lending rates in 2022.

Raising short-term and long-term capital in various currencies on the international money and capital markets (funding) is an important activity for BNG Bank, enabling it to provide clients with financing. BNG Bank obtains the majority of its funding through the public issue of bonds on the international capital markets. A limited share is acquired through private placements. More information is available on BNG Bank's website.

Developments in 2022

In 2022, BNG Bank raised EUR 16.3 billion in long-term funding with an average maturity of 7.7 years. Like last year, the demand among our clients in 2022 was for loans with longer maturities. This means that BNG Bank's funding duration remained relatively high, similar to 2021. The total amount of long-term funding was higher than last year, but lower than the long-term average. This was mainly due to BNG Bank's participation in the ECB's third Targeted Longer-Term Refinancing Operation (TLTRO) in the past two years. TLTRO-III provides funding to BNG Bank with a maturity of less than three years on favourable terms. The objective is to stimulate the real economy by providing liquidity to specific target groups, such as housing associations and healthcare institutions.

BNG Bank launched benchmark issues in euros and US dollars. This was in line with its ambition to maintain a liquid curve of benchmark emissions for both currencies. In addition, BNG Bank launched emissions in British pounds, Australian dollars and Canadian dollars. This allowed the bank to attract a body of investors that is more diverse in terms of both geographical location and type. Further to its preparations for future market standards involving bond issues linked to SOFR (US dollars) and SONIA (British pounds), the bank linked short-term fixed-interest bonds to ESTR (euros) for the first time in 2022. In its capacity as a risk-free interest rate and future market standard for interest rate derivatives in euros, ESTR will play an important role in BNG Bank's funding strategy.

ESG-bonds[1]

BNG Bank offers ESG bonds as a special category of public issues. These bonds are issued in line with the bank's Sustainable Finance Framework. This framework specifies that the funds raised in this way are used to finance municipalities and housing associations and that the budgets of municipalities and expenditures of housing associations are linked directly to the 17 Sustainable Development Goals of the United Nations. The Framework can be viewed on BNG Bank's website.

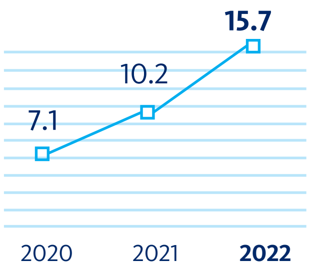
In 2022, BNG Bank once again increased the share of its long-term capital raised by way of ESG bonds. This share was below 30% in 2021, but has now increased to 36% on the back of several successful issues. In total, BNG Bank issued a record EUR 5.9 billion worth of ESG bonds in 2022, both through new issuances and by increasing the amount of some existing bond loans.

[1] Previously, BNG Bank's ESG Bonds were known under a variety of names, including SRI bonds and SDG bonds.

Key figures for funding

Total outstanding ESG Bonds

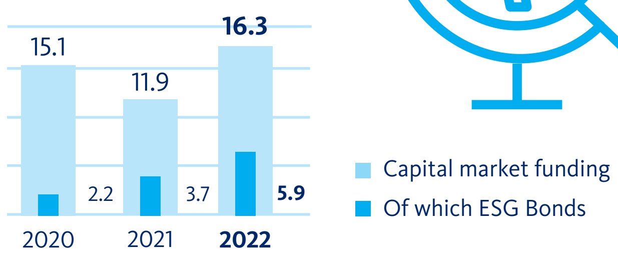
€ 15.7
billion



(in EUR billions)

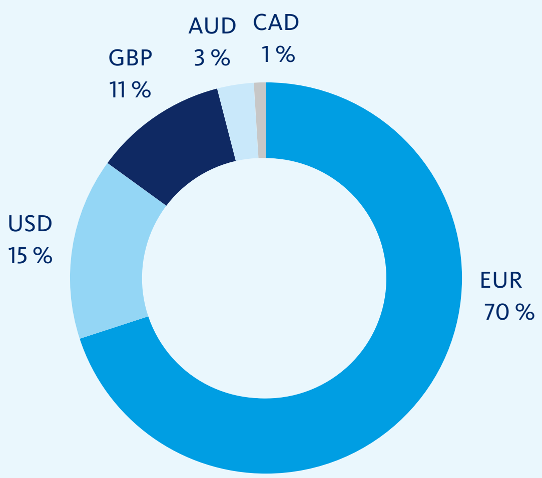
Long term funding raised

€ 16.3
billion

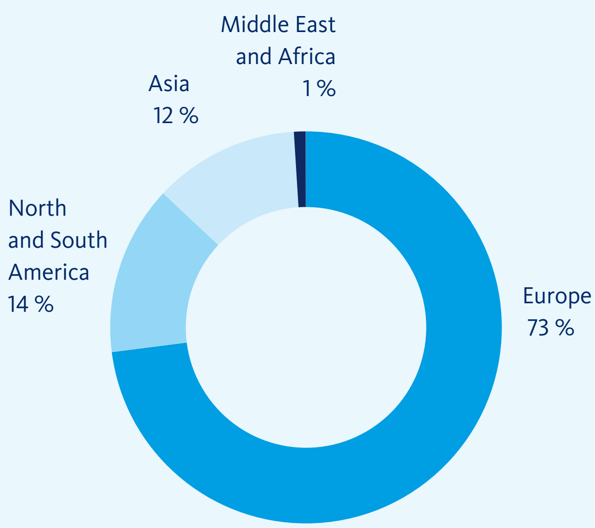


(in EUR billions)

Funding by currency



Funding by geographic region



VNG, Sûd-West Fryslân en BNG Bank

Prepaid debit cards for more than 300 municipalities

February 2022 saw the arrival of the first wave of Ukrainian refugees in the Netherlands. While they were quickly granted residence status, they did not have enough money to live on – nor did the thousands that followed. BNG Bank partnered with the Association of Netherlands Municipalities (VNG) to solve this urgent problem, which affected hundreds of municipalities.

Thousands of refugees without a living allowance

Lonneke de Waal, sector lead in BNG Bank's public and education sector team, remembers all too well the refugees she heard about first. 'They were Ukrainian lorry drivers who abandoned their lorries on the side of the road wherever they were in Europe. Their way home had been cut off.' The war in Ukraine started in late February 2022. What had been their home soon turned into a danger zone.

Although Ukrainian refugees in the Netherlands were quickly granted residence status, this did not entitle them to a living allowance. Sjoerd Dijkstra, a financial controller for the municipality of Súdwest-Fryslân, remembers how things went in those first few weeks:

Untenable and complex

VNG's Ingrid Hoogstrate agreed that this was an untenable situation. 'Dozens of municipalities reported similar problems. Most refugees wanted to open a bank account, but to do that you need a citizen service number. And in order to get a citizen service number, you need a passport. Many Ukrainians either did not have one or their passport was illegible, for example because it was handwritten in Cyrillic script.'

‘BNG Bank offered an initial solution in the form of prepaid credit cards. You could tell that they were keen to solve this problem.’

Ingrid Hoogstrate
Director
Inclusive Society
VNG

Creative solution

She recounts how BNG Bank came to VNG’s aid. ‘We hold regular consultations with a number of banks. During one of those sessions, BNG Bank offered an initial solution in the form of prepaid debit cards.’ That is when things took off, as Ingrid recalls. ‘You could tell that BNG Bank were keen to solve this problem.’

However, this was easier said than done. De Waal explains why. ‘One of our technical partners for banking transactions warned us that registering a single new customer would take at least one week. We had estimated that the problem had an impact on more than 300 municipalities, and we needed thousands of prepaid debit cards. With those numbers, it would take forever. We found a way around this by registering VNG itself as the sole customer for all cards. A creative solution, even if I do say so myself.’

Ready within two weeks

The municipality of Súdwest-Fryslân’s Sjoerd Dijkstra was impressed with the speed of implementation. ‘After BNG Bank’s initial offer, it only took a week and a half until the first cards were ready for use. Naturally, we had plenty of questions: how do we deal with families who move around? What do we do with credit that has not been used up? Who can help unblock a card that has become blocked after entering an incorrect PIN too many times? Fortunately, BNG Bank helped us deal with these issues for as long as they took. The system is actually working quite well now.’

Crucial stopgap

Dijkstra is pleased that the most hectic days are now behind him. ‘The cards played a crucial role while refugees were waiting to receive their citizen service numbers, a period of great uncertainty for them. The cards will remain in use to cater to the needs of new refugees. Fortunately, most of those in the first wave have now been able to open bank accounts.’

2 INTERNAL BUSINESS OPERATIONS

2.1 Employees

Passionate, capable staff and the right leadership are preconditions for successful performance and achieving the ambitions and objectives of 'Our Road To Impact'. In the current tight labour market, attracting and retaining talent is a major challenge. Accordingly, BNG Bank is focused on offering a wide range of development opportunities and good leadership. This will ensure its staff continue to develop, and can work and perform at their best.

Strengthening our internal organisation
A key strategic pillar of 'Our Road to Impact' is strengthening our internal organisation. This involves developing both the organisation and our employees. BNG Bank hopes that such development will help us achieve our ambitions.

Organisational development
A number of key developments took place in the organisation this year. Adjustments were made to the structure of the IT/Operational domain (COO) and the commercial domain (CCO). These two domains were created in 2021 with the introduction of the new organisational structure. The organisation now comprises five domains, led by an Executive Committee with five members: a CEO, CFO, CRO, COO and CCO. The restructure of the COO and CCO's departments was based on chain-oriented thinking in relation to these two domains. The tasks and responsibilities of these departments were more clearly defined. The new organisational structure also provided new development opportunities for staff. The restructure triggered a significant amount of mobility (mainly internal mobility).

Leadership profile

Leaders at BNG Bank are responsible for implementing the organisational strategy and promoting the desired organisational culture

We are BNG Bank – a bank with a heart.
Our employees make an impact on society all day, every day.

We work with respect for each other, together and on the basis of trust.
Our focus is on simply doing our job well.
We are always driven by social impact.
Although the work we do is special, we remain modest.
This is something we are proud of.
We challenge ourselves to keep developing continuously.
We do this by working together and keeping in close contact with our clients.
This way, we contribute to making the Netherlands a better place.

Leadership with impact

Leaders at BNG Bank

> implement the strategy
- prioritize the goals of the bank
- organize innovation
- search for opportunities
- promote cooperation throughout the organisation

> help others to be successful
- empower employees
- lead by example
- are focused on growth and development of our staff
- create the right conditions for ongoing feedback
- appreciate different perspectives
- facilitate efficient working methods

> stimulate performance
- set clear targets, priorities and expectations
- concentrate on output and encourage progress
- assume and claim ownership
- are focused on future-proof solutions
- build high-performance teams

Leaders at BNG Bank possess/promote the following competencies

> a focus on results
Converting strategic targets into tactical and operational targets. Pursuing and following up on results with energy and passion. Spotting and seizing opportunities for improvement.

> decisiveness
Being able to make clear and timely decisions. Making decisions even when faced with uncertainty and ambiguity and making a decision is difficult.

Systems thinking: being able to think, act and solve problems based on a helicopter view of the system as a whole.

> the ability to learn
Working actively and with the ability to reflect on increasing self-awareness, knowledge, insight and wisdom.

> interpersonal intelligence
Dealing effectively with conflicts and opposing views. Processing your own emotions as well as those of others. Being genuinely able to listen and ask questions.

> teamwork and cooperation
Creating a positive environment for cooperation between and within teams. Inspiring trust. Involving others in such a way as to establish a common ground and let people work on common goals in an enjoyable way.

Together we work

sustainably
We make impact, both now and in the long term. We know what is happening in society and focus on solutions and relationships.

reliably
Our actions are transparent, we communicate clearly and honestly about what we can do and we keep our promises.

professionally
We work effectively and keep developing. We show respect for others, listen carefully and address and learn from mistakes.

Working at BNG Bank – making impact together

Another topic that received a great deal of attention last year was leadership development. This is based on the idea that the right leadership is essential to attract and retain the right talent. Within BNG Bank, leaders are responsible for implementing the intended structure and promoting the desired organisational culture. BNG Bank leaders implement strategy, help others to be successful and stimulate performance. In 2022, the leadership collectively adopted the leadership profile 'Leadership with Impact'. Based on that profile, an upward feedback assessment was performed for the leadership, which involved employees assessing the leadership skills of their leaders. This resulted in collective and individual development plans for all managers.

Development opportunities

Providing employees with opportunities for development is essential for retaining talent. Accordingly, there has been a big focus on training and knowledge development. For example, a learning platform was introduced in 2022, based on the Unlimited Learning principle: staff can select an unlimited number of training courses from a broad catalogue.

The talent management cycle is based on ongoing dialogue between employees and managers. The employee's performance is discussed, along with their completed and required development. Strategic personnel planning (SPP) is used to provide insight into the skills, knowledge and expertise required to achieve the objectives of the organisation. SPP also identifies any gaps in the potential of the current employee. Based on these insights, development interventions, recruitment needs and succession planning are defined.

Talent management

Strategic workforce planning

- Context analysis
- Dream team story
- Set of knowledge and competences

HR potential portfolio

- Strategic Workforce review
- Talent review
- Underperformance management

Succession planning policy

- Key positions
- Succession planning
- Management development

Learning & development

- Individual interventions
- Collective training programmes
- Leadership development

Performance management

- Performance and development goals
- Continuous performance dialogue
- Self-assessment and final assessment
- Ambitions & career

Staff surveys

In 2022, a Pulse Survey was conducted each quarter. This is a survey of all staff at the bank (both internal and external), to measure whether BNG Bank is achieving its ambitions around strengthening its internal organisation. The following Key Performance Indicators were defined and measured in the surveys

Extent to which BNG Bank gives its employees an opportunity to develop	Rating
Target	7.5
Outcome	7.1

Extent to which staff see BNG Bank as an attractive employer (eNPS score)	Rating
Target	3.0
Outcome	-6.1

Employee engagement	Rating
Target	7.5
Outcome	7.2

Extent to which staff indicate that core values guide their behaviour	Rating
Target	7.5
Outcome	6.3

The measurements show an average of the results of four quarters. The KPI targets were not met in 2022. This means there is still work to be done to achieve the goals. Accordingly, in 2023, work will be carried out around offering development and other opportunities, leadership and work experience.

The input from the Pulse Surveys is also used to update policies and start conversations within departments on a range of themes. For example, in 2022, partly in response to the topic of 'social safety', the Code of Conduct and the Undesirable Behaviour Complaints Rules and Policy were updated. Other topics raised in Pulse Safety include hybrid working, workloads and development opportunities.

Key figures on employees

In 2022, the number of employees with a BNG Bank contract increased, as did the number of external staff. The number of employees of BNG Bank and its subsidiaries increased by 35 to 397 employees (395.3 FTEs). In 2022, 28 employees changed positions, 81 new employees joined the bank and 46 employees departed.

BNG Bank employs 390 staff. The subsidiary BNG Gebiedsontwikkeling has 7 employees. The subsidiary Hypotheekfonds voor Overheidspersoneel has no employees.

As per 31 December 2022, there are 63 employees (14.6%) on fixed-term contracts. There are 18 men (4.5%) and 33 women (8.3%) working part-time. This year, the average age of employees was 46 years, which is comparable to last year (45.8 years in 2021). The average length of service of employees decreased slightly to 11.34 years (11.44 years in 2021). BNG Bank has 123 external staff occupying formal staff positions, while BNG Gebiedsontwikkeling has 2 external staff occupying formal staff positions (0.8 FTEs). Most of the external staff work on a contractual basis. BNG Bank does not employ any staff on the basis of a non-guaranteed hours contract.

BNG Bank has set a target for the ratio of men to women among the members of the Supervisory Board and Executive Committee. A target ratio has also been set for managers who report directly to the Executive Committee (direct reports). For the Executive Committee and Supervisory Board, the target is at least one-third women and one-third men. The bank met this target in the 2022 reporting year. For direct reports, the bank's target is a ratio of 40% women and 60% men. At the end of 2022, 7 of the 21 direct reports were women, while 14 were men - excluding the managing director of BNG Gebiedsontwikkeling. This works out as 32% women and 68% men. Accordingly, the target ratio was not met. The bank continues to strive for this.

Ninety-five percent of BNG Bank employees are covered by the collective labour agreement for the banking industry (which runs from 1 January to 31 December of this year). In accordance with the collective agreement, on 1 March 2022 salaries increased by 2.5%. Parental leave is governed by the collective labour agreement for the banking industry. Twenty-three employees (11 men and 12 women) took parental leave last year. Twenty employees whose parental leave had ended returned to work. Of the 19 employees who took parental leave in 2021, 14 (8 men and 6 women) were still employed by the bank at the end of 2022. All employees participate in the pension scheme. As the employer, BNG Bank contributes 70% to each employee's pension, while the employee contributes 30%.

BNG Bank's policy on working conditions aims to maintain a healthy work environment for employees and prevent absences due to illness. The absence rate due to illness was 3.7% in 2022. It was therefore higher than the internal standard of 3.0%.

Managers hold a meeting with any employee who is frequently absent (3 times in the past 12 months). In addition, a Social Medical Team (SMT) meeting is held periodically with each manager, which is attended not only by the manager in question, but also by the company medical doctor, the staff welfare officer and HR. The SMT discusses early warning signs of potential absences. This allows managers to engage with employees at any early stage and discuss what they need to keep them from taking sick leave.

The theme of 'vitality' was once again a focus for BNG Bank in 2022. Through the Energy Platform, employees are given an opportunity to participate in digital seminars on topics such as dealing with high workloads, managing their energy levels and developing a healthy lifestyle. Boot camps (sports activities) also started up again in 2022, after they were forced to stop due to Covid-19. Once a week, during their lunch break, employees work on their health and fitness under the guidance of a fitness trainer. In addition, the sports budget and bicycle scheme were once again widely used in 2022.

No formal reports of incidents of discrimination were received in 2022. The internal confidential advisers were consulted in a couple of cases, involving situations of undesirable behaviour. These consultations did not lead to formal reports. Further conversations resulted in an acceptable outcome for the parties involved. The procedure for reporting incidents is set out in the updated Undesirable Behaviour Complaints Rules. Internal and external confidential counsellors are also available.

397 colleagues

140 female

257 male

46 left the organization

81 commenced employment

28 changed position internally

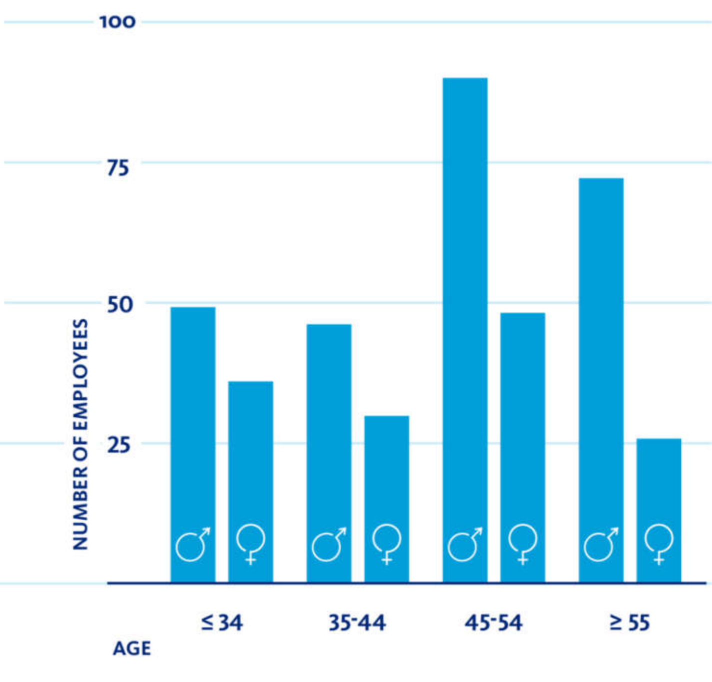
46 years is the average age

51 work part-time
< 36 hours

346 work full-time
> 36 hours

23 years is the youngest employee

68 is the eldest employee



Hiring of internal and external staff

Within three months of joining the company or starting work, internal and external staff take the Banker's Oath. They also receive a copy of the Code of Conduct and the Regulations Governing Private Investment Transactions. When they are hired, staff state their side activities, which are assessed for potential conflicts of interest. Based on the amended labour legislation that came into force on 1 August 2022, the standard employment agreement has been adjusted.

Working from home

As a consequence of the Covid-19 pandemic, working from home has become a common occurrence. A working from home policy was drafted back in 2020, in the early days of the pandemic. It assumed that staff would be present in the office at least two days per week. BNG Bank believes it is important for the topic of presence in the office to be discussed within teams and between managers and staff in open dialogue. Employees receive a home workspace allowance (750 euros for a five-year period) to set up their home workspace. BNG Bank also pays employees a working-from-home allowance of 2 euros per day worked from home. In June 2022, the working-from-home allowance was adjusted to 3 euros per day worked from home, due to a change in the official guidelines.

Labour market campaign

BNG Bank has a good employee value proposition, due to its purpose and core values. Based on this employee value proposition, a labour market campaign was developed in 2022, centred around the bank's existing employees and their experiences. The campaign appeared on our 'Werken Bij' (Work With Us) website and in various social media channels. Based on its core principles, BNG Bank succeeded in attracting passionate talent in a tight labour market.

Consultation with the Works Council

In 2022, consultation took place on several occasions between the HRM and the Works Council, both in regular Works Council consultation meetings and in separate meetings between a specific Works Council committee and representatives of the HR department. Various requests for advice and approval were made at these meetings. Topics such as accommodation, privacy and complaints were also discussed.

Restrained remuneration policy

BNG Bank aims for a restrained remuneration policy that corresponds with its identity and strategy. The remuneration policy discusses the relationship between remuneration and the social function of the bank. The remuneration policy discourages employees from taking more risks than acceptable, and avoids incentivising dishonest behaviour. Accordingly, Executive Committee and Supervisory Board members do not receive variable remuneration. Nor do employees receive variable remuneration for their work. In situations of outstanding performance, employees may receive a one-off payment.

The Supervisory Board monitors the bank's remuneration policy. The general principles of the remuneration policy for Executive Committee members and employees have been approved by the Supervisory Board. A report on the implementation of the remuneration policy is presented to the Supervisory Board each year. For the purposes of this report, Risk Management carries out a risk analysis for various components of the remuneration policy. The Compliance department is consulted about any compliance or integrity risks. Each year, the Supervisory Board checks that the remuneration policy complies with the principles of a restrained remuneration policy. There is also an annual consultation meeting between the Supervisory Board and the Works Council about the pay ratios at the bank.

The Annual General Meeting adopts the remuneration policy for the statutory members of the Executive Committee and the remuneration scheme for members of the Supervisory Board. In 2022, the salary of the highest-earning member of the Executive Committee was 4.15 times the median salary of employees at BNG Bank (4.0 in 2021). The average salary (wage bill) dropped by 2.35% compared with 2021.

The remuneration policy and the remuneration report are published on the website. The remuneration of Executive Committee and Supervisory Board members in 2022 is reported in the Financial Statements.

Diversity figures for age categories as at December 31 2022 (in absolute figures)

Age of workforce	Male	Female	Total
≤ 34 years	49	36	85
35-44 years	46	30	76
45-54 years	90	48	138
≥ 55 years	72	26	98
Total	257	140	397

Diversity figures on the different salary scales as at December 31 2022 (in percentages)

Salary scale	Male	Female	Total
4	2,3%	0,0%	1,5%
5	0,0%	2,1%	0,8%
6	0,8%	3,6%	1,8%
7	1,6%	10,0%	4,5%
8	10,9%	15,0%	12,3%
9	13,2%	17,1%	14,6%
10	33,9%	30,7%	32,8%
11	18,7%	9,3%	15,4%
12	11,7%	6,4%	9,8%
13	0,8%	1,4%	1,0%
Above CAO	6,2%	4,3%	5,5%
Total	100	100	100

Diversity figures on different categories of employees

	Female	Male
Employees	140 (35%)	257 (65%)
Managers	17 (33%)	35 (67%)
Direct Reports to ExCo	7 (32%)	15 (68%)
ExCo	2 (40%)	3 (60%)
RvC	3 (43%)	4 (57%)

Contract types and male-female ratios

Contract type	Male	Female	Total
Regular employment	223	111	334
Temporary employment	34	29	63
Total	257	140	397

Contract type	Male	Female	Total
Full time	239	107	346
Part time	18	33	51
Total	257	140	397

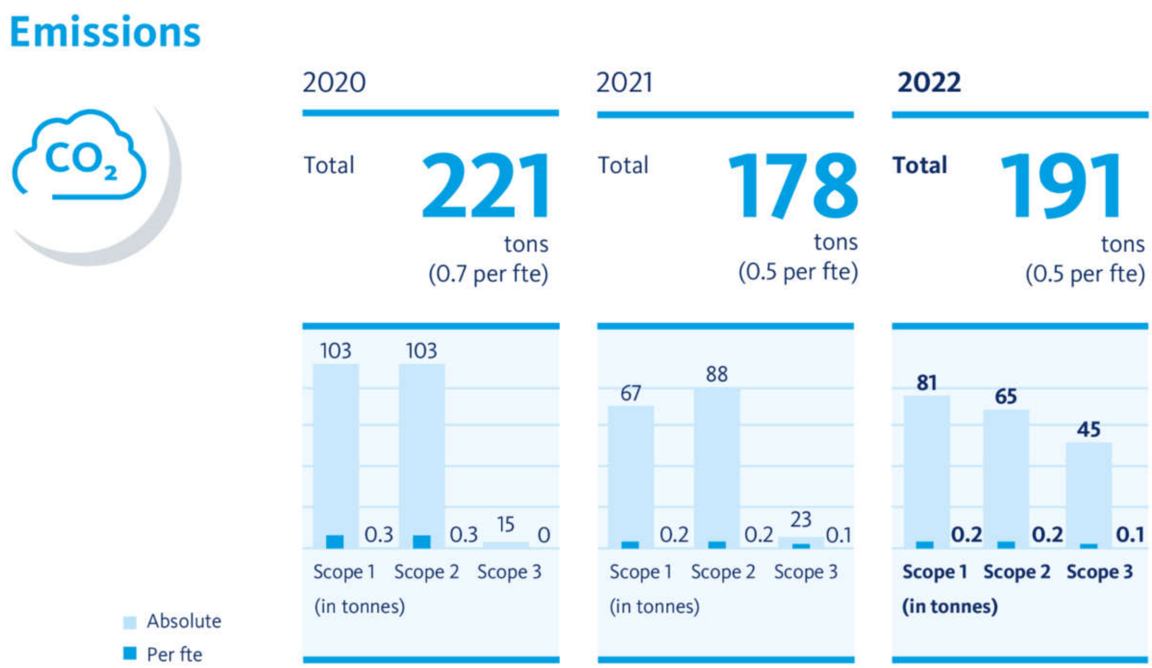
2.2 CO_2 emissions from business operations

BNG Bank aims to carry out its internal operations on a CO_2-neutral basis, to use materials as efficiently as possible and to reduce its CO_2 emissions.

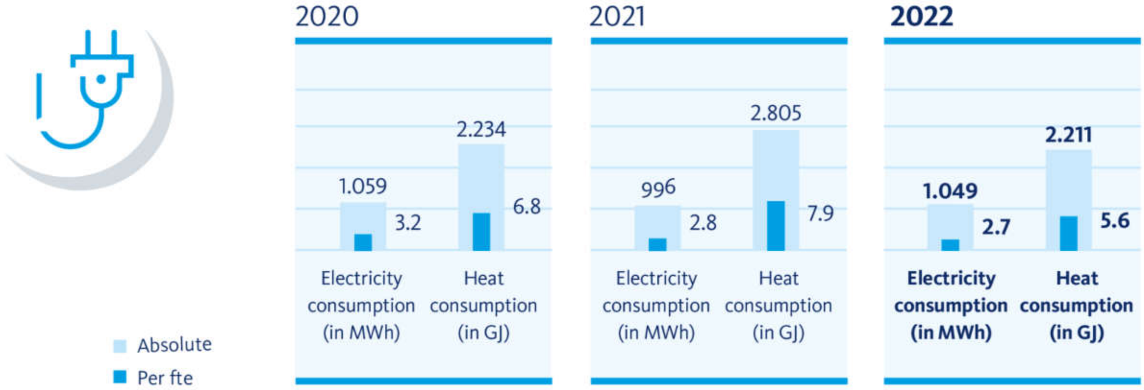
Every year, BNG Bank reports the CO_2 emissions produced by its business operations according to Scope 1, 2 and 3 of the Greenhouse Gas Protocol (GHG). The Reporting principles section explains how the CO_2 emissions of our internal business operations are calculated.

The end of the COVID-19 pandemic in 2022 had the effect of driving up the bank's CO_2 emissions. Staff came back to work in the office and resumed visits to stakeholders. As a result, there was an increase in both electricity use (+5.6%) and the consumption of fossil fuels by lease cars (+28%). Efforts to strengthen relationships with overseas investors and potential investors were reflected in the steep increase in our air miles in 2022. High average temperatures in 2022 resulted in heat consumption falling by 21%.

The Scope 3 emissions include the approximate natural gas consumption of the back-up site. BNG Bank's offices in The Hague are supplied by green energy.



Energy and heat consumption



2.3 Compliance

Ethical business practices are an important foundation of BNG Bank. BNG Bank considers the need to comply with relevant regulations and to assume social responsibility as self-evident and seamlessly connected to its social ambitions.

Risk appetite

BNG Bank has defined an integrity and compliance risk appetite as part of its risk appetite. The bank pursues an outstanding integrity profile and expects its employees, clients, counterparties and third parties relevant to the bank to satisfy its integrity requirements. With regard to rules and regulations, the bank aims to ensure sound conduct, ethical business practices and compliance with relevant legislation and regulations as well as relevant criteria of the regulatory bodies.

Governance

Managing the compliance risks is the responsibility of all departments of the bank. An independent compliance function supports the organisation in performing the Systematic Integrity Risk Analysis (SIRA), developing and advising on compliance policies, organising the process of identification and impact assessment of regulatory developments and advising, monitoring and reporting on integrity and regulatory compliance risks.

In its compliance charter, the bank has defined the objective and scope of that second line compliance function as well as the compliance cycle which forms the basis for all activities of the compliance department. The compliance charter can be found on the website.

Main tools to detect significant instances where BNG Bank operates outside its integrity risk appetite are:
- Identification of risks and controls in annual SIRA-workshops and Risk Control Self Assessments and corresponding controls to mitigate identified key risks.
- Execution of risk-based monitoring programs by both first and second line departments to monitor the effectiveness of the controls.
- Procedures to manage incidents.

Additional assurance on our compliance risk management is provided by internal and external audits as well as frequent contact with supervisors.

Each quarter the integrated risk report provides information to both executive and supervisory boards on the state of play of those risks. The quarterly compliance report provides further details on the compliance risks and is discussed each quarter in the Non-Financial Risk Committee, Executive Committee and Risk Committee.

Developments 2022

In 2022, substantial progress was made in the further professionalisation of the Compliance Cycle and the maturity level of the compliance activities was raised. Both first line departments and the Compliance department have continued their efforts to strengthen compliance risk management in 2022. The risk based compliance monitoring program as well as the regulatory change process have been enhanced. In the course of 2022 GRC (Governance, Risk and Compliance) tooling was implemented for a number of processes, to facilitate effective execution of those programs. This tool will be expanded to other processes in 2023.

The number of compliance related internal staff in the first as well as second line departments have increased to ensure sufficient resources are available for execution of the Compliance Cycle. Simultaneously, the Compliance department reduced the number of external staff which temporarily supported BNG Bank in improving the compliance management cycle with a focus on CDD policy development, monitoring and training activities, enhancing the privacy organisation and the regulatory change process.

During 2022, the Compliance department determined that BNG Bank did not fully operate within its risk appetite for compliance risks. This specifically related to the increasing requirements on CDD-processes, the complexity to effectively execute a privacy framework and the challenges of the regulatory landscape. However, no significant risks materialised. As detailed in the respective sections below, enhancements in its controls to mitigate those risks were ongoing in 2022 to ensure that BNG Bank operated within its risk appetite.

Financial economic crime

Both counterparties on the money and capital markets as well as the clients in the Dutch public domain are subject to a CDD policy. This policy is based on our commitment to high standards of integrity and our role as gatekeeper to the financial system. As part of this commitment BNG Bank has a transaction monitoring system in place to detect suspicious transactions.

After its formation in 2021, the first line Client Integrity department focused in 2022 on reducing the remaining backlogs in CDD-processes, improving the quality of CDD analyses and advancing its transaction monitoring techniques. No breaches of the sanction lists have been identified.

A specific priority in 2022 were the frequent updates of sanction lists due to the Ukraine conflict. BNG Bank performed periodic screenings of updated sanction lists on its entire client and counterparty portfolio as well as its vendors. Transaction data were monitored closely to identify any transactions that could be related to entities which were mentioned on any of the applicable sanction lists. Municipalities that qualified for temporarily exemptions in their energy contracts with sanctioned parties have been contacted by BNG Bank to ensure the required substantiation and attestation were in place.

Conduct risk

To safeguard its integrity as well as the integrity of its staff, clients, counterparties and other third parties and the provision of fair products and services the bank applies internal policies and rules of conduct including the bank's **code of conduct**. Policies are published internally and are available to all employees. Maintaining and increasing awareness of applicable policies is a responsibility of both managers and the Compliance department. New employees are informed of these policies when they start their employment.

Employees can consult their manager, the Compliance department as well as the Human Resources department if they want advise on compliance policies. Furthermore, whistleblower and complaints schemes as well as counsellors are in place for employees to raise any concerns about the business conduct. For clients and other parties a compliant procedure is in place which is made public through the website.

Incidents that were detected in 2022 through these procedures have not led to any significant impact. Most incidents related to confidential information for which the protection was breached or the protection was deemed insufficient. These incidents have not led to any complaints concerning breaches of customer privacy.

Improvements in the protection of personal data are part of the implementation of the new privacy organisation for which the policy and framework was drafted in 2021. The implementation was executed in 2022 in a separate project.

No incidents have been detected in respect of corruption (or other unacceptable conduct). As with other integrity risks, the risk of (indirect) involvement in corruption is part of the annual SIRA cycle. Therefore, all process owners annually assess their risks related to corruption. Inherent risks to corruption are identified in the commercial processes, but are considered to be limited after taken into account the bank's policies and code of conduct, that mitigate these risks. As a result of the consideration, no specific training on anti-corruption has been provided in 2022.

Fraud risk

Identification and mitigation of fraud risks have a high priority as these risks can cause direct financial impact to BNG Bank and/or its clients. Additionally these risks can impact its reputation as a reliable financial institution. Therefore, fraud risks are analysed together with the other integrity risks in the annual SIRA-cycle. Workshops are organised for all processes to discuss which scenarios of fraud could potentially occur. Controls which mitigate those scenarios are identified. The residual risks are mapped to the risk appetite to determine whether additional measures are required. In 2022, no new risk scenarios or measures concerns have been identified.

BNG Bank detected no internal fraud cases and no internal fraud investigations were conducted in 2022. Neither is BNG Bank aware of any external fraud occurrences regarding BNG Bank itself.

Regulatory compliance risk

Regulatory requirements continue to be highly demanding and require continued, intense effort by the organisation. Furthermore, the availability of a demonstrable compliance has become more important. The processes to deal with this ongoing changing environment are now incorporated into a dedicated regulatory change framework (RCF). It consists of a policy, working methods, roles and responsibilities in order to ensure that new or amended legislation and regulations are detected, analysed and implemented in time.

After implementation of the RCF in the first half of 2022 a maturity model has been incorporated in the RCF to guide further enhancements. These are aimed at improving the effectiveness of the processes as well as the oversight for process owners, senior management and the compliance function.

With respect to existing laws and regulations risk based monitoring programs periodically review whether compliance is safeguarded. Internal monitoring activities, supervisory requests, regulatory changes and incidents resulted in the identification of several topics where timely and full compliance with law and legislations could be improved. In some cases the shortcomings are followed-up closely by the supervisors, while in other cases they are managed solely internally. Most significant instances relate to enhancements to the role of BNG Bank as gatekeeper to the financial system, its processes to manage IT and privacy related risks and its external reporting capabilities. Actions to follow-up on those instances were already in place or were initiated immediately after detection. In 2022 no instances were observed where BNG Bank incurred a fine or sanction or was involved in legal proceedings for non-compliance with laws and regulations. There were no outstanding fines or sanctions from previous years of non-compliance.

2.4 Risk Management

Risk management focuses on maintaining a safe risk profile, which is reflected in the bank's high external credit ratings. A strict capital policy, a limitation in our services and counterparties in our articles of association and the absence of a trading book limit the bank's risk appetite.

The process of accepting and controlling risks is inherent to the day-to-day activities of any bank. To perform its activities, the bank must accept a certain level of credit, market, liquidity, operational, compliance, security and strategic risk. The bank's low risk appetite is reflected in its risk policies, its capitalisation policy and, in its Articles of Association, the restriction on its services and its customers. Also, the bank does not have a trading book.

Internal Governance Framework
The Internal Governance Framework (IGF) formalises the design of the internal organisation and provides the basis for all decision-making within BNG Bank. The Internal Governance Framework consists of various elements, including the Three Lines of Defence model, the Risk Management Framework and the Compliance Cycle. The Three Lines of Defence model describes the roles of the three lines in relation to the bank's internal control and risk management system. The Risk Management Framework contains the overarching policy on general and specific risk-related subjects, such as risk governance and the risk appetite framework. The Risk Management Framework is tailored to BNG Bank's specific company profile. Risk management activities have been integrated into all parts of the organisation where significant risks may arise. The ongoing risk management process comprises of identification, assessment, measurement, monitoring, reporting and steering of the various types of risk. The Compliance Cycle forms the basis for all activities of the compliance function and focuses on the detection of instances where BNG Bank operates outside its integrity risk appetite or is in non-compliance with relevant laws and regulation.

Risk Governance en Risk Management Framework
The Supervisory Board approves the bank's Risk Appetite Statement and supervises the development of the actual risk profile in relation to the risk appetite. The ExCo is responsible for drafting the Risk Appetite Statement and ensuring the bank's operating activities are carried out within the parameters of the risk appetite for the various risks. The ExCo performs this task via various risk-oriented committees, namely the Asset & Liability Committee (ALCO), the Credit Policy Committee, the Credit Committee, the Capital Committee, the Financial Counterparties Committee, the Investment Committee and the Non-Financial Risk Committee. A description of the tasks and members of these committees is published on the website of BNG Bank.

The 'first line' (the business) is the risk owner and is primarily responsible for risk identification, designing and executing internal controls to manage the risks associated with business processes.

The following 'second line' departments, which are directly positioned under the Chief Risk Officer, further support the ExCo in implementing and executing the bank's internal control and risk management system:
- **Risk Management**: The Risk Management department supports the business in identifying, qualifying, quantifying and mitigating the risks. It also monitors risks with the support of specific risk management instruments and independently reports on these activities. These risks consist of financial risks (credit risk, market risk and liquidity risk) and non-financial risks (operational risk and strategic risk). The Risk Management department also maintains the Risk Management Framework and various risk policies. The coordination of scenario

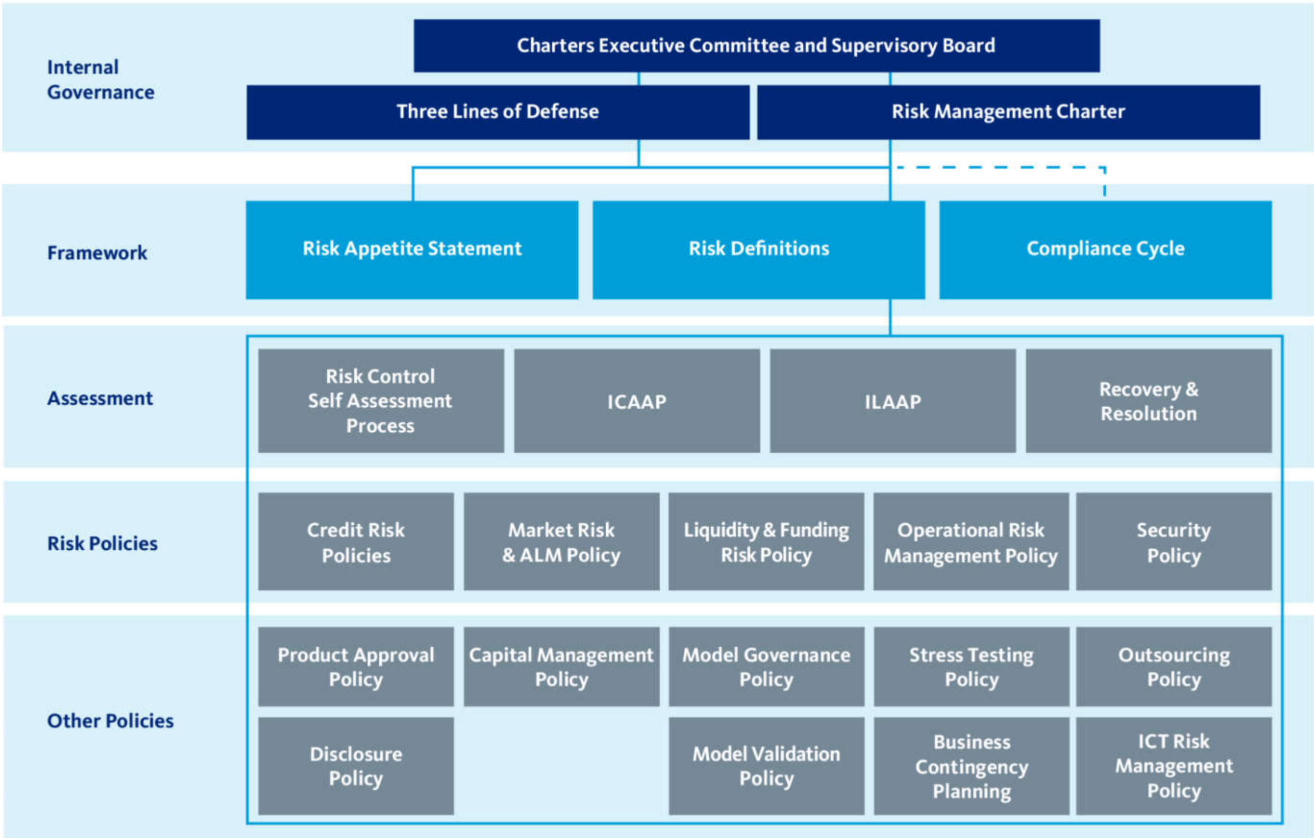
analysis is also assigned to the Risk Management department, with regard to both the economic and the normative perspective (in which, among other scenarios, an adverse climate scenario is calculated,). As part of its responsibilities, the risk management department aims to ensure that BNG Bank operates within its risk appetite. The purpose, position and authorities of the function are documented in the Risk Management Charter. Risk Management is represented in all ExCo committees and takes part in meetings held by the SB's Risk Committee. The Head of Risk Management reports to the ExCo and has a reporting line to the Supervisory Board.

- **Credit Risk Assesment:** The Credit Risk Assessment department provides independent assessments and advice on risks relating to individual credit proposals and reviews for clients and financial counterparties, including non-performing loans and loans where a strong increase in credit risk is observed. The department also participates in the formulation of policies with respect to credit risk. As part of the operational lending process, the department is represented in all credit risk-oriented ExCo committees.
- **Compliance:** The Compliance function promotes the integrity of the organization, its clients, its employees and the markets in which BNG Bank operates and monitors compliance with rules, regulations and internal standards. The Head of Compliance reports to the ExCo and has a reporting line to the SB. This is documented in the Compliance Charter. Please see the paragraph on Compliance for further details.
- **Security:** The Security function monitors, facilitates, supports and challenges the business in order to safeguard the reliability (confidentiality, integrity and availability) of information, IT infrastructure and critical business processes with regard to (cyber)threats. Security is responsible for developing and maintaining the information security policy, maintaining the crisis management policies and the execution of the security awareness programme. Furthermore, the Security department is responsible for monitoring and reporting on security risks. As part of this responsibility, the Security department aims to ensure that BNG Bank operates within its security risk appetite. The purpose, position and authorities of the Security department are documented in the Security Charter.

Finally, the 'third line' is represented by the internal auditors working in a separate department positioned under the Chief Executive Officer (CEO), to reflect their independence from the business.

- **Internal Audit Department (IAD):** The IAD periodically conducts operational audits to evaluate the design and operational effectiveness of the bank's internal control and risk management systems and assess compliance with the applicable legislation. The purpose, position and authorities of the IAD are documented in the Internal Audit Charter. The IAD reports to the ExCo and it has a reporting line to the SB.

Risk Management Framework (RMF)



Risk Appetite Framework

An important element of the Risk Management Framework is the Risk Appetite Framework (RAF). This framework covers policies, processes, controls, and systems for establishing, communicating and monitoring the bank's risk appetite. In addition, the RAF includes the Risk Appetite Statement, the subsequent risk limit setting, and an outline of the roles and responsibilities of parties overseeing the implementation and monitoring of the Risk Appetite Statement. This statement is updated annually, based on external and internal developments. It is cascaded into limits and targets for the various types of risk. These are subject to a quarterly monitoring programme to determine whether the bank operates within the limits of its risk appetite. The outcomes are reported to the various Risk Committees and subsequently integrated into a report to the ExCo and the SB. The integrated risk report not only provides aggregated information derived from figures used for periodic limit monitoring, but also aims to present a holistic view on the present and future risks of the bank.

Risk Appetite Statement 2022

Reputation and internal business operations

Indicator
Credit rating and other indicators

Qualitative description of risk appetite

- Preserve status of promotional bank
- Sound conduct and ethical business practices in line with legitimate expectations of society and other stakeholders
- Compliant with laws and regulations and criteria by supervisors
- Qualitative and quantitative capacity to execute the Road to Impact
- Effective, efficient, controlled business practices
- Meet the adequate standards to prevent information security or business continuity incidents

Ambition

- Perception of BNG Bank as a semi-public institution with excellent creditworthiness
- Committed to high standards of integrity and our role as gatekeeper to the financial system
- Driven by Social Impact – selected SDGs
- Reliable, sustainable, professional

2022

The management of the non-financial risks requires management attention.

Profitability

Indicator
Profitability

Qualitative description of risk appetite

- Income and expense trends are relatively stable and in line with each other
- Amounts of potential / incidental losses limited
- Services at cost-covering rates

Ambition

- Relatively stable annual results.
- Reasonable returns.

2022

The bank shows healthy financial results in 2022.

Solvency

Indicator
Capital ratios

Qualitative description of risk appetite

- Total capital ratio higher than other banks.
- High quality of capital.
- Available capital > required capital plus a buffer.

Ambition

- Very prudent capital adequacy, in line with desired rating profile.

2022

- The bank remains well capitalised.
- This is in line with 2021.

Liquidity

Indicator
Liquidity ratios

Qualitative description of risk appetite

- Always be able to meet obligations in times of business as usual, without use of buffers.
- Continuous access to money and capital markets.
- The capacity to generate liquidity is sufficient for any time horizon under stressed circumstances.
- Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) are used as backstops.

Ambition

- Stable presence for public sector.
- Prudent liquidity position, in line with desired rating profile.

2022

- The bank maintained a prudent liquidity position.
- This is in line with 2021.

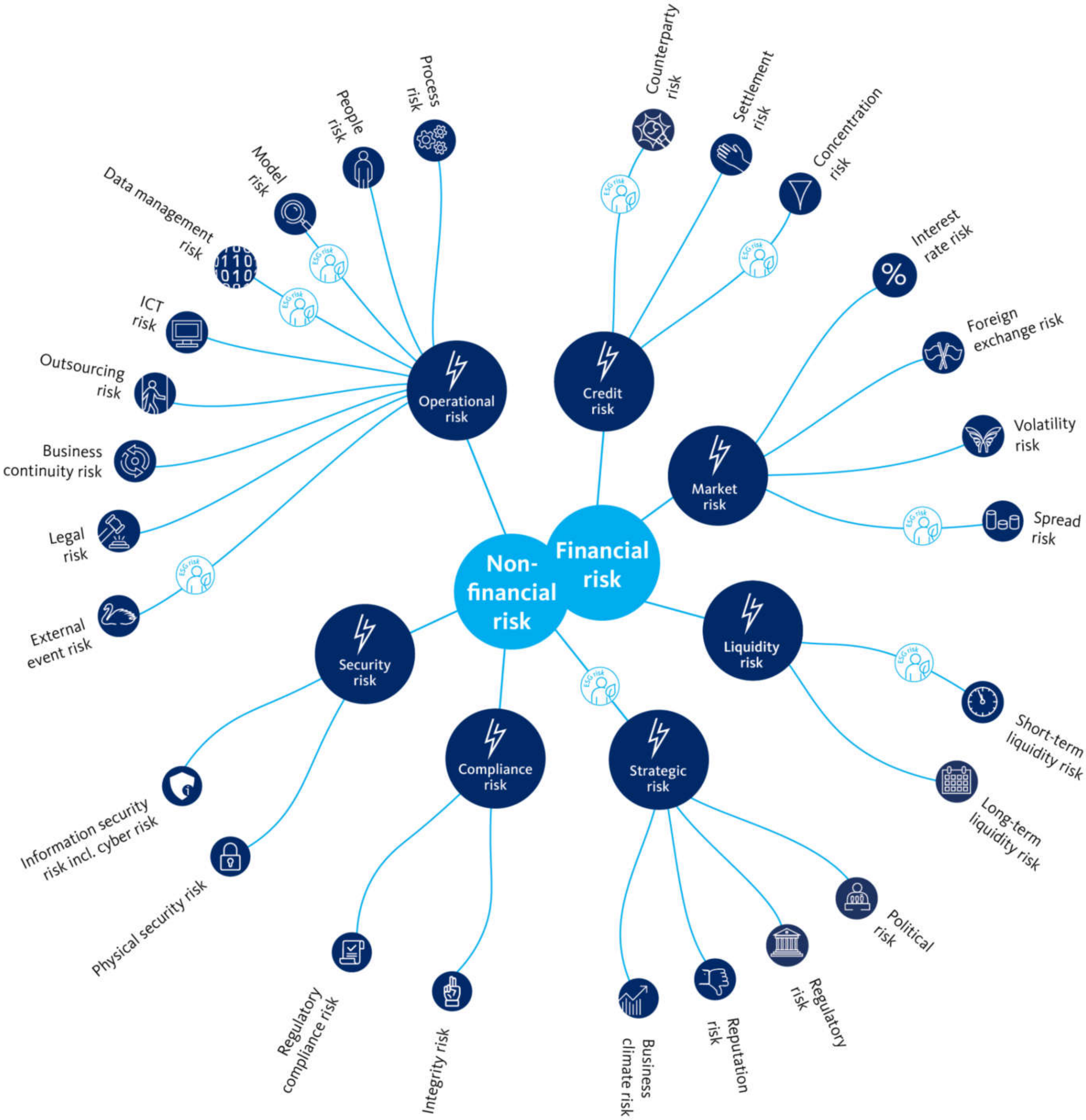
In 2022, BNG Bank operated within its risk appetite for financial risks. Regarding credit risk, the bank is closely monitoring sectors for which a relatively severe impact is possible, due to increased energy prices, cost inflation and higher interest rates. The bank remains well capitalised and maintains a prudent liquidity position in line with its desired external credit rating.

For non financial risks, BNK Bank didn't fully operate within its risk appetite in 2022. Shortcomings in internal processes, people and system can potentially cause much damage. First, second and third line findings demonstrate the bank should improve on this. For this reason the bank has given priority to the improvement of the operational risk profile, amongst others by founding a Non Financial Risk Committee. The improvement of the operational risk profile is a multi year programme that will be a priority for the ExCo in 2023 as well.

Risk culture

BNG Bank recognises the importance of ensuring a proper risk culture within its organisation and endeavors to embed it in the internal control and risk management system. The risk appetite is an important instrument in enhancing risk awareness and embedding the desired risk behaviour. To increase risk awareness by employees, BNG Bank has extended the responsibility for the monitoring of limits and targets to the risk oriented ExCo committees. This development is aiming to increase risk awareness at operational level. It is expected that the implementation of the Governance, Risk and Compliance (GRC) tool to support the internal control and risk management process will enhance efficiency and segregation of responsibilities. The GRC tool will also contribute to the aim of the bank to further strengthen its risk culture and reach a higher level of maturity of its non-financial risk management process.

Risks



Non-financial risk
Financial risk
Operational risk
Process risk
People risk
Model risk
Data management risk
ICT risk
Outsourcing risk
Business continuity risk
Legal risk
External event risk
Credit risk
Counterparty risk
Settlement risk
Concentration risk
Market risk
Interest rate risk
Foreign exchange risk
Volatility risk
Spread risk
Liquidity risk
Short-term liquidity risk
Long-term liquidity risk
Strategic risk
Political risk
Regulatory risk
Reputation risk
Business climate risk
Compliance risk
Regulatory compliance risk
Integrity risk
Security risk
Information security risk incl. cyber risk
Physical security risk

Specific risks

Risk management within BNG Bank distinguishes between the categories of financial risks and non-financial risks. Within these categories main risks (level 1) and sub-risks (level 2) have been defined. Only risk categories that are relevant to BNG Bank have been included. ESG risk is connected to those traditional risk categories where material impact from ESG factors is expected. The figure shows the relevant categories, without giving an indication of the magnitude of each category. A description for each specific risk is given below.

Risk category	Definition
Credit risk	The risk of loss of earnings or capital resulting from a borrower or a counterparty failing to meet its obligations in accordance with the agreed terms. The potential credit risks in relation to BNG Bank are counterparty risk, concentration risk and settlement risk.

Counterparty risk - Counterparty risk is relatively low as a result of BNG Bank's business model. The bank is mainly exposed to its statutory counterparties and its financial counterparties. Statutory counterparties are restricted to public sector entities. BNG Bank issues loans, the majority of which (more than 90%) are issued to or guaranteed by central or local government bodies. These loans have a risk weighting of 0%. Consequently, loans granted to or guaranteed by Dutch government authorities are regarded as virtually free of credit risk. Furthermore, lending is subject to initial and periodic credit risk assessments, which comprise a detailed assessment of the creditworthiness of the client concerned. The counterparty risk of financial counterparties is reduced by making use of central clearing and of collateral agreements based on a daily exchange.

Concentration risk – Given that BNG Bank focuses on the Dutch public domain, concentration risk is relatively high for the bank and inherent to its business model. Sector-specific policies, internal targets, and maximum exposure amounts on individual counterparties are applied to manage the concentration risks on sectors and individual parties.

Settlement risk – Settlement risk for BNG Bank is related to the risk of losses to earnings and capital arising from a party failing to comply with the conditions of a contract (or a group of contracts) with the bank at the time of settlement. BNG Bank mitigates this risk by setting minimum ratings on its counterparties and by limiting exchange amounts.

In 2022, some noteworthy developments occurred in relation to credit risk, in addition to the ongoing impact of the COVID-19 pandemic. Those developments are mainly related to the Russia-Ukraine conflict and the deterioration of the creditworthiness of financial counterparties.

Russia-Ukraine conflict – The conflict in Ukraine led amongst other to increased energy prices, higher inflation and rising interest rates. These developments affected all clients of BNG Bank. Therefore, the bank closely monitors the sectors in which it operates as well as its individual clients. In particular the healthcare and energy sectors receive additional attention.

Financial counterparties – The bank expects an increase in financial counterparty risk in the current economic environment. Hence it is closely monitoring relevant developments and proactively takes appropriate measures to reduce or manage exposures on its financial counterparties.

Internal improvements – In 2022, BNG Bank improved its credit risk control processes in relation to governance and monitoring. The framework of governance and limits was extended. Moreover, the bank started implementing ESG credit risks within the internal control and risk management framework. To identify the material sectors for monitoring purposes, the bank is conducting an analysis per sector in which it operates, to define the material ESG-related credit risks. The results from the analysis conducted so far, demonstrate that most ESG-related credit risks are mainly related to emissions and energy. In 2023, the bank will continue with the analysis and is planning to implement monitoring metrics as one of the next steps.

Risk category	Definition
Market risk	The risk of losses to earnings and capital due to the fluctuation of market prices. Market risk includes the interest rate risk, exchange risk and fluctuations in credit spreads and liquidty spreads.

BNG Bank adopts a prudent approach to manage its market risk. The interest rate position of BNG Bank consists of the actively managed Treasury book and the passively managed ALCO book.

The interest rate position in the Treasury book is managed at portfolio level by the Treasury department. This department is authorized to operate and hedge within a limited bandwidth, which allows efficient hedging and flexibility for clients.

The interest rate position in the ALCO book is a passive position and replicates the benchmark used for its required return on equity. Due to this passive strategy with a direct link to the required return, the economic impact of the rising interest rates was relatively limited to BNG Bank.

In 2022 BNG Bank has finalised adjustments for the transition from GBP Libor to Sonia. In addition, preparations have been made for the transition from USD Libor to completed to Sonia. In addition, preparations have been made for the transition from USD Libor to SOFR.

Risk category	Definition
Liquidity risk	The risk of losses to earnings and capital due to the possibility, at any given time, that the bank will not be able to fulfil its payment obligations without incurring unacceptable costs or losses. Liquidity risk comprises of short-term liquidity risk and long-term liquidity risk (or refinancing risk).

In 2022, financial markets remained volatile as a consequence of the Russia-Ukraine conflict. To support the financial markets, the European Central Bank (ECB) at first maintained the policy interest rate at a historically low level and continued its assets purchase programme. In addition, the ECB continued the TLTRO programme, consisting of longer-term loans to banks at favourable costs to encourage them to lend to businesses and consumers in the euro area. However during the second half of 2022, interest rates rose significantly as a response to increased inflation (expectations). This led to a significant collateral inflow for BNG Bank. As a consequence, less short and medium term funding was needed.

By the end of 2022, the ECB decided to sober down the conditions of TLTRO. This triggered the bank to reduce its participation in the TLTRO programme to EUR 3.5 billion (end of 2021: EUR 18.5 billion). Despite the market volatility and diminished TLTRO participation, BNG Bank's funding position remained solid. The desired average maturity of regular capital markets funding was increased by approximately one year during 2022, in response to the increased average maturity of new lending.

Risk category	Definition
Operational risk	The risk of losses of earnings or capital due to shortcomings of internal processes, people and systems, or as a result of external events. Operational risk comprises process risk, people risk, model risk, IT risk, data management risk, outsourcing risk, legal risk, business continuity risk and external event risk.

The overarching governance-related developments in operational risk management relate to the Non-Financial Risk Committee (NFRC) and the implementation of a tool to support the management of non-financial risks. The NFRC became fully operational in 2022 and is formed by two members from the ExCo, the Chief Operating Officer (Chair) and Chief Risk Officer, as well as senior stakeholders from the first and second line of defense. The NFRC addresses non-financial risk related policies and developments on the internal control and risk management system as reported by the first line and by the second line, including the outcome of Risk Control Self Assessments on processes and incident management topics.

The implementation of the GRC tool that will enable more effective and efficient management of the operational, compliance and security risks started with a pilot project for the Back-office process. After a successful implementation in the midst of the year, the further roll out has been executed and this will continue in 2023 This will support the execution and documentation of first line risk monitoring activities.

The other main developments in 2022 in the operational risk profile relate to process risk (including change), people risk, data management risk and ICT risk.

Process risk (including change) – The bank has an ambitious change agenda to support the execution of its strategy. To ensure oversight and focus on the key priorities, the bank has adopted an Integral Portfolio Management approach(and related governance body) and further developed its Project Management Office (PMO). Furthermore, large transition projects took place at both the commercial and operational areas, resulting in additional change. As a consequence, the bank has observed a deterioration in its operational risk profile.

In the third quarter of 2022, BNG Bank has taken legal action in a dispute with the Dutch Central Bank (DNB) regarding an operational incident from 2021 whereby the bank has not been granted the first conditional bonus rate from the TLTRO programme. This resulted in a negative impact of EUR 57 million. See the annual financial results in 2021 for more information.

People risk – To cope with the operational challenges resulting from the change agenda, the bank has increased its capacity and capabilities by hiring temporary external staff. Due to the difficult job market, especially in the IT-area, a number of internal vacancies have to be filled in by external hires as well. BNG Bank is also aware and keen to strengthen the knowledge and experience of its own employees and has set up a new training portal for personal development.

Data management risk – The project Data Insight 2.0 was started to further improve the central data warehouse. It is expected that data quality and its monitoring will improve and that the number of manual interventions will decrease.

ICT risk – The dependency on outsourcing partners has increased the risk profile regarding IT-performance, due to the developments related to one important partner. Furthermore, the IT-related control framework was subject to an internal review in 2022 and further improvements are being prepared to ensure and maintain an adequate maturity level of IT-related controls.

Risk category	Definition
Security risk	The risk of compromising data or ICT systems and/or incurring damage or harm to locations, buildings, equipment, personnel or visitors. It comprises information security risk (including cyber risk) and physical security risk.

No major security incidents occurred in 2022. To improve employee security awareness, quarterly phishing tests were performed in the past year. Furthermore, security training sessions and serious gaming sessions (as part of BNG Bank's knowledge programme) as well as security awareness presentations were conducted.

The first line security function has been strengthened. BNG Bank's second line Security department challenges the IT department, including its IT projects and critical IT changes, regarding security aspects. Furthermore, the Security department monitors the quality of disaster recovery exercises.

To improve management of (cyber) security risks, security assessments and ethical hack tests have been performed. Findings are addressed through a focussed security program to ensure the bank operates within its security risk appetite. The bank has also strengthened its cyber security capacity and will continue to expand its security teams in 2023.

Risk category	Definition
Compliance risk	The risk of insufficient compliance with or recognition of corporate values, codes of conduct, generally accepted social standards and values, laws, regulations and supervisory requirements. Compliance risk comprises integrity risk and regulatory compliance risk.

BNG Bank condiders ethical business practices and compliance with applicable laws, rules and social standards a prerequisite for its purpose to maximise social impact. BNG Bank has an independent compliance function to support the organisation in the management of integrity risks and regulatory compliance risks at BNG Bank. Although the Compliance department established that BNG Bank didn't fully operate witin her risk appetite for compliance risks in 2022, no significant risk materialised. Further information can be optained from the compliance paragraph.

Risk category	Definition
Strategic risk	The risk that an organization's strategic decisions result in losses of earnings and capital due to changes beyond its control with regard to political climate, regulatory developments, reputation, business climate and ESG.

Strategic risks are constantly evolving, and BNG Bank had to respond to a wide range of external developments in addition to the COVID-19 pandemic. Specifically, the Russia-Ukraine conflict, the supervisory focus on the NPE backstop regulations and the need for addressing ESG in its strategy and processes have added more complexity to the environment in which the bank operates.

Government guaranteed credit exposures are now subject to the NPE backstop regulation. This regulation prescribes write-offs to non-performing loans after a certain period of time, even if a full guarantee is in place. Although the details of the regulation may be still be amended, this regulation in its current form may have consequences for the way the bank finances guaranteed clients in the future.

The bank has recalibrated its priorities to improve internal alignment with the strategic direction and associated goals. This has enhanced focus and is expected to have a positive contribution to the execution power of the bank.

Last year, BNG Bank has foreseen that ESG factors will have a potential material impact on the following risk categories in the long run: counterparty and concentration credit risk, spread risk, short-term liquidity risk, data management risk, model risk, external event risk and strategic risk (related to regulatory adjustments and BNG Bank’s reputation and business model). In 2022, the bank has started to conduct impact and materiality assessments on ESG and will continue to complete this exercise for all relevant risk categories.

Further incorporating supervisory guidelines regarding ESG into the internal control and risk management framework has been an important focus for 2022 and this will continue to be a key priority in 2023 and beyond.

Heimen Visser
Fund Manager
Primevest Capital Markets

Martin Vols
Relationship manager
NEMM BNG Bank

Primevest Capital Partners and BNG Bank

Charging cars from street lights in Renkum

The first CityCharge street light was installed on 1 July 2022, in the municipality of Renkum in East Netherlands. A further twenty were installed over the next few months. The multifunctional street lights provide public lighting while also serving as charge points for electric cars. The project was made possible with the assistance of Smart City Nederland, an initiative by Primevest Capital Partners, and in partnership with BNG Bank.

Growing demand for charge points

Demand for charge points is increasing exponentially. By 2030, there are expected to be around 2.3 million electric cars in the Netherlands. To be able to charge them all, hundreds of thousands of charge points will need to be installed in the next few years. However, the rollout is behind schedule. Municipalities are struggling to find places to put all the charge points. The installation of charge points has also increased the number of objects cluttering up the streets.

Preventing cluttering

Under the Climate Agreement, municipalities have committed to halving their energy consumption and CO_2 emissions by 2030. Smart City Netherlands CityCharge street lights contribute to achieving this goal. Integrating the charging function into street lights helps reduce the shortage of charge points for electric cars and prevents the streets from becoming cluttered. The dimmable LED lighting in the smart street lights also reduces energy consumption in the municipality.

‘In 2022, Renkum became the first municipality to combine public lighting with electric vehicle charging.’

Heimen Visser

Suitable for all municipalities

Heimen Visser, Fund Manager Communication Infrastructure & Smart Cities at Primevest, says: ‘When this multifunctional and sustainable infrastructure started operating in 2022, Renkum became the first municipality to combine public lighting with electric vehicle charging. In the next twelve months, we’ll install a further twenty street lights with charging capacity. Within a couple of years, we’ll have around two hundred. But that figure isn’t set in stone: we’ll look at the demand on an annual basis. In addition, in 2023 we’re going to start applying the concept in Arnhem: we’ve worked with BNG Bank to develop a Smart City proposition, which in theory would allow us to roll out this solution to every municipalities in the Netherlands.’

Martin Vols, relationship manager NEEM (Networks, Energy, Environment and Mobility) at BNG Bank, says: ‘This partnership is entirely consistent with our mission. By providing financing, we’re helping municipalities achieve their sustainability goals. These street lights with charging capacity support three of the Sustainable Development Goals against which we measure our impact: 7: Affordable and clean energy, 11: Sustainable cities and communities and 13: Climate action. A smarter road network, more sustainable energy, innovation ... For us, choosing to take part was an easy decision to make.

Future-proof cities

Smart City Nederland is an initiative by Primevest Capital Partners in partnership with BNG Bank that is designed to help future-proof cities. As a partner of municipalities, the Smart City Netherlands initiative fits in perfectly with BNG Bank’s ambition to achieve social objectives, such as the energy transition in the public sector. For the municipality of Renkum, BNG Bank provided initial financing of around 5.5 million euros within the Smart City Netherlands partnership structure. The municipality provided a guarantee covering both the principal and the interest.

Visser is positive about the partnership with BNG Bank. ‘I’d particularly like to mention the flexibility. If it strengthens the proposition and the climate goals, there’s so much that BNG Bank can do. For instance, we originally started with equity-based financing, but gradually BNG Bank realised that the Smart City street lights fit into their strategy so well that they should provide full financing. Which was great!’

3 FINANCIAL RESULTS AND OUTLOOK

3.1 Financial results

Results and return

BNG Bank has had a good year. The bank recorded a net profit of EUR 300 million for 2022. This is EUR 64 million more than in 2021. This performance was also reflected in a higher return on equity of 6.7%, compared with last year's return on equity (5.4%). Favourable market conditions contributed to this result. More specific causes of this relatively high return compared with 2021 include the increased interest result and a higher positive result on financial transactions.

The interest result of EUR 481 million was EUR 74 million higher than the result for 2021. In 2021, the interest result was negatively impacted by the fact that the EUR 57 million TLTRO rebate was not granted, while for 2022 the TLTRO rebate was received. This benefit was passed on to clients in the form of an interest rate rebate on their loans, which are generally long-term loans. The higher interest rates also made a positive contribution to the interest result.

The result on financial transactions was higher in 2022 than in the previous year. It was EUR 113 million in 2022, which represents an increase of EUR 13 million. The realised results on sales were EUR 47 million. Of the other unrealised results of EUR 66 million, approximately EUR 30 million stemmed from positive returns from the ineffective portion of hedge accounting. The rise in the result on financial transactions can also be attributed to changes in credit spreads and interest rate hikes in the market.

Last year saw satisfactory developments in the long-term loan portfolio. BNG Bank issued EUR 12.3 billion in new long-term loans to clients, which is EUR 0.5 billion less than last year but EUR 1.6 billion more than expected. Compared with last year, the commission result rose by EUR 2 million to EUR 19 million. This was due to a higher turnover in loans subject to solvency requirements.

In 2022, we saw a rise in consolidated operating expenses from EUR 107 million in 2021 to EUR 115 million at the end of last year. Although BNG Bank spent less on consultants, the bank hired a large number of temporary external staff to strengthen the data and IT system and to implement the new organisational structure.

The effective tax for 2022 was 26.2%, at a nominal corporate income tax rate of 25.8%. In 2021, a one-off increase of 50% of the bank levy led to an increase of our effective tax rate to 32.6%. The bank levy was EUR 32 million in 2022, a decrease of EUR 21 million from 2021. In addition, not all expenses were tax deductible in 2021, due to the level of the leverage ratio.

The total of impairments on BNG Bank loans fell by EUR 80 million to EUR 160 million at year-end 2022. This difference includes a decrease resulting from an administrative settlement of EUR 130 million from previously devalued loans to a specific client. There was also an increase due to specific clients across various sectors being given a reduced credit rating. Relative to the balance sheet total, the total expected credit losses were low, at EUR 112 billion. This is a reflection of the high credit rating of the bank's exposures.

The balance sheet total for BNG Bank at year-end 2022 was EUR 112.1 billion, representing a decrease of EUR 37 billion relative to year-end 2021. The rise in long-term interest rates caused a drop in the value of loans in portfolio hedge accounting and a less-negative value of the corresponding derivatives and the associated cash collateral.

At the end of 2022, BNG Bank's equity stands at EUR 4.6 billion. This is EUR 0.4 billion less than in 2021, due to the repayment of part of the additional Tier 1 capital in May 2022. At the end of the year, there was EUR 0.3 billion in additional Tier 1 capital remaining. The bank's solvency ratios remain strong. The Common Equity Tier 1 ratio is 35% and the Tier 1 ratio is 37%. The Common Equity Tier 1 ratio is higher than in 2021, when it was 32%. This increase was caused by a decrease in risk-weighted assets from EUR 12.8 billion to 11.4 billion.

The leverage ratio at year-end 2022 was 13.0%, significantly higher than the 10.6% at the end of 2021. The option of excluding the ECB balance as a result of exceptional market conditions expired on 1 April 2022. Nevertheless, the leverage ratio was higher in 2022 than in 2021 because the balance sheet total decreased significantly, from EUR 149.1 billion to EUR 112.1 billion.

Lending and funding

The long-term loan portfolio increased by EUR 0.9 billion to EUR 88.0 billion in 2022. The long-term loan portfolio in the Housing sector was EUR 44.8 billion, an increase of EUR 1.4 billion on year-end 2021. The turnover targets were comfortably achieved in all sectors.

The portfolio of long-term loans not subject to solvency requirements was worth EUR 80.6 billion. This represents a solvency-free exposure of 91.6% of the total portfolio. Accordingly, BNG Bank met the target of a solvency-free exposure of at least 90%. In addition, the bank achieved her goal of a scoring percentage of at least 55% on solvency-free long-term lending to the local authority, housing association and healthcare institution sectors: in 2022, the bank granted 67.5% of loan applications.

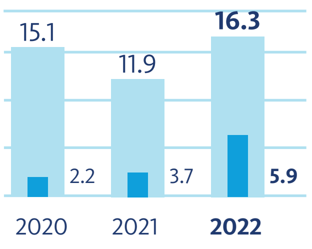
In 2022, BNG Bank raised a total of EUR 16.3 billion in long-term funding through the issuing of bonds. This included EUR 5.9 billion in ESG bonds to fund Dutch municipalities and housing associations. In 2021, 11.9 billion was raised, of which EUR 3.7 billion came from ESG bonds.

In mid-2022, BNG Bank decided to continue EUR 18.5 billion of ECB funding in the form of the TLTRO facility. The objective of this instrument was to stimulate the real economy during the pandemic by providing liquidity to specific target groups, such as housing associations and healthcare institutions. In the last quarter of 2022, the conditions of this instrument were adjusted, making it less attractive. BNG Bank therefore repaid EUR 15 billion of this funding.

Dividend

A dividend of EUR 139 million for 2022 will be proposed at the Annual General Meeting. This is 50% of the net profit, adjusted for the Additional Tier 1 capital payout.

Funding



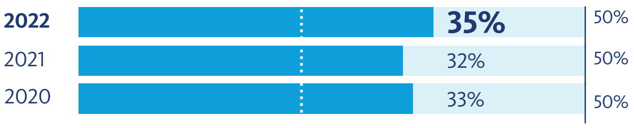
€ 16.3 billion

- Capital market funding
- Of which SDG Bonds

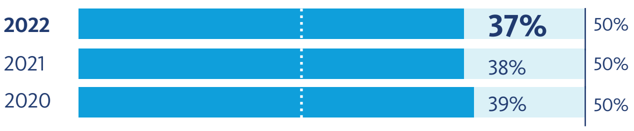
AAA

External ratings by Moody's, S&P and Fitch are in line with the ratings of the Dutch State

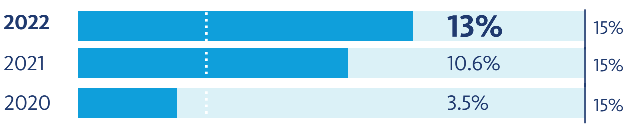
Common equity Tier 1 ratio



Tier 1 ratio



Leverage ratio

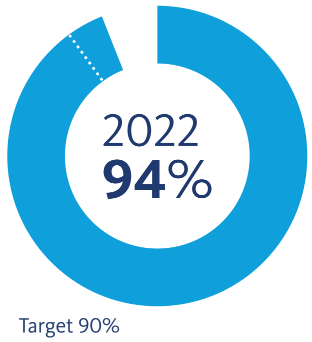


Lending

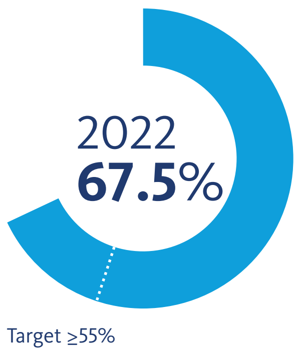
Long-term loans 2022

€ 12.3 billion

Share of promotional loans in portfolio



At least 90% of the long-term loans on the balance sheet should qualify



Scoring percentage for lending volume exceeds 55%

Net profit increased in 2022

Net profit 2022	Net profit 2021
€ 300 million	€ 236 million

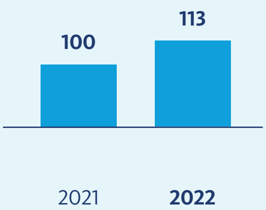
Return on equity

Return on equity is above return benchmark of the Ministry of Finance:

Return benchmark set by the Ministry of Finance: 3.7%

Factors that influence net profit:

Higher result financial transactions

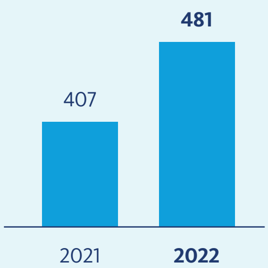


(in EUR million)

Cause

- Higher interest rates
- Spread development

Higher interest results

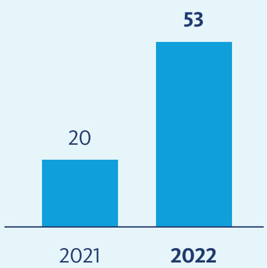


(in EUR million)

Cause

- Correction for ungranted TLTRO bonus rate in 2021
- Higher interest rates

Increase in allowance for credit losses

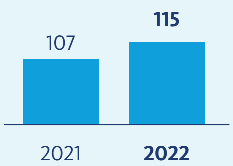


(in EUR million)

Cause

- Detoriation of macro economic forecasts
- Overlay for the healthcare sector

Increase in operational expenses



(in EUR million)

Cause

- Inflation and investments in the credit process and IT organisation

3.2 Financial outlook

The 2022 figures show that BNG Bank is in a strong financial position. A high level of capitalisation, a high leverage ratio and good funding conditions provide a solid financial foundation. Looking ahead, favourable funding, market opportunities and cost control will continue to be essential to maintaining our market position.

As in previous years, BNG Bank's funding policy will continue to be focused on ensuring permanent access to the money and capital markets for the terms and volumes required and at the lowest possible rates. BNG Bank expects to raise approximately EUR 17 billion in funding in 2023. As a result of the repayment of the TLTRO loan, the interest result will probably be lower in 2023. Over the next twelve months, the bank intends to raise at least 25% of its long-term funding from ESG bonds.

BNG Bank expects its operating expenses to increase in 2023. This is mainly due to necessary investments in the organisation, relating, among other things, to improvements in the IT landscape, data accessibility, and improvements to client and lending processes. The bank also estimates that its expenses will increase as a consequence of high inflation and the collective labour agreement.

The nominal corporate income tax rate will remain unchanged for 2023 at 25.8%. The basic principles underpinning the bank levy are also expected to remain unchanged. This means the bank levy for 2023 should be around EUR 29 million.

4 GOVERNANCE

4.1 Corporate structure

Since 1914, BNG Bank has acted as a financing partner for the public domain in the international money and capital market. The only shareholders of BNG Bank are Dutch public authorities.

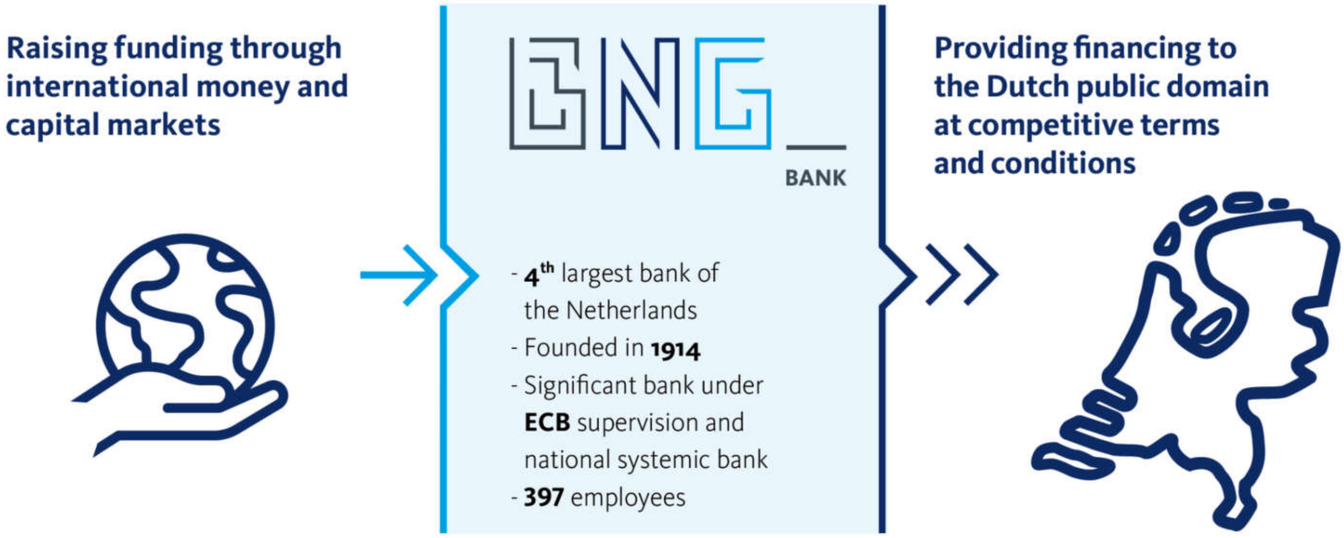
Business model

BNG Bank is a statutory two-tier public limited company. The bank was originally named ‘Gemeentelijke Credietbank N.V.’. After several other name changes, in 2018 the bank formally changed its name from N.V. Bank Nederlandse Gemeenten to BNG Bank N.V. The bank provides all its services under this name. The only shareholders of BNG Bank are Dutch public authorities. Half of the bank’s share capital is held by municipal authorities, provincial authorities and a water board. The other half is held by the Dutch government. The bank receives no financial assistance or other benefits from the government. BNG Bank is a bank of national systemic importance under the direct supervision of the ECB, and its balance sheet total makes it the fourth-largest bank in the Netherlands. BNG Bank has one branch in The Hague, where it conducts all its business. There were no significant changes in the bank’s size, structure, ownership or supply chain in 2022.

History

The history of BNG Bank begins in the early 20th century, during a period of significant poverty when social issues dominated the public discourse. It was during this period that the Vereniging van Nederlandsche Gemeenten (VNG; Association of Dutch Municipalities) was founded, leading in turn to the establishment of the Gemeentelijke Credietbank in 1914. The Gemeentelijke Credietbank provided municipalities with financial support, thereby helping to address and correct social issues. The Gemeentelijke Credietbank is now called BNG Bank, and it serves the same purpose as its predecessor.

Business model



BNG Bank provides financing to the public sector on competitive terms and for all maturities. The bank aims to support its clients, even when times are difficult. To date, it has always succeeded in doing so. The majority of the loans the bank provides (more than 90%) are granted to or guaranteed by public authorities. These loans are not subject to solvency requirements and have a risk weighting of 0%. BNG Bank also provides its clients with payment services.

The bank is seen as a safe bank, given that all its shareholders are Dutch public authorities and most of its lending is solvency free. BNG Bank holds the highest external credit ratings (Moody's: Aaa; Fitch Ratings: AAA; S&P Global: AAA). This provides the bank with a strong funding position on the international money and capital markets. Short and long-term funding in various currencies can be secured at low prices. This in turn enables BNG Bank to offer its clients low lending rates.

Management structure

The management structure of BNG Bank comprises a Supervisory Board and an Executive Committee. The Executive Committee consists of five directors, including three statutory directors who jointly form the statutory board. The members of the statutory board are appointed and dismissed by the Supervisory Board. The Executive Committee exercises the executive functions of the management body, as referred to in the Capital Requirements Directive (2013/36/EU). The Executive Committee is responsible for the day-to-day management of BNG Bank, its general operations and the continuity of its business. The Executive Committee has established a number of committees and consultation bodies that advise the Executive Committee or to which specific decision-making tasks are delegated. These include the Asset & Liability Committee, the Credit Policy Committee, the Credit Committee, the Non-Financial Risk Committee, the Capital Committee, the Financial Counterparties Committee, the Investment Committee, the Comprehensive Portfolio Consultation Body and the Sustainable Banking Committee. A description of the tasks and membership of these committees is published on the website.

The Supervisory Board exercises the supervisory functions of the management body, as referred to in the Capital Requirements Directive. The task of the Supervisory Board is to oversee the policies of the Executive Committee and the general operations of the company and its affiliated enterprise. The members of the Supervisory Board are appointed and dismissed by a general meeting of shareholders. The

Supervisory Board has four committees: the Audit Committee, the Risk Committee, the HR Committee and the Remuneration Committee. The committees carry out preparatory work for the decision-making by the Supervisory Board. The Report of the Supervisory Board contains a more detailed description of the responsibilities and activities of the committees.

ESG policy governance
The CEO is responsible for setting the strategy, including the ESG policy; the management team is responsible for implementing the strategy. Proposals for amending the bank's purpose, strategy, ESG policy and ESG goals are prepared by the Strategy department and presented to the Executive Committee for a decision. The Strategy department reports to the Executive Committee each quarter on the progress of the strategy, including the material topics.

Measurement of the impact that BNG Bank makes through its clients is part of the ESG policy and is the responsibility of the Strategy department. The method for measuring this impact was approved by the Executive Committee. Once a year, the bank reports in its annual report on the impact it makes on society via its clients; see section 1.1 of this report.

Stakeholders
BNG Bank's principal stakeholders are clients, investors, shareholders and employees. BNG Bank invests in long-term relationships with its stakeholders by engaging in regular consultation, attending regional and sector-based meetings and carrying out surveys. This dialogue provides the bank with a clear picture of their expectations and the value the bank can create for them. Stakeholders' responses are used to improve products, services and processes.

Three times a year, BNG Bank consults with the Client Council, a permanent committee of around ten board members from various client groups. The bank exchanges ideas with them on strategic issues that are important to both the bank and clients. For its municipal authority clients, BNG Bank organises annual meetings where topical issues are discussed. BNG Bank also makes substantive contributions to meetings concerning real estate in the healthcare, education, municipal and housing association sectors.

Subsidiaries and participations
BNG Gebiedsontwikkeling B.V. is a BNG Bank subsidiary specialising in risk-based participation in land development, process design and process guidance for municipalities and other public or semi-public organisations. In March 2018, the Supervisory Board of BNG Gebiedsontwikkeling and the Executive Board of BNG Bank jointly decided to hold off on initiating any new activities or projects within BNG Gebiedsontwikkeling, in order to complete the projects in the existing portfolio over the coming years.

Hypotheekfonds voor Overheidspersoneel B.V. (HvO) was the second subsidiary of BNG Bank. It supplied mortgages to public sector employees. On 12 December 2022, the portfolio was sold to National Nederlanden Bank N.V. (NN Bank). HvO will be wound up.

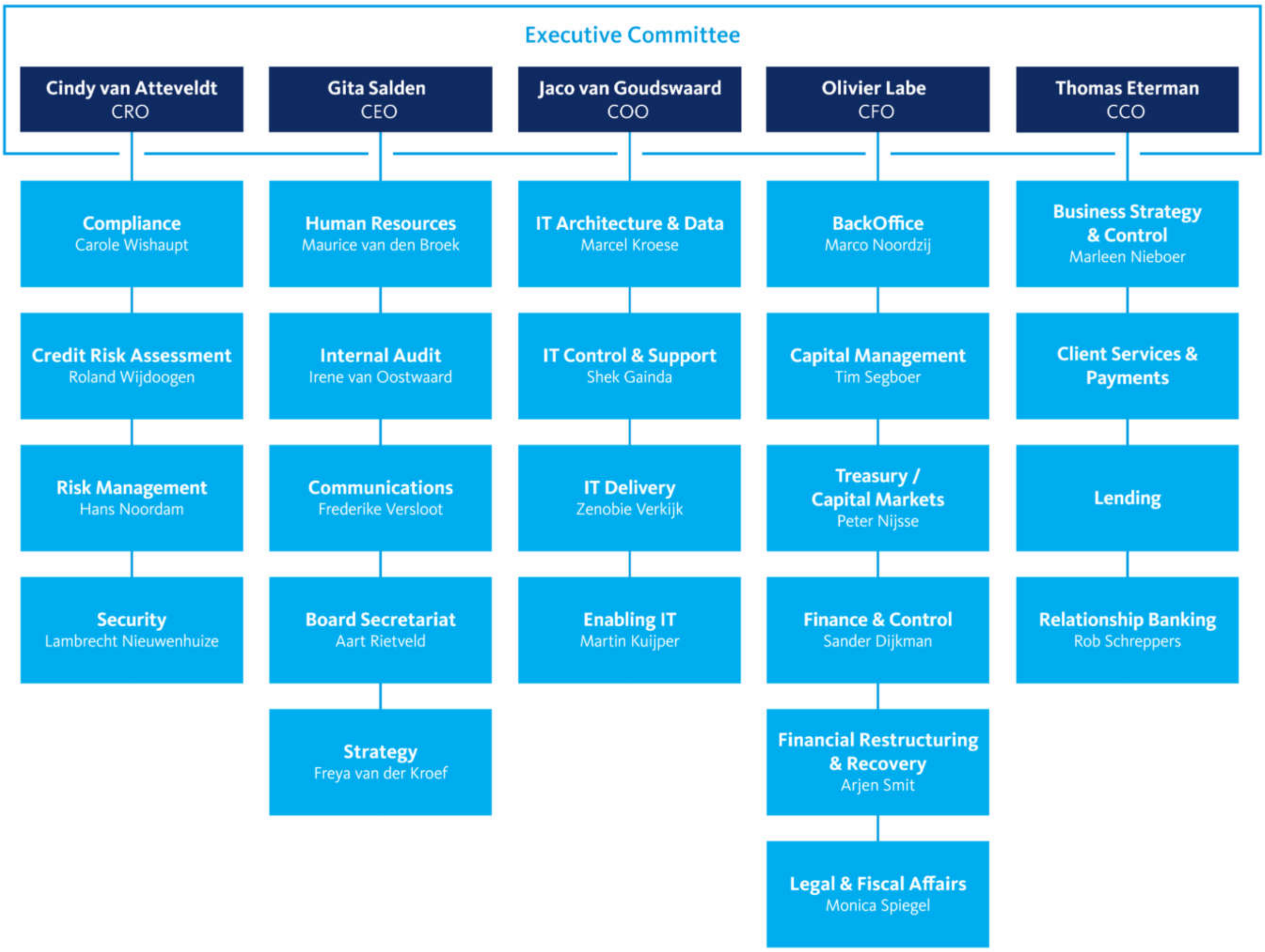
BNG Bank's participation in Dataland B.V. came to an end in 2022 due to the cessation of activities and subsequent liquidation of Dataland. BNG Bank sold its participating interest in Data B Mailservice Holding B.V. in 2022.

BNG Bank is a member of the Dutch Banking Association (NVB), the European Association of Public Banks (EAPB) and the International Capital Market Association (ICMA).

4.2 Composition of the management body and organisation

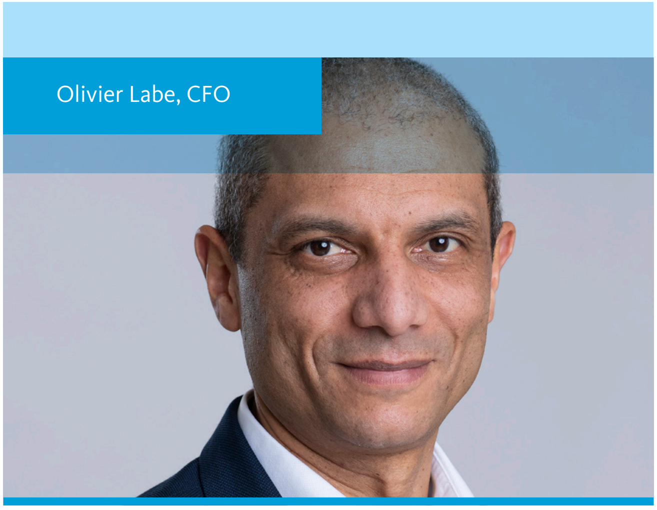
BNG Bank is managed by a five-member Executive Committee. The portfolios of Executive Committee members have been allocated in such a way that the Three Lines of Defence model can be fully implemented.

Name	Gender	Year of birth	Nationality	Date of first appointment	Date of reappointment	Date of second reappointment
Gita Salden, CEO	F	1968	NL	1 January 2018	1 January 2022	
Olivier Labe, CFO	M	1969	F/NL	1 May 2015	1 May 2019	1 May 2023
Cindy van Atteveldt, CRO	F	1972	NL	15 February 2021	-	
Thomas Eterman, CCO	M	1976	NL	22 June 2021	-	
Jaco van Goudswaard, COO	M	1967	NL	22 June 2021	-	


Executive Committee
Cindy van Atteveldt
CRO
Gita Salden
CEO
Jaco van Goudswaard
COO
Olivier Labe
CFO
Thomas Eterman
CCO
Compliance
Carole Wishaupt
Credit Risk Assessment
Roland Wijdoogen
Risk Management
Hans Noordam
Security
Lambrecht Nieuwenhuize
Human Resources
Maurice van den Broek
Internal Audit
Irene van Oostwaard
Communications
Frederike Versloot
Board Secretariat
Aart Rietveld
Strategy
Freya van der Kroef
IT Architecture & Data
Marcel Kroese
IT Control & Support
Shek Gainda
IT Delivery
Zenobie Verkijk
Enabling IT
Martin Kuijper
BackOffice
Marco Noordzij
Capital Management
Tim Segboer
Treasury / Capital Markets
Peter Nijsse
Finance & Control
Sander Dijkman
Financial Restructuring & Recovery
Arjen Smit
Legal & Fiscal Affairs
Monica Spiegel
Business Strategy & Control
Marleen Nieboer
Client Services & Payments
Lending
Relationship Banking
Rob Schreppers

Composition of Executive Committee

Gita Salden, CEO



Olivier Labe, CFO

Gita Salden, CEO, is responsible for strategy, communication, organisational and personnel policy development, internal audit and the board secretariat, as well as economic research. She is also responsible for general coordination and stakeholder relations.

In relation to her position at BNG Bank, she is a board member of the Dutch Banking Association (NVB). She is also a member of the Supervisory Board of Invest International.

Olivier Labe, CFO, is responsible for financial reporting, funding and treasury, asset and liability management, capital management, investor relations, and legal and tax matters. He is also responsible for the back office and financial restructuring and recovery (special management). He chairs the Capital Committee, the Asset & Liability Committee and the Investment Committee.

In relation to his position at BNG Bank, he is Chair of the Supervisory Board of the subsidiary Hypotheekfonds voor Overheidspersoneel B.V., Chair of the Supervisory Board of the subsidiary BNG Gebiedsontwikkeling B.V., Chair of the Supervisory Board of the Stichting BNG Duurzaamheidsfonds and member of the Investment Committee BOEI B.V. He is also a member of the Supervisory Board of ASR Vermogensbeheer N.V. He is a member of the Advisory Board of the Faculty of Economics and Business Administration at the University of Amsterdam and is a member of the Steering Committee of the Public Sector Issuer Forum of the International Capital Market Association (ICMA).

Cindy van Atteveldt, CRO

Cindy van Atteveldt-Machielsen, CRO, is responsible for risk management, compliance, credit risk assessment and security. She is Chair of the Credit Committee, the Credit Policy Committee and the Financial Counterparties Committee.

In relation to her position at BNG Bank, she is a member of the Supervisory Affairs Committee of the Dutch Banking Association (NVB), and a member of the Supervisory Board of its subsidiary, Hypotheekfonds voor Overheidspersoneel B.V. She is also a member of the Supervisory Board and chairman of the Audit Committee of N.V. Exploitatiemaatschappij De Krim.

Thomas Eterman, CCO

Thomas Eterman, CCO, is responsible for Relationship Banking, Lending, Client Services and Payments and Business Strategy & Control.

In relation to his position at BNG Bank, he is a member of the Supervisory Board of BNG Gebiedsontwikkeling B.V.

Jaco van Goudswaard, COO

Jaco van Goudswaard, COO, is responsible for processing, as well as data and information management. He is Chair of the Non-Financial Risk Committee.

Samenfoort en BNG Bank

Building schools together in Amersfoort

In Amersfoort, 15 school boards have joined forces in two cooperatives: Samenfoort PO (for primary education) and Samenfoort VO (for secondary education). Together with the municipality of Amersfoort, the cooperatives have launched a project to renovate a large number of the school buildings in the city over the next 40 years. BNG Bank is providing funds for this project. This gives the school boards that make up the cooperatives several advantages, including a stronger position in negotiations with building contractors, the possibility of long-term funding and a convenient 'merry-go-round' approach to temporary accommodation requirements.

Modern times call for modern schools

A large part of the school buildings in Amersfoort is more than 40 years old, so the large-scale building project that Samenfoort PO and VO are facilitating for the commissioning parties comes at the right time for the municipality.
As the cooperatives' accommodation officer Mark Canjels explains, there were a number of possible funding options. 'As a public-sector bank, BNG Bank is familiar with the social challenges that schools are facing and the most suitable funding structure to tackle these. That made it the obvious choice for us. The fact that it is in contact with the municipality involved and speaks the same language was another benefit. Moreover, we found that it offered better value for money.'
Ever since its inception, he has been more than happy with the partnership: 'Obviously, setting up the necessary entities and arranging funding took quite a bit of hard work, but I have been fortunate in having an effective working relationship with Jeffrey Nijhuis and receiving full cooperation from BNG Bank with the completion of all the paperwork.'

Benefits of the partnership

Jeffrey Nijhuis, relationship manager public and education at BNG Bank, argues that the benefits

> ‘BNG Bank combines the digital facilities of a modern bank with bespoke customer relationship management. We feel seen as well as heard.’
>
> **Mark Canjels**

for Samenfoort speak for themselves: ‘Samenfoort presents a common front in its negotiations with the municipality on behalf of the schools – and in its dealings with BNG Bank as well, of course. This is more efficient than negotiating as 15 school boards separately. On top of that, all schools benefit from the more attractive conditions and added possibilities of large-scale funding as a result.’ He smiles. ‘Such a large group provides additional funding opportunities for BNG Bank, but above all it genuinely allows the cooperatives to work with us on achieving their long-term ambition over the next 40 years.’

Canjels adds: ‘There are also logistical advantages. Commissioning parties in primary education use a district approach, renovating each school in turn. This makes it possible for one school to find temporary accommodation in the old buildings of another school in a sort of merry-go-round. This is not a factor for secondary education as we are tackling all pre-vocational secondary education institutions in the municipality in one go.’

An impressive project

Amersfoort’s ambitious building plans will result in a large number of new school buildings for both primary and secondary education in the coming years. The scope of the planned renovations is impressive. As a minimum, the new school buildings will adhere to the NZEB (near zero-energy building) and Fresh Schools Class B guidelines, which cover a long list of sustainable innovations. The school boards’ own contributions will make it possible to take additional steps towards greater sustainability, for example towards the ZEB (zero-energy building) or gas-free standards. In addition, the first primary schools will be built in accordance with the UBG (Uniform BasisGebouw, uniform basic building) standard. This means that each school will have the same broad floor plan, but be given a different appearance both inside and out. Each school will feature notable innovations like theatre stairs, open-plan learning zones or round-the-clock childcare and bespoke child health care facilities.

First opening

16 November 2022 saw the festive opening of De Kei as the first primary school in the ‘merry-go-round’ – the first school of four in Amersfoort’s Schothorst district to be renovated. Two pre-vocational secondary education institutions in Amersfoort, Het Element and Trivium, are up next, in early 2023.

5 CORPORATE GOVERNANCE STATEMENT

The internal risk management and control systems are an important point of attention within BNG Bank. The Risk Governance Framework forms the basis for all risk management activities at BNG Bank. It clarifies the principles behind the internal control and risk management system. The Risk Appetite Statement describes the risks that the bank wishes to accept in order to achieve its objectives. The various risks posed by the bank's activities are discussed each year in BNG Bank's annual report. In their 'In Control Statement' to the Executive Committee, the managing directors and department heads report directly to the Executive Committee, focusing on risk management as it relates to the bank's risk appetite. In the annual plans, they also explain how they aim to fulfil their responsibility of meeting the bank's risk appetite. The second line reports to the Executive Committee on compliance with the Risk Appetite throughout the year. This overall framework is closely linked to the bank's Capital Management Policy, which is periodically reviewed and discussed with the regulator.

Audits by the Internal Audit Department (IAD) focus on independently determining the structure and function of the internal risk management and control systems. The external auditor audits the financial statements and evaluates internal control in respect of the financial reporting insofar as relevant to an efficient and effective audit of the financial statements. The findings of the IAD and the external auditor are reported to the Executive Committee and to the Supervisory Board. The head of the IAD and the external auditor attend the meetings of both the Audit Committee and the Supervisory Board where the financial statements are discussed.

The annual report provides sufficient insight into shortcomings in the operation of BNG Bank's internal risk management and control systems. The aforementioned systems provide a reasonable degree of certainty that the financial reporting contains no inaccuracies of material importance. These systems are of course incapable of providing absolute certainty about the achievement of the company's objectives and the prevention of all errors, as well as instances of fraud and non-compliance with laws and regulations. A detailed explanation is provided in the 'Risk' section of the Annual Accounts. The consolidated financial statements are prepared on the basis of the going-concern principle. No material risks or uncertainties were identified that could hinder continuity for a period of twelve months following the preparation of the report.

Declaration of responsibility

In the opinion of the statutory board, the financial statements provide a true and fair view of the assets, liabilities, financial position and results of BNG Bank and the subsidiaries included in the consolidation. The annual report provides a true and fair view of the bank's position, and the current balance sheet reflects performance during the reporting year and the expected developments of BNG Bank and its consolidated subsidiaries. Figures belonging to these subsidiaries have been included in the consolidated financial statements. The annual report also describes the material risks facing BNG Bank.

Den Haag, March 17, 2023

Statutair bestuur

Gita Salden (CEO)
Olivier Labe (CFO)
Cindy van Atteveldt-Machielsen (CRO)

BNG Bank en Radboudumc

Partner in Radboudumc's construction plan

Nine years ago, when the time came to invest in accommodation of its own, Radboudumc in Nijmegen prepared the first draft of its proposal for the role of property in health care. In September 2022, King Willem-Alexander inaugurated the new hospital building: the centrepiece of Radboudumc's 'campus plan'. BNG Bank is the principal funder of the plan, as well as the organisation's 'long-term partner'. Radboudumc CFO Mark Janssen and Okko Dijkstra, sector lead for health care at BNG Bank, tell us more.

Unpredictable future

'Nine years ago, we did not know what today's digital possibilities would be, just like we are unable to predict right now what the world will look like in 2031', Mark Janssen says. 'But even at the time, we had the feeling that the first draft was too conservative and had to go. We forced both ourselves and the architect to come up with a truly cutting-edge proposal for the role of property in the health care sector of tomorrow.'

BBB

The result was a 'campus plan' that focused on the concept of BBB: 'Less Bricks, more Bytes, different Behaviours'. As Janssen explains, these factors are closely linked: 'Let's talk about less Bricks first. The new building on the campus occupies a smaller floor area: we have gone from 550,000 to 450,000 m2. This means less maintenance and lower heating costs. In addition, many rooms in our new building are multifunctional, so the same space can be used by employees with different roles and positions. The buildings that have been knocked down on the site will be replaced with greenery.

The second B, more Bytes, stands for the fact that digital technology has made our working methods more efficient. For example, digital technology allows us to differentiate between busy nurses and assistants, who are more flexible. If a patient wants a glass of water, a nurse is no longer alerted if an assistant is available to deal with the request. Those various roles and positions, some of which can change from one moment to the next, make up the different Behaviours accommodated by the new building – the third B.’

Lifetime commitment

All told, the ‘campus plan’ is an ambitious construction plan covering the period until 2030. As the principal funder, BNG Bank, is contributing around 260 million euros. ‘It is no understatement to speak of a lifetime commitment’, Okko Dijkstra claims. ‘Not entirely coincidentally, Radboudumc is one of those organisations whose mission is comparable to that of BNG Bank: delivering high-quality care to society. I should also mention that its board has had the courage to be transparent – even vulnerable – over many years, not least when it comes to the financial picture. This has given us a lot of confidence as a funder.’

Janssen, in turn, is full of praise for BNG Bank as a partner: ‘This is a bank that is interested in more than just numbers. It helps us out with our dilemmas and is always available for an exchange of views. As an example, Okko regularly shares examples from other sectors that he is knowledgeable about. This makes it easier for us to be open about things we struggle with.’

6 REPORT OF THE SUPERVISORY BOARD

6.1 Foreword

I have the pleasure to address you for the second time in my role as Chair of the Supervisory Board. 2022 was an eventful year, both for the Netherlands and for BNG Bank. A the start of the year, we thought we had reached calmer waters after the turbulence caused by COVID-19, but this impression was soon shattered when war broke out in Ukraine in February. In economic terms, we faced high inflation and a sharp rist in interest rates . This affected all of society, not least of all the public sector. As BNG Bank, we helped assist Ukrainian refugees by supplying prepaid debit cards. This is something I am proud of.

The lifting of the recommendation to work from home meant that BNG Bank's employees could return to the office. Most employees were working partly on location and partly from home. Whereas videoconferencing had been the norm in 2021, hybrid conferencing became commonplace in 2022: some participants meet in person while others dial in. It was a major advantage for new employees in particular to receive induction training on location again.

The focus in 2022 was on further continuing the strategy known as 'Our Road to Impact'. The Supervisory Board is keeping a close eye on the transition of the organisation. The restructuring of the commercial organisation and developments in BNG Bank's IT organisation contributed to the implementation of the strategy. This transition rests heavily on the ongoing development of the lending process and the IT landscape. Other recurring topics included the developments at an outsourcing partner of the bank and the developments in the context of regulations at both national and international level. At the end of 2022, the bank published its 'Going Green' climate plan. In doing so, BNG Bank is taking an important step towards realizing the bank's ambitions in this area.

Meanwhile, BNG Bank's solvency, liquidity and profitability remained strong, and the bank's sold financial position enabled it also in 2022 to fulfil its role as financier of the public sector.

Strategic personnel planning was high on the agenda. Various positions immediately below the Executive Committee were filled again or for the first time. Due to scarcity in the labour market, increasing use was made of external staff. The organisation endeavoured to recruit new employees.

The Executive Committee (ExCo) set up in 2021 remained the same in 2022 in terms of composition. The Supervisory Board is content with Olivier Labe's reappointment as CFO for a period of two years, effective from 1 May 2023. This period is in line with the Ministry of Finance's new policy on state-owned enterprises. On a bilateral basis, the discussions between the Supervisory Board and the ExCo have been intensified. This underlines the Supervisory Board's advisory role.

This year, the Supervisory Board said goodbye to Kees Beuving. I would like to take this opportunity to thank Kees for his significant contribution in the past eight years. After Kees' departure, the Supervisory Board again consisted of seven members.

Clients take centre stage, also for the Supervisory Board. During two client sessions, we engaged in dialogue with clients about their activities and dilemmas. Obviously, the contribution and services of BNG Bank were also addressed on this occasion. The Supervisory Board finds it extremely useful to discuss the way our clients view and position BNG Bank in this manner.

In response to the Supervisory Board's annual self-evaluation, the memberships of the Supervisory Board committees were reassigned halfway through the year. The distribution of subjects among the committees and the Supervisory Board was worked out in further detail. This ensures that topics for discussion are assigned to the right people and are addressed with the right amount of depth.

On behalf of the Supervisory Board, I would like to thank the employees of BNG Bank for their efforts and engagement. The Supervisory Board has every confidence that the further implementation of 'Our Road to Impact' will be undertaken with diligence also in 2023.

On behalf of the Supervisory Board,

Huub Arendse
Chair of the Supervisory Board

The Hague, 17 March 2023

6.2 Composition of the Supervisory Board and committees

The composition of the Supervisory Board as per 31 December 2022 is shown in the table below. In accordance with the Articles of Association and the Corporate Governance Code, Supervisory Board members are appointed for a period of four years. After this term, Supervisory Board members are eligible for reappointment for another period of four years by the General Meeting of Shareholders. In the event of special circumstances, Supervisory Board members may then be reappointed once more for a two-year term of office, which may subsequently be extended by a maximum period of two years.

Effective from the 2022 AGM, Kees Beuving stepped down as a member of the Supervisory Board at the end of his second term of office. At the same meeting, Marlies van Elst was reappointed as a member of the Supervisory Board for a four-year period.

Within the Supervisory Board there is ample knowledge of and experience with the relevant business units of BNG Bank, the markets within which the bank operates and the specific characteristics of public stakeholders. The collective knowledge of the Supervisory Board is described in the Supervisory Board's fitness matrix and in its job profile. The current or most recent principal position held by each member of the Supervisory Board is listed on the following pages. Additional positions held by the Supervisory Board members are only stated in this annual report insofar as they are relevant. The register of additional positions held is available on the website. All the Supervisory Board members are independent within the meaning of the best-practice provisions of the Corporate Governance Code.

The four Supervisory Board committees, the Audit Committee, the Risk Committee, the HR Committee and the Remuneration Committee, prepare the decision-making by the Supervisory Board. The activities of the committees are described in the section entitled ‘Activities of the Supervisory Board committees’. A total of seven regular Supervisory Board meetings and one extraordinary meeting were held in 2022. The attendance rate for regular Supervisory Board meetings in 2022 was 98% (2021: 96%). In addition, the Audit Committee met five times, the Risk Committee met five times, the HR Committee met five times and the Remuneration Committee met once. The attendance rate for committee meetings in 2022 was 96% (2021: 98%). The attendance rate for all meetings in 2022 was 96% (2021: 97%).

Composition of the Supervisory Board and Committees

Name	Gender	Year of birth	Nationality	Date of first appointment	End of first term	End of second term
Huub Arendse Chair	M	1958	NL	18-04-2019	2023	
Jan van Rutte Vice-Chair	M	1950	NL	23-11-2015		2024
Karin Bergstein	F	1967	NL	22-04-2021	2025	
Johan Conijn	M	1950	NL	01-01-2016		2024
Marlies van Elst	F	1966	NL	19-04-2018	2022	2026
Leonard Geluk	M	1970	NL	22-4-2021	2025	
Femke de Vries	F	1972	NL	22-4-2021	2025	

Huub Arendse, Chair

Huub Arendse was CFO and member of the Executive Board of Achmea. He is Chair of the Supervisory Board of Achmea Bank.

Jan van Rutte, Vice-Chair

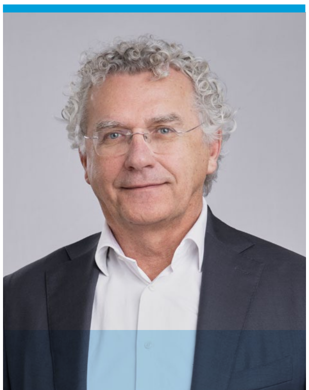
Jan van Rutte was CFO in the Executive Board of ABN AMRO Group. He is member of the Supervisory Board of PGGM and member of the Supervisory Board of Health Center Hoenderdaal.

Karin Bergstein

Karin Bergstein was member of the Executive Board of a.s.r. She is member of the Supervisory Board of Van Lanschot Kempen, Non Executive Director at Chesnara and member of the Supervisory Board of UMC Groningen.

Composition of the Supervisory Board Committees and attendance

Supervisory Board member	Supervisory Board meetings	Audit Committee meetings	Risk Committee meetings	HR Committee meetings	Remuneration Committee meetings	%
Huub Arendse	100%			100%	100%	100%
Karin Bergstein	100%	100%	100%			100%
Johan Conijn	100%	100%	100%			100%
Marlies van Elst	100%		100%			100%
Leonard Geluk	89%	67%		75%	100%	83%
Jan van Rutte	100%	100%				100%
Femke de Vries	100%		100%	100%	100%	100%
Total	**98%**	**92%**	**100%**	**92%**	**100%**	**96%**



Johan Conijn

Johan Conijn is director and senior advisor of housing corporations at Finance Ideas. He is member of the Investment Committee of Amvest Residential Core Fund.

Marlies van Elst

Marlies van Elst was COO of ING Bank in Belgium and Poland and member of the Operations & IT Management Team of ING Group. She is member of the Supervisory Board of Bank Mendes Gans.

Leonard Geluk

Leonard Geluk is general director of the Association of Netherlands Municipalities (VNG). Formerly Councilor Youth & Education at the municipality of Rotterdam.

Femke de Vries

Femke de Vries is professor by special appointment of Supervision at the University of Groningen and a consultant in behavior, culture and leadership.

6.3 Activities of the Supervisory Board

The Supervisory Board monitors the policy of the ExCo, the way in which the latter implements the strategy and oversees general affairs within the company. In doing so, the Supervisory Board focuses on long-term sustainable value creation for BNG Bank's clients and for society. It also monitors the effectiveness of the internal risk management and control systems as well as the integrity and quality of the financial reporting. The members of the Supervisory Board are independent Depending on the topic being discussed, the Supervisory Board fulfils the role of supervisor, employer or advisor to the ExCo.

Meetings and topics of discussion

The Supervisory Board met eight times in 2022. The regular meetings of the Board are attended by the members of the ExCo and, upon invitation, by the external auditor. Prior to meetings of the Supervisory Board, a private session is held in which only members of the Supervisory Board may participate. Committee meetings are held one week before the regular meeting. During meetings of the Supervisory Board, written and oral reports are presented covering these committee meetings. If the approval of the Supervisory Board is required, the committee concerned gives advice to the Supervisory Board. At the start of each meeting of the Board is determined that no conflicts of interest exist.

In 2022, the Supervisory Board was kept up to date about the developments in and achievement of BNG Bank's strategic objectives. Through quarterly reports, the Board was informed about the status of the strategic objectives and internal developments. Throughout the year, the Supervisory Board and the ExCo spoke about the prioritization and determination. In regular consultation with the ExCo, it was decided to sharpen the bank's focus and to scale back the activities aimed at achieving a number of targets in 2022.

The Supervisory Board devoted much attention in 2022 to the further development of the COO and CCO organisation within BNG Bank. It also closely followed the progress of projects launched in order to improve the lending process, further automation of transaction monitoring and complete the KYC project.

During its meetings, the Supervisory Board regularly discussed the necessary IT-related developments within BNG Bank, such as IT security. The ongoing development of the bank's own IT organisation and the developments at Centric FSS, the bank's major outsourcing partner, were regularly addressed. These topics remain a point of attention for the Board also in 2023.

Throughout the year, the Supervisory Board was kept up to date about ongoing results, as well as commercial developments. Consideration was also given to the follow-up steps taken by BNG Bank in response to not being granted the conditional bonus rate under TLTRO III. The Supervisory Board supports the ExCo in the legal proceedings brought against the decision not to grant the conditional bonus rate.

Finally, the Supervisory Board discussed and approved the 2021 Annual Report, and discussed issues and developments arising from external supervision, capital and liquidity planning and dividend policy.

Permanent education

Each year, members of the Supervisory Board and the ExCo follow a permanent education (PE) programme. Five PE sessions were held in 2022. These sessions covered digitalisation in the financial sector in general and at BNG Bank in particular, sustainable funding, the standard pricing model applied by BNG Bank, compliance and integrity. In addition to the PE sessions, two meetings were held on the topic of BNG Bank clients and client partnerships. These meetings focused on the developments within the residential sector and at housing associations, and on public district heating systems.

Evaluation of the Supervisory Board and the Executive Committee

In accordance with the Banking Code and the Dutch Corporate Governance Code, the Supervisory Board must discuss its own performance once per year. In 2022, the Board carried out a self-evaluation under the supervision of an external party. Based on interviews with the full Supervisory Board, with the individual Board members, with ExCo members and with a number of BNG Bank employees, a report was drawn up about the Board's performance. The overall picture emerging from the self-assessment is positive and an encouragement to continue the current activities of the Supervisory Board. An important activity for the Board in 2023 will be the preparation for the vacancies that arise in 2024 following the departure of two Board members with expertise in banking and housing associations.

The Supervisory Board is also responsible for the evaluation of the functioning of the ExCo and the assessment of the members of the ExCo. It does so on the basis of individual performance and development targets for each ExCo member. In 2022, discussions about the individual objectives were held with all ExCo members.

Contact with stakeholders

The Supervisory Board maintains contact with stakeholders such as the Works Council, clients, shareholders, the external regulator, the external auditor and managers. Members of the Supervisory Board attended three consultative meetings with the Works Council in 2022. The Board has found these conversations with the Works Council to be constructive, and appreciates the transparent and effective communication between the Supervisory Board, the ExCo and the Works Council.

Contact with the shareholders is conducted in part via the General Meeting of Shareholders, at which the Supervisory Board renders account for its supervision. The Annual General Meeting of Shareholders was held on 21 April 2022. The items on the agenda concerned the approval of the financial statements for 2021, the approval of the proposed dividend, the grant of discharge to the members of the Executive Committee and Supervisory Board for their duties during the 2021 financial year, the amendment to BNG Bank's Articles of Association and the reappointment of Supervisory Board member Marlies van Elst. The AGM agreed to all the resolutions on the agenda.

In 2022, two meetings were held between the Ministry of Finance, BNG Bank's primary shareholder, and the Chair of the Supervisory Board. The chairwoman of the Audit Committee was present at one of the meetings.The Supervisory Board also holds an annual consultation with the external regulator. In addition, members of the Supervisory Board keep in touch with managers of BNG Bank. Where relevant, managers attend specific agenda items at the meetings of the Supervisory Board and the committees. Managers also give presentations if this is required. Lastly, the Supervisory Board maintains regular contact with the external auditor as well as the Internal Audit Department (IAD), while the Board also oversees the performance of the external auditor. In the Supervisory Board's opinion, no situations involving conflicting interests on the part of ExCo members, Supervisory Board members, shareholders and/or the external auditor occurred in 2022 that were of material significance to the company and/or the relevant ExCo members, Supervisory Board members and/or the external auditor.

6.4 Activities of the Supervisory Board committees

The four Supervisory Board committees support the Supervisory Board in monitoring the activities of the Executive Committee.

The committees prepare the Supervisory Board's decision-making policy and advise the Supervisory Board on various topics. Each committee has its own set of rules and regulations. In principle, the committees meet one week before the regular meeting of the Supervisory Board.

Audit Committee

The Audit Committee consists of Karin Bergstein (Chair), Jan van Rutte, Johan Conijn and Leonard Geluk. The Audit Committee prepares decision-making by the Supervisory Board in respect of financial reports, internal control systems and reports from internal audit and the external auditor. In addition to the Audit Committee members, the CEO and CFO, the head of IAD, the head of Finance & Control and the external auditor participate in the meetings of the Audit Committee. The Chair of the Risk Committee is also a member of the Audit Committee. The Chair of the Supervisory Board attends the Audit Committee meetings as a permanent observer. The Audit Committee holds a private session with the external auditor and the head of IAD prior to some of the meetings. The Chair of the Audit Committee meets separately with the head of IAD and the external auditor five times a year, around the time of the Audit Committee meetings.

The Audit Committee met five times in 2022. The Audit Committee discussed the financial statements and annual report for 2021. It also addressed the altered requirements on filing the financial statements and the annual report. Another topic of discussion was the Pillar 3 Disclosure Report. The Audit Committee gave the Supervisory Board a positive recommendation on the approval of the financial statements. A positive recommendation was also given on the proposal to make a dividend of 60% of net profit in 2021 available for distribution. Furthermore, the Audit Committee spoke in detail about the internal quarterly financial reports. Special consideration was given to the significant financial items in relation to the figures and the disclosures. These items were:

Impairments of loans and receivables

The Audit Committee discussed the provisions on the basis of the quarterly reports and the auditor's audit. Special consideration was given to clients in the biomass industry and the liquidation of Econocom. Specifically, the Audit Committee looked at the impact of high inflation on the various sectors in which BNG Bank operates. It discussed the correct application of IFRS-9, as well as the reason for applying a management overlay in view of the uncertainty for companies in the healthcare sector caused by the extremely high inflation rate. Based on these discussions, the Audit Committee agreed to the provisions formed.

Fair value of financial instruments

The Audit Committee was informed about the methods used and the outcome of management valuations. Based on these discussions, the Committee agreed to the methodology applied and the outcomes.

The Committee was kept up to date through quarterly reports on key figures, developments and forecasts concerning commerce, profitability, solvency, capital, liquidity and funding. In response to this, the Audit Committee discussed the quality of the financial results. The Committee also discussed the evolution of the margin over the short and long term. In this context, it looked at the price dynamics in response to the TLTRO and at the missed TLTRO conditional bonus rate.

The Audit Committee considered the rate of success across the various sectors. Along with the development of the provisions, it discussed the cost development within BNG Bank. The initiatives relating to the part of the loan portfolio designated as 'legacy' (in connection with the updated strategy) were another topic of discussion. In addition, the Audit Committee spoke about the management of the internal control systems and the measures taken in that context.

The Audit Committee discussed the audit plan with the external auditor. It also discussed the board report to the 2021 financial statements, prior to its discussion by the entire Supervisory Board. The main topics were the audit scope, materiality and key audit issues. The progress of the transformation was discussed as well. Additional sections on fraud risks and continuity were added to the audit opinion, based on BNG Bank's status as a Public-Interest Entity.

The Audit Committee monitors the activities of the Internal Audit Department during each meeting. In doing so, it addresses the key IAD findings and the progress of the implementation of the IAD findings. The Committee approved the IAD's annual plan. The annual plan was discussed in the context of the overall implementation of the Risk & Control Framework. The Audit Committee is satisfied with the IAD's altered working method, which is reflected in the Audit Plan and Audit Charter for 2022 approved by the Audit Committee.

Finally, the Audit Committee discussed the cost development in 2022 and the 2022 budget in preparation for their discussion by the Supervisory Board.

Risk Committee

The Risk Committee supports the Supervisory Board in supervising the activities of the ExCo with regard to risk management and the management of the various risks and corresponding risk areas. The Risk Committee consists of Johan Conijn (Chair), Marlies van Elst, Karin Bergstein and Femke de Vries. In addition to the Risk Committee members, the CEO and CRO, the head of IAD, the head of Risk Management and the head of Compliance participate in the meetings of the Risk Committee. The Chair of the Supervisory Board attends the Risk Committee meetings as a permanent observer. The Chair of the Risk Committee meets with the head of Risk Management at least once a year, and at least once a year with the head of Compliance. Consultations also take place around the time of the Risk Committee meetings.

The Risk Committee met five times during the financial year. The Risk Committee periodically discusses the effectiveness of the structure and operations of the internal risk management systems aimed at controlling financial and non-financial risks. Each quarter, the Committee receives the Integrated Risk Report. This report includes the reports from Risk Management, Compliance and Security, together with a joint opinion from the CRO column. In particular, the Risk Committee considers the recommendations which the CRO column makes to the ExCo.

In the Integrated Risk Report, the Risk Management department reports on the monitoring of the bank's risk profile in relation to the risk appetite approved by the Supervisory Board. The reports discuss the status of the credit, market and liquidity-based risks, as well as on operational and strategic risks. In response to these risk reports, the Risk Committee spoke at length about the credit risk, focusing on the review process and the activities of the first and second lines. Operational risk was discussed as well. Incident analyses were covered, as well as process risks in relation to both projects and 'people risk' within a changing organisation. In addition, the Risk Committee discussed developments relating to ESG risk, specifically climate and environmental risk.

The compliance report included in the Integrated Risk Report examines integrity risks, compliance with existing legislation and regulations, and the preparation for and implementation of new legislation and regulations. In response to these reports, the Risk Committee discussed the results of the Systematic Integrity Risk Analysis (SIRA). Topics discussed included the privacy organisation and projects in the field of client integrity. Also discussed were monitoring assurance, implementation of ESG legislation and regulations, and the initiatives taken to this end. Developments in the areas of transaction monitoring and client integrity were discussed as well. Regarding client integrity, the Risk Committee addressed the way tax integrity is taken into account as a key topic. The Risk Committee discussed the continuing development of the compliance function, as well as the Regulatory Change Framework (RCF), which aims to provide more oversight during the implementation of laws and regulations. Furthermore, the Committee was updated on the acquisition and implementation of tools for the systematic recording of non-financial risks and associated controls and monitoring activities. In 2022, the Risk Committee also discussed the root cause analyses of a number of incidents, including the TLTRO incident, and the risk analysis of restrained remuneration policies.

The third pillar of the Integrated Risk Report is the report from the Security department. Throughout 2022, the Risk Committee regularly discussed IT security, partly in response to an external review of the bank's IT security. Cyber security risks were also discussed.

The Risk Committee prepared the annual adoption of the Risk Appetite Statement (RAS) by the Supervisory Board. Each year, the Risk Committee also discusses the updated Recovery Plan and the outcome of the Supervisory Review and Evaluation Process (SREP). Part of the SREP involves the assessment of risks relating to capital (ICAAP) and liquidity (ILAAP). The documents drawn up as part of this process form the basis of the regulator's assessment of the capital requirement.

The Audit Committee and the Risk Committee held one joint meeting in 2022. During this meeting, the members of the respective committees were updated on the impact of non-performing exposures on BNG Bank's capital. The management of the various types of concentration risk and the going-concern approach of the IRRBB (Interest Rates for Banking Book) were also discussed at this meeting. In addition, consideration was given to the plans for setting up a new data warehouse.

HR Committee

The HR Committee consists of Huub Arendse (Chair), Femke de Vries and Leonard Geluk. The HR Committee's responsibilities include the recruitment and selection of members of the Supervisory Board and statutory members of the ExCo, the periodic evaluation of the performance of the Supervisory Board and the ExCo as a whole and the assessment of the performance of individual statutory members of the Supervisory Board and ExCo. The HR Committee also supervises BNG Bank's broader HR policy. The HR Committee prepares the Supervisory Board's decision-making on this point, thereby supporting the Supervisory Board in its role as employer. In addition to the members of the HR Committee, the CEO and the head of HR participate in the meetings of the HR Committee.

The HR Committee met five times in 2022. Key topics addressed during these meetings were the evolution and implementation of the HR strategy, the leadership development within the bank and the actions ensuing from the employee surveys conducted every quarter. Much consideration was given to the presentation of BNG Bank as an attractive employer, as laid down in the HR strategy. During the year, the HR Committee intensively monitored the development of the employer brand story and the development of good leadership within the bank, and was pleased to establish that significant progress had been made in these areas.

In addition, the Committee looked at diversity within BNG Bank and the analysis of a potential gender pay gap. The HR Committee endorses the steps which BNG Bank has taken to strengthen employee diversity. Furthermore, the HR Committee established that there is no gender pay gap within the organisation.

The HR Committee spoke about the process and outcomes of BNG Bank's annual Strategic Personnel Planning.

Remuneration Committee

The Remuneration Committee consists of Femke de Vries (Chair), Huub Arendse and Leonard Geluk. The Remuneration Committee is responsible for preparing the decision-making by the Supervisory Board concerning the remuneration of the Supervisory Board, the ExCo and senior management, including decisions that have consequences for risk management within the company. As is the case for the activities of the HR Committee, this responsibility primarily centres around the 'employer' role of the Supervisory Board. In addition to the members of the Remuneration Committee, the CEO and the head of HR participate in the meetings of the Remuneration Committee.

The Remuneration Committee met once in 2022. The remuneration policy for the Supervisory Board was discussed at that meeting. This policy is approved each year by the Remuneration Committee in accordance with the Restrained Remuneration Policy. The Remuneration Committee gave the Supervisory Board a positive recommendation on the approval of the policy. In addition, consideration was given to the remuneration of employees – or 'Identified Staff' – capable of impacting the bank's risk profile. The Committee also took note of the outcome of the annual risk analysis of the controlled remuneration policy.

In the Remuneration Report (published on the website) prepared by the Remuneration Committee, the Supervisory Board reports on the execution of the remuneration policy for the ExCo and employees, and on the implementation of the remuneration scheme for the Supervisory Board.

Merlien Welzijn
Executive director
Woonpartners
Midden-Holland

Ilona Sijm
Relationship manager
Social Housing
BNG Bank

Woonpartners Midden-Holland and BNG Bank

Financing middle-income rentals for a healthier housing market

Housing association Woonpartners Midden-Holland manages a sizeable social housing portfolio in the low-income market segment – with rents of up to 800 euros per month – in the region around Gouda, Waddinxveen and Boskoop. Last year, its board decided to expand the portfolio with a relatively small number of homes in the middle-income segment. Merlien Welzijn, executive director of the housing association, explains why; Ilona Sijm, account manager at BNG Bank, explains why the bank is happy to finance this expansion.

Healthy housing market

'A healthy housing market offers people mobility', says Welzijn. 'However, the middle-income segment has for many years been insufficiently attractive to commercial landlords. As a result, growth in the number of homes to let in this segment has stagnated. We felt that things could not go on like this. Because if current tenants cannot progress to the middle-income segment, no homes will become available for first-time tenants with a low income.'

Non-'sgei' homes

Strictly speaking, due to the higher rents, these homes in the middle-income segment do not meet the definition of 'services of general economic interest' (sgei), a legal definition introduced in 2018 to prevent the possibility of housing associations causing market disruption. Welzijn: 'But because we have provided adequate evidence that insufficient rental housing is being offered by commercial landlords in this region, the investment is allowed.'

> ‘BNG Bank have been our principal banker for many years, so they are familiar with our portfolio.’
>
> **Merlien Welzijn**

Mixed neighbourhood, better neighbourhood

Merlien Welzijn points out the importance of having a good mix of residents in the neighbourhood. ‘A neighbourhood where everyone lives in social housing has a higher risk of deteriorating. It can suffer from poverty and easily fall victim to degradation. But the addition of even a small percentage of wealthier residents transforms the entire neighbourhood. Gouda-Oost, for example, was for many years a neighbourhood with a bad reputation. But by attracting more middle-income residents, an upward spiral was set in motion that has utterly transformed the neighbourhood. That is why we want to ensure that enough homes become available in the middle-income segment.’

Reliable partner

Ilona Sijm, BNG Bank’s relationship manager for Woonpartners Midden-Holland, says that BNG Bank fully understands the step taken by Woonpartners Midden-Holland: ‘One of the reasons why we are financing this expansion worth about 25 million euros is that we fully endorse the vision of this housing association for a healthy housing market. Furthermore, Woonpartners Midden-Holland has for many years been a transparent and reliable client.’

Being a principal banker is a plus

Welzijn says she is happy that BNG Bank decided to finance the expansion. ‘They have been our principal banker for many years, so they are familiar with our portfolio. In a project like this, you inevitably run into surprises. To give one example, BNG Bank’s valuer recently put a lower value on our collateral than our own valuation. So that meant we had to renegotiate. But that did not put a dent in the progress towards the loan, because there was mutual trust that we would be able to reach a deal, and that’s what counts.’

The financing from BNG Bank will enable Woonpartners Midden-Holland to expand its portfolio with about 130 apartments, which will be built in several neighbourhoods in the region.

7 SUPPLEMENTARY INFORMATION

7.1 Value creation and materiality

This annual report shows how BNG Bank created financial and non-financial value for its stakeholders in 2022. The annual report was prepared in accordance with the standards of the Global Reporting Initiative applicable from 2021 onwards. These guidelines provide a generally accepted system for reporting to internal and external stakeholders. In accordance with the guidelines, a materiality analysis was performed to determine the topics that are of material importance.

The topics are part of the broader strategy and objectives of BNG Bank in 2022. This section reports on the management of the activities relating to these topics.

Materiality analysis

The purpose of BNG Bank is to make a social impact. Thanks to its outstanding credit rating, BNG Bank is in a position to provide the public sector with affordable financing. The bank aims for maximum social impact in all its activities. The organisation has performed a comprehensive trend analysis. The emphasis of the analysis was on developments in the public sector that might affect the activities of BNG Bank. A variety of sources were used for the analysis, such as a competition analysis, SWOT analysis and dialogue with the bank's Executive Committee. Based on these trends, the impacts of BNG Bank were identified.

For each impact, BNG Bank determined whether it was an actual or potential impact in relation to its business activities. It also determined whether the impact would have a positive or negative effect on the economy, climate and people, including any possible effect on human rights. The bank also assessed the timeframe within which the impact would arise, distinguishing between short, medium and long-term impacts. It should be noted that an impact as described above may relate to more than one of the three aspects (economy, climate, people). At the same time, an impact can have both positive and negative effects, depending on the context in which it arises.

The significance of the impact is determined by a subjective weighting of the severity and probability of it occurring. Based on this weighting, the most significant impacts were translated into seven material topics in order of importance. These topics were discussed with around two hundred members of staff, an official delegation of young employees of BNG Bank, and the senior management of the bank. The Executive Committee then approved the material topics, after which the Supervisory Board accepted them. The external auditor was asked to review the selection of topics.

Material topics

2022	2021
1. Market leader in the public domain	1. Affordable financing
2. Social impact on five SDGs	2. Sustainability financing
3. Client partnerships and stimulating social impact of clients	3. Client partnerships aimed at increasing sustainability/ Encouraging responsible business operations of clients
4. Ethical conduct in accordance with core values	4. Ethics and compliance
5. Data security and high-quality data	5. Data security
6. Efficient organisation	6. Efficient organisation
7. Attractive and future-proof work environment	7. Employees with future-oriented skills / Attractive employer

Comparison with the material topics for 2021

Material Topic 1 was 'Offering affordable financing'. This was a means of achieving market leadership, which is essential for the bank to be able to fulfil its mission.

Material Topic 2 was 'Sustainability financing'. This objective was made more specific by mentioning the SDGs.

Material Topics 3 and 7 were worded more succinctly than in 2021.

Material Topic 4 was 'Ethics and Compliance'. This was made more specific by adding a reference to the core values.

Material Topic 5 was previously only concerned with data security; it has been expanded to include data quality, based on the identified impact of the quality of data.

Material Topic 6 is unchanged.

Explanation of the material topics

The material topics were formulated on the basis of a grouping of different impacts. The following paragraphs explain the impacts of each material topic.

MARKET LEADER IN THE PUBLIC SECTOR

Government support and monetary interventions resulting from Covid-19 – The government support received by public parties prevented any deterioration of the credit risk profile. The ECB's monetary interventions also reduced BNG Bank's funding costs. Both actions supported the financial results and the availability of money on the capital market, and thus our ability to lend money to all clients at attractive rates, even in difficult circumstances.

Attractive rates resulting from sustained low interest rates – The sustained low interest rates in place at the end of 2021 had a negative effect on banks' financial results. BNG Bank grants loans with long terms. This means the impact of these low interest rates will be felt for a long time, improving the bank's competitive position. BNG Bank is able to provide financing at relatively low rates.

Completion of the European banking union – In the long term, BNG Bank foresees potential negative consequences from an integrated capital market. It would make it easier for many of its clients to switch to foreign providers, which could in turn reduce BNG Bank's market share and thus decrease the social impact the bank can make. This development is still surrounded by a great deal of uncertainty.

Climate risks – In 2022, BNG Bank began to systematically identify the climate risks in its portfolio. In the long term, transition risks resulting from climate change could lead to irreversible deterioration in the quality of parts of the loan portfolio. An assessment of such risks must be performed for all new loan applications. Because of BNG Bank's low risk appetite, this could have a negative impact on its market position in some client segments.

Stakeholder value – If other parties focus less on shareholder value and more on *stakeholder value*, they will become more like BNG Bank and start to compete with the bank more directly. However, BNG Bank carefully monitors its favourable position on the money and capital market and does not expect its competitive position to be threatened.

SOCIAL IMPACT ON FIVE SDGS

ESG ratings play an important role in sustainable investment decisions – BNG Bank's ESG bond framework enables the bank to serve a broader investor base than in the past. The importance that investors place on ESG ratings is increasing, due to the desire to avoid greenwashing. The bank has updated its framework for ESG bonds. The methodology for this framework has been simplified and made more transparent; it is now also based on SDGs. This methodology has been externally assessed by ISS-ESG. Around 36% of the funding was obtained under the new framework.

Hybrid digital meetings and events – BNG Bank facilitates staff to reduce their travel. For both day-to-day activities and events, BNG Bank facilitates digital working. In 2022, staff spent a substantial portion of their working hours working from home, and both the Annual General Meeting and extraordinary general meetings of shareholders were held as hybrid events. Staff no longer fly when travelling 500 km or less.

CLIENT PARTNERSHIPS AND STIMULATING THE SOCIAL IMPACT OF CLIENTS

Reducing CO_2 emissions – BNG Bank has signed the Paris Climate Agreement 2030 to make a positive contribution to combating climate change. To achieve the set targets, the bank is actively working to reduce its carbon emissions and monitor the carbon emissions of its clients. The 'Climate Plan – Going Green' was published on the website in late 2022. These actions contribute to the targets BNG Bank has set itself in relation to Affordable and clean energy (SDG 7) and Climate action (SDG 13).

Tackling the shortage of affordable housing – Housing corporations are working to create more mid-market rental properties, to facilitate the transition out of social rental housing. To this end, a covenant was signed in 2022 between the government and other organisations. BNG Bank made a concrete contribution to this effort via loans subject to solvency requirements, and sees further opportunities for action in 2023.

ETHICAL CONDUCT IN ACCORDANCE WITH CORE VALUES

Increasing public attention on behaviour, communication, interaction, standards and values – Because of its position in society and its high credit rating, preserving its impeccable reputation is of the utmost importance to BNG Bank. To maintain staff behaviour and commitment at the desired high level, the bank has set a standard for staff engagement. The bank attaches great importance to the extent to which staff state that the core values of BNG Bank guide their actions. Quarterly staff surveys are used to assess the influence of the core values and staff engagement.

DATA SECURITY AND HIGH-QUALITY DATA

Higher standards for data quality – BNG Bank is intrinsically motivated to improve the quality of the services it provides to its clients with the help of good data. An improvement in the quality of BNG Bank's service delivery will put the bank's clients in a better position to focus on their own impact and value creation. In addition, the supervisory authority has increased the requirements around data quality. BNG Bank aims to comply with all standards set by regulators.

EFFICIENT ORGANISATION

Digitalisation – BNG Bank is working to improve the digitisation of data and digital methods of exchanging data. This will increase both the efficiency and the quality of business processes. A faster turnaround time for the lending process will improve the client experience. Exchanging data digitally will also reduce carbon emissions. Transactions with financial counterparties now take place largely via digital platforms. The client process will be further digitalised through the My BNG Bank portal.

Increasing complexity of laws and regulations – The bank aims to provide a smooth lending process for its clients, with a minimum of mistakes. Labour-intensive regulations, such as those relating to Customer Due Diligence (CDD), make this more difficult. Unavoidably, such regulations lead to higher costs. These higher costs have a negative impact on the affordability of the rates for its clients.

ATTRACTIVE AND FUTURE-PROOF WORK ENVIRONMENT

Greater attention on staff recruitment, development and retention – As a consequence of growing labour market shortages, perceived workloads within the organisation are increasing. This could lead to more stress, and may ultimately lead to a loss of productivity. Accordingly, BNG Bank is stepping up its efforts to attract new staff.

MANAGEMENT OF MATERIAL TOPICS

The following tables report on the management of the material topics and the set KPIs in 2022. The associated actions are also identified.

Actions in response to a negative impact

One negative impact resulting from BNG Bank's business model has been identified.

Impact (actual/potential)	*Action*
High workloads due to labour market shortages	In the third quarter of 2022, BNG Bank conducted a more extensive prioritisation of its activities to reduce perceived workloads. The organisation also stepped up its efforts to recruit new staff.

Policy and actions with regard to material topics

Material topic	*KPI*	*2022 policy and planned actions*	*Actions taken*
Market leader in the public domain	Scoring percentage for lending volume exceeds 55%.	BNG Bank has a pricing policy that leaves room for interventions when required by the market situation. *Planned action* Monthly reporting and adjustment.	Monthly monitoring found that the actual scoring percentage exceeded the targeted scoring percentage at all times during the year.
Social impact on the total of five SDGs	Increase of the social impact in 2022 relative to the impact in 2021 exceeds 0.	The social impact made in 2022 should exceed the impact made in 2021. A baseline measurement of the impact will be performed in the first quarter of 2022, followed by a first measurement at the end of 2022.	Based on a preliminary methodology, the baseline measurement and first measurement were performed.
Social impact on five SDGs	Increase of the social impact in 2022 relative to the impact in 2021 exceeds 0.	BNG Bank will draw up and implement an engagement strategy vis-à-vis its clients.	The engagement strategy was drawn up in 2022.
Client partnerships and stimulating social impact of clients	BNG Bank's Net Promoter Score among clients to which it has provided loans is 20% or higher.	Requesting clients to rate their satisfaction to calculate the Net Promoter Score.	The information was gathered from clients to whom BNG Bank has provided lending subject to solvency requirements.
Client partnerships and stimulating social impact of clients	Reduction in BNG Bank's CO_2 emissions of the loan portfolio relative to the 2021 measurement exceeds 0.	Measuring CO_2 emissions.	The CO_2 emissions were measured.
Ethical conduct in accordance with core values	Extent to which employees indicate that core values guide their behaviour corresponds to a score of 7.5 or higher.	The monitoring of this score will take place quarterly by conducting surveys among all employees.	Workshops were held for all managers to increase awareness of the core values within the organisation. In addition, staff were asked in a survey about the extent to which they saw the core values reflected in their managers' behaviour. The scores from the measurements were below the target. This was accepted as part of the prioritisation of strategic activities in September 2022.
Ethical conduct in accordance with core values	Employee engagement score exceeds 7.5.	The monitoring of this score will take place quarterly by conducting surveys among all employees.	The scores from the measurements were slightly below the target. This was accepted as part of the prioritisation of strategic activities in September 2022.
Data security and high-quality data	Score for the quality and accessibility of data is 'Good' or higher.	This score will be measured on the basis of various performance indicators.	Based on the monitoring of a number of activities and milestones, a qualitative measurement method has been developed. Concrete action is being taken in respect of

Continuation of previous page *Material topic*	*KPI*	*2022 policy and planned actions*	*Actions taken*
			the data quality of the Credit Loan Tape and reporting for the regulator.
Efficient organisation	Improving the turnaround time for the client acceptance process. The turnaround time for the CDD process is less than 48 days.	The turnaround time for the client acceptance process is measured on the basis of the time required for the CDD investigation.	CDD turaround time measurements were conducted throughout 2022. To reduce the turnaround time, actions on points for improvement were agreed upon. The complexity of clients varies greatly between measurement periods.
Efficient organisation	Improving the turnaround time for the credit review process. The turnaround time for credit reviews is less than 81 days.	Improvment will be measured on the basis of the reduction of the turnaround time for credit reviews.	The measurements were conducted each quarter. The scores from the measurements were below the target. This was accepted as part of the prioritisation of strategic activities in September 2022.
Efficient organisation	The 'First Time Right' percentage for credit reviews exceeds 77%.	Improvement will be measured on the basis of the improvement on the 'First Time Right' principle.	The 'First Time Right' percentage moved towards the set standard over the course of the year.
Attractive and future-proof work environment	Employees rate the extent to which BNG Bank offers them the opportunity to develop with a score of 7.5 or higher.	The monitoring of this score will take place quarterly by conducting surveys among all employees.	The measurements were conducted each quarter. To increase its attractiveness as an employer, in 2022 BNG Bank acquired an online learning platform which is easy for staff to use. The scores from the measurements were below the target. During the course of the year, recruitment activities became a greater priority.
Attractive and future-proof work environment	Employee Net Promoter Score (extent to which employees see BNG Bank as an attractive employer) is 3 or higher.	Monitoring van de score vindt ieder kwartaal plaats door middel van enquêtes onder alle medewerkers.	The score was below the set standard during the year. The results were discussed with staff.

Outcomes on KPIs and effectiveness of the management of material topics

Material topic	*KPI and target*	*Outcome*	*Effectiveness of management actions*
Market leader in the public domain	Scoring percentage for lending volume exceeds 55%.	The scoring percentage for 2022 was 67.5%.	Regular management was effective; the target scoring percentage was achieved.
Social impact on the total of five SDGs	Increase of the social impact in 2021 relative to the impact in 2021 exceeds 0.	Based on a preliminary methodology, the social impact made in 2022 has increased compared to the impact made in 2021.	The preliminary result was higher than the set standard.
Client partnerships and stimulating social impact of clients	BNG Bank's Net Promoter Score among clients to which it has provided loans is 20% or higher.	The necessary information was gathered from clients to whom BNG Bank has provided lending subject to solvency requirements.	The measurement was performed in the domain of lending subject to solvency requirements. Because BNG Bank's client portfolio also includes lending that is not subject to solvency requirements, this measurement is not representative.
Client partnerships and stimulating social impact of clients	Reduction in BNG Bank's CO_2 emissions relative to the 2021 measurement exceeds 0.	The CO_2 emissions related to BNG Bank's loan portfolio were 7,0% lower in 2022 compared to 2021. This is measured in emissions in tons divided by the loan volume in millions of EUR.	
Ethical conduct in accordance with core values	Extent to which employees indicate that core values guide their behaviour corresponds to a score of 7.5 or higher.	The score for 2022 was 6,3 on average.	The scores from the measurements were below the target.
Ethical conduct in accordance with core values	Employee engagement score exceeds 7.5.	The score for 2022 was 7,2 on average.	The scores from the measurements were slightly below the target. This was accepted as part of the prioritisation of strategic activities in September 2022.
Data security and high-quality data	Score for the quality and accessibility of data is 'Good' or higher.	An integral measurment is not yet possible.	Measurements did take place for a number of underlying performance indicators. A method for measuring data quality is still being developed. It proved infeasible to expand this to a comprehensive quantitative measurement during the year.
Efficient organisation	Improving the turnaround time for the client acceptance process. The turnaround time for the CDD process is less than 48 days.	The turnaround time for the CDD process was 73 days in average in 2022.	Due to qualitative process improvements, the objective of reducing the turnaround time was not achieved.
Efficient organisation	Improving the turnaround time for the credit review process.	The turnaround time for credit reviews was 98 days on average for 2022.	The turnaround time for credit reviews increased during the year. The set standard was not achieved. The 'First

Continuation of previous page	*KPI and target*	*Outcome*	*Effectiveness of management actions*
Material topic			
	The turnaround time for credit reviews is less than 81 days. The 'First Time Right' percentage for credit reviews exceeds 77%.	The 'First Time Right' percentage was 75,8% for 2022.	Time Right' percentage showed an upward trend during the year and exceeded the standard.
Attractive and future-proof work environment	Employees rate the extent to which BNG Bank offers them the opportunity to develop with a score of 7.5 or higher. Employee Net Promoter Score (extent to which employees see BNG Bank as an attractive employer) is 3 or higher.	The score for 2022 was 7.2 on average. The score for 2022 was -6.1 on average.	The measurements were conducted each quarter. To increase its attractiveness as an employer, in 2022 BNG Bank acquired an online learning platform which is easy for staff to use. The scores from the measurements were below the set target. During the course of the year, recruitment activities became a greater priority. The score was below the set standard during the year. The results were discussed with staff.

Stakeholder engagement in 2022

A number of internal stakeholders were involved in management actions in 2022. Every three months, the Supervisory Board is informed of progress in relation to the material topics and set KPIs. The Supervisory Board also took note of the prioritisation of strategic activities in September 2022. Senior management were intensively involved in setting the KPIs and prioritising the strategic activities.

In 2022, client forums were held to collect feedback from clients about BNG Bank. Discussions were held with the supervisory authority about management actions performed in 2022.

Value creation model

Purpose

Driven by social impact

Core values

Sustainable, reliable and professional

Core activities

Lending and payment services in the public domain

Strategic focus

- More Focus
- Operational Excellence
- Enhancing client partnerships
- Strengthening the organisation

Material topics

- Market leader in the public domain
- Social impact on the 5 SDGs
- Customer partnerships and stimulating the social impact of customers
- Ethical conduct in accordance with core values
- Data security and high quality data
- Efficient organisation
- Attractive and future-proof work environment

Indicators

The lending volume scoring percentage is 67.5%.

Based on a preliminary methodology, the social impact made in 2022 has increased compared to the impact made in 2021.

The reduction in BNG Bank's CO_2 emissions relative to the 2021 measurement is 7.0%.

The extent to which employees indicate that the core values guide their behaviour is 6.3.

The employee engagement score is 7.2.

The score for the quality and accessibility of data cannot yet be fully measured.

The turnaround time for the CDD process is 73 days.

The turnaround time for credit reviews is 98 days.

The 'First Time Right' percentage for credit reviews exceeds 75.8%.

The extent to which BNG Bank gives its employees an opportunity to develop is 7.1.

The Employee Net Promoter Score | Extent to which employees see BNG Bank as an attractive employer is -6.1 or higher.

Impact

7.2 Reporting Principles

In its 2022 annual report, BNG Bank accounts for its activities during the 2022 financial year. The annual report represents a balanced and complete analysis of the situation on the balance sheet date, the development and the results during the financial year, and it contains financial and non-financial performance indicators.

GUIDELINES USED AND DEFINING THE SCOPE OF REPORTING

Legislation and reporting guidelines

BNG Bank draws up its annual report in accordance with Section 391 of Book 2 of the Dutch Civil Code, the EU Directive on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings (2013/34/EU) and the Directive amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups (2014/95/EU).

The annual report has been prepared in accordance with the GRI Standards (Sustainability Reporting Guidelines of the Global Reporting Initiative). The annual report shows how BNG Bank created financial and non-financial value for its stakeholders in 2022, in accordance with the International <IR> Framework. The report provides an overview of the principal developments and the performance of BNG Bank in 2022, and shows how the bank deals with opportunities, risks and uncertainties. The annual report is based on the topics designated as material by the ExCo and stakeholders. BNG Bank participates in the Transparency Benchmark, a survey of the Ministry of Economic Affairs and Climate Policy into the content and quality of external reporting on the social aspects of enterprise.

Defining the scope of the annual report

Non-financial information for the 2022 calendar year is included in the 2022 annual report to inform stakeholders about the public role of BNG Bank in relation to its mission, strategy and objectives. The information in this report relates to BNG Bank N.V. The two subsidiaries BNG Gebiedsontwikkeling B.V. and Hypotheekfonds voor Overheidspersoneel B.V. have not been included in this report, as both subsidiaries are being phased out. Where non-financial data relate to subsidiaries, this is indicated. Both subsidiaries are included in the consolidated financial statements. There were no potential or actual acquisitions in the year under review. The performance of suppliers, sources of funding, clients and other parties in the chain is not included in the figures.

Codes and guidelines observed

BNG Bank endorses a number of codes of conduct and international conventions and guidelines. BNG Bank has undertaken to comply with the Dutch Banking Sector Agreement on international responsible business conduct regarding human rights (2016). As of 2020, and pursuant to the latter agreement, BNG Bank has applied the Equator Principles, a risk management framework for determining, assessing and managing environmental and social risk in project finance. Along with other financial institutions, BNG Bank committed to the Climate Agreement in 2019. As a result of this agreement, the bank reports on the climate-based impact of its lending activities. In 2022, it produced a Climate Plan to contribute to the reduction of CO_2 emissions. BNG Bank endorses the future-oriented banking package of the Dutch Banking Association (NVB), which brings together the Social Charter, the Dutch Banking Code and a set of rules of conduct associated with the banker's oath, through which the banking sector explicitly states how it strives for service-orientated and sustainable banking. BNG Bank adheres to the recommendations under the UN Global Compact, the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, and has implemented these recommendations in its relevant procedures. BNG Bank complies with the provisions of the Dutch Corporate Governance Code (2016 revised version) by ensuring that its working methods align as closely as possible with the Code, among other standards. An overview of compliance with the principles and best practice provisions of the Dutch Corporate Governance Code can be found on BNG Bank's website.

Data collection

The quantitative and qualitative information in this annual report was collected on the basis of requests to provide data, requests for information and through interviews. Sources of data include staff records, financial reports, incident registration, and the registration of reports from internal confidential counsellors and the Compliance Officer. Information was provided by the departments of Compliance, Finance & Control, HR, Risk Management, Security and Treasury & Capital Markets. In addition, interviews were conducted with employees of the departments of Business Strategy & Control, Relationship Banking and Lending. BNG Bank follows the GRI Standards for the quality of the data included in this annual report. The non-financial data in this report relate to the 2022 reporting year. Where possible, data and results are also reported for previous years.

Management cycle

The ExCo is responsible for strategy, company objectives, content and implementation of policy. The directors and heads of department that report directly to the ExCo are responsible for achieving the objectives in accordance with policy frameworks, and for measuring performance. The ExCo monitors policy implementation and the achievement of objectives on the basis of monthly or quarterly reports prepared by the directors, heads of department and control functions. Where necessary, adjustments are made on the basis of progress against the objectives. Performance against the objectives set is externally reported in the annual report. In turn, the ExCo and senior management evaluate policy as well as the designated objectives in preparation for the annual management cycle. The lessons drawn from the evaluation are incorporated into the subsequent management cycle and reported to the Supervisory Board. New policy and procedures are assessed in terms of coherence with existing policy and procedures, and implemented by means of work meetings and publication on the intranet. The policies, procedures and support systems of BNG Bank and its subsidiaries are subject to internal audits.

EU Taxonomy

Promoting the financing of sustainable growth is an important goal of the European Commission. The EU Taxonomy was drawn up for the purpose of a uniform definition of sustainable activities. BNG Bank monitors progress with regard to the EU Taxonomy closely, continuously assessing its impact on strategy and business operations. Amendments for the short and medium term are made where necessary.

BNG Bank is a bank of and for the public sector and motivated by achieving the maximum social impact. The objective of the EU Taxonomy appears to dovetail neatly with this. Due to the specific character of BNG Bank's loan portfolio, a number of specific challenges apply. For example, BNG Bank only lends to local and regional authorities and/or the public sector. These are mostly excluded from the EU Taxonomy. To be able to report on its implementation of the EU Taxonomy on a voluntary basis, BNG Bank relies on the willingness and capacity of borrowers to provide information voluntarily.

Principles and methods used in determining CO_2 emissions of loan portfolio

The CO_2 emissions associated with the loan portfolio were calculated based on the method developed by the Partnership for Carbon Accounting Financials (PCAF). BNG Bank reported for the first time on the CO_2 emissions associated with its lending activities in its annual report for 2019, covering the year 2018. Due to the availability of necessary data, reporting always covers the year preceding the bank's current reporting year. Each year, we work with Het PON Telos on improving the methodology and enhancing the quality of internal and external data. In that context, we have now recalculated the figures for previous years.

The CO_2 emissions of the various client sectors for 2019, 2021 and 2022 are shown in the table 'Calculation of the CO_2 Emissions Assiociated with the Loan Portfolio'. The percentages in brackets indicate the share of the total loans outstanding in the relevant client segment that was included in the measurement.

It is often still necessary to resort to sector averages or reasoned estimates in calculations of the emission data of the various sectors. Public sources were used for this purpose. In most cases, an estimate of the emissions is used rather than the actual emissions figure. The share of the financing provided by BNG Bank in the emissions of a client or project is calculated by multiplying the bank's share in the total balance sheet size of this client or project by the total greenhouse gas emissions of this client.

Calculation is based on the bank's outstanding loans at year-end 2018, 2019 and 2021 (based on nominal amounts outstanding). The emissions data is derived from or calculated based on public data available from Statistics Netherlands (CBS), the Human Environment and Transport Inspectorate, the CBIG (implementing body of the Ministry of Health, Welfare and Sport), the Dienst Uitvoering Onderwijs (DUO) and sustainability reports of the financed institutions. The calculations were performed by Het PON & Telos. For the definitions of terminology used in this chapter, please refer to the Glossary and the [PCAF rapport Greenhouse Gas Emissions of BNG Bank Loan Portfolio, reporting year 2022].

In 2022, BNG Bank also published its 'Going Green' climate plan. This report uses the emissions data associated with the portfolio as well, comparing these figures with the Paris-aligned decarbonisation pathways. However, this report looks only at the scope 1 and scope 2 emissions of our clients, in respect of four focus sectors. The PCAF report explains how these figures tie in with each other.

CALCULATION OF THE CO_2 EMISSIONS ASSOCIATED WITH THE LOAN PORTFOLIO

	2022				2021			
	Amount included in the measurements2022[1]	Coverage rate	CO_2-emissions (tons CO_2 eq.)	CO_2-emissions (in tons per million EUR)	Amount included in the measurements 2021[1]	Coverage rate	CO_2-emissions (tons CO_2 eq.)	CO_2-emissions (in tons per milllion EUR)
Municipalities total	27.230	100	1.610.877	59,2	27.359	100	1.679.491	61,4
Provinces	337	100	10.573	31,4	357	100	11.292	31,6
Water Authorities	204	100	19.117	93,8	193	100	24.807	128,4
Joint Regulations	689	36	17	0,0				
Others	61	19	206	3,4	63	18	264	4,2
Mobility	1.058	86	16.894	16,0	1.223	87	23.471	19,2
Drinking Water Utilities	593	88	26.300	44,3	603	88	29.803	49,4
Education	623	63	26.207	42,1	656	65	35.149	53,6
Social Housing associations	42.782	99	563.942	13,2	41.231	99	574.235	13,9
Healthcare	5.962	87	259.128	43,5	6.151	86	280.856	45,7
TOTAL	79.539	91	2.533.262	31,8	77.837	91	2.659.368	34,2

1 In million euro

CALCULATION OF THE CO_2 EMISSIONS ASSOCIATED WITH THE LOAN PORTFOLIO

	2019			
	Amount included in the measurements[1] 2019	Coverage rate	CO_2-emissions (tons CO_2 eq.)	CO_2-emissions (in tons per million EUR)
Municipalities total	25.973	100	1.725.921	66,5
Provinces	137	100	5.449	39,8
Water Authorities	233	100	39.419	169,0
Joint Regulations				
Projects total				
Others				
Mobility	885	59	14.017	15,8
Drinking Water Utilities				
Education	627	66	33.919	54,1
Social Housing Aassociations	38.302	99	664.218	17,3
Healthcare	6.096	87	344.455	56,5
TOTAL	72.253	89	2.827.398	39,1

1 In million euro

Of the asset classes distinguished in the PCAF method, the following are relevant for BNG Bank: Mortgages, Public Loans, Commercial Real Estate and Project Finance. The measurement has been done in accordance with the general principles laid down by the PCAF:

- where possible, the seven greenhouse gases from the Kyoto Protocol have been included in the calculation and converted to their CO_2 equivalents;
- absolute emissions are expressed in metric tons of CO_2 equivalents (tCO_2e);
- relative emissions are expressed in metric tons of CO_2 equivalent/million euros (tCO_2e/M€);
- the follow-the-money principle is applied for measuring the CO_2 emissions of financial assets, which means that the financing must be traced as far as possible within the chain in order to properly understand the effects of CO_2 emissions on the economy;
- in principle, Scope 1, Scope 2 and the relevant parts of Scope 3 are taken into account in the calculation. Any deviations must be explained;
- the greater the influence of a financial institution on an investment, the larger the proportion of the investment that needs to be included in the calculation;
- to calculate the share of CO_2 emissions, all types of financing provided (both shares and loans) must be taken into account in the calculation. Any deviations from this must be explained.

The details of the calculation for each sector are described in the PCAF rapport Greenhouse Gas Emissions of BNG Bank Loan Portfolio, reporting year 2022 on the website.

Data quality

Last year we provided insight into the reliability of the emission data based on a number of stars. These could be traced back to the PCAF data quality scores. This year, too, efforts were made to improve the quality of the data used. The PCAF platform has an assessment framework for the quality of the data per asset class, on the basis of which it can be assigned a score. Further development of the method used will rationalize a more specific assignment of scores. This year the allocation of PCAF data quality scores per sector has been split per scope. The PCAF report describes which scores change and why. We also reflect on the scores awarded last year. See the PCAF report table 15.2, data quality scores per sector. The table below summarizes the PCAF data quality scores per sector, per scope.

PCAF Data quality scores per sector and sub sector

		Scope 1	Scope 2	Scope 3	
Sector	**Sub-sector**	**Use of gas**	**Use of electricity**		**All scopes**
Social Housing Associations		2	2		
Public sector	Municipalities	4*	4	4	
Public sector	Provinces	4*	4	4	
Public sector	Water Authorities	2**	2	2	
Public sector	Joint Regulations	2	2		
Healthcare		3	3	5	
Drinking Water Utilities		2	2	3	
Education		4	4		
Mobility and Others					4

*** For municipalities and provinces commercial vehicles are within Scope 1, with PCAF score 5.**

**** In scope 1 emissions of water authorities, sewage treatment plants are included, with PCAF score 3.**

Calculation of CO_2 emissions of internal business operations

To monitor progress, BNG Bank reports the CO_2 emissions of its own business operations each year on the basis of Scope 1, Scope 2 and Scope 3 of the Greenhouse Gas (GHG) Protocol. BNG Bank uses 2010 as the baseline year for its CO2 emissions. Since that year, BNG Bank has registered its CO_2 emissions on an annual basis. CO_2 emissions are calculated for all business units that fall within BNG Bank's operational control. Up to and including 2012, BNG Bank applied the international conversion factors stated in the GHG Protocol, those of the Department for Environment, Food and Rural Affairs (Defra) in the UK, and those set out in the EC IPPC (Industrial Emissions) Directive. Because BNG Bank is active in the Dutch market, in 2013 the bank transitioned from applying the international conversion factors to using the standard conversion factors generally accepted in the Netherlands, in accordance with the CO_2 performance ladder. Scope 2 emissions are location based, in conformity with the GHG Protocol. Green power is extrapolated as climate-neutral (0 grams CO_2/kWh). The CO_2 emissions generated by district heating are calculated using an STEG emissions factor of 29.42 kg/GJ, in line with the most recent statement from the supplier. In contrast to the CO_2 performance ladder, business flights are attributed to Scope 3.

7.3 Glossary

Attractive and future-proof work environment (material topic 2022): BNG Bank provides a work environment in which talent can develop and new talent can be attracted. The indicators relating to this are determined at the end of each quarter using questionnaires. For this purpose all internal and external staff (excluding temporary staff) that actively works at the bank at that moment is approached. The outcome is the average of the measures for the four quarters.

Bond: Tradable proof of participation in a loan, with a fixed nominal value on which interest (usually fixed interest) is paid. The loan is repaid after the term expires. A bond is sustainable if the funds obtained from issuing the bond are used solely for sustainable projects.

CEO: Chief Executive Officer, chair of the ExCo and the statutory board

CCO: Chief Commercial Officer, member of the ExCo

CFO: Chief Financial Officer, member of the ExCo and the statutory board

Client partnerships and stimulating social impact of clients (material topic 2022): Cooperative working relationships with various public and private partners to support increasing the sustainability of the Netherlands. The related indicator for reducing the emissions of the bank's loan portfolio over time is measured by dividing the CO_2 emissions by the loan volume. The related indicator Net Promotor Score among Clients is measured by gathering information from clients to whom BNG Bank has provided lending subject to solvency requirements.

Compliance: Observance of laws and regulations, as well as working in accordance with the standards and rules drawn up by the institution itself.

Compliance Risk: The risk of insufficient compliance with or recognition of corporate values, codes of conduct, generally accepted social standards and values, laws, regulations and supervisory requirements. Compliance risk comprises integrity risk and regulatory compliance risk.

Conducting business ethically according to core values (material topic 2022): Employees identify and act in line with BNG Bank's core values and purpose.

Consolidated financial statements: The financial statements of a group of legal entities in which the annual figures of both the parent company and its subsidiaries included in the consolidation are aggregated into the accounting figure, and shown as belonging to a single reporting entity.

COO: Chief Operating Officer, member of the ExCo

Corporate governance: Corporate governance is the system of principles and best-practice provisions regulating relations between the Executive Committee, the Supervisory Board and the General Meeting of Shareholders. The Dutch corporate governance model is characterised by the two-tier board structure, which provides for a Supervisory Board with supervisory duties and a managing body with executive management duties.

Credit rating: Valuation of banks' creditworthiness, banks' capacity to meet their obligations. The assessment is made by independent, recognised rating agencies, such as Moody's, Fitch and Standard & Poor's.

Credit risk: The risk of loss of earnings or capital resulting from a borrower or a counterparty failing to meet its obligations in accordance with the agreed terms. The potential credit risks in relation to BNG Bank are counterparty risk, concentration risk and settlement risk.

CRO: Chief Risk Officer, member of the ExCo and the statutory board

Customer Due Diligence Policy (CDD): A policy to ensure that banks know and monitor their clients well in order to prevent and combat financial and economic crime. This policy enables banks to fulfil their important gatekeeper function, the aim of which is to prevent funds obtained through financial and economic crime from gaining access to the financial banking system.

Data security and high-quality data (material topic 2022): The data BNG Bank works with is of high quality, secure and easy to access.

Efficient organisation (material topic 2022): BNG Bank aims to provide efficient and professional customer credit processes with short turnaround times and minimal margins of error. As an indicator for an efficient client process the process time of the Due Diligence process is used. For each quarter the process time is measured for all CDDs that are completed for all customers of the bank. The outcome is the average of the measures for the four quarters. As an indicator for an efficient credit process the process time of the credit reviews process is used. For each quarter the process time is measured in days for all credit customers of the bank. The outcome is the average of the measures for the four quarters. A second indicator is the 'First Time Right' percentage for all credit reviews (except initial credit assessments).

ESG bond: A bond issued in line with BNG Bank's Sustainable Finance Framework.

Ethical conduct in accordance with core values (material topic 2022): The employees of BNG Bank identify themselves and act in line with the core values and purpose. The indicators relating to this are calculated at the end of each quarter using questionnaires. For the questionnaires all internal and external staff (excluding temporary staff) that actively works at the bank at that moment is approached. The outcome is the average of the measures for the four quarters.

Executive Committee (ExCo): BNG Bank's management body in its executive function

Exposure: Payment obligation. An exposure may be a non-cash payment obligation, if it is provided solely as a guarantee.

Full-time equivalent (FTE): A unit to measure the scope of an employment contract or the workforce. Within BNG Bank, one FTE represents one employee with a full-time working week of 36 hours.

Funding: Raising short-term and long-term capital in various currencies in international money and capital markets.

Global Reporting Initiative (GRI): Sustainability guidelines for reporting on economic, social and environmental performance.

Innovative products and processes (material topic): Anticipating the future through product and process innovations.

Integrated Reporting: Reporting framework originating from the International Integrated Reporting Council (IIRC) resulting in an integrated report covering value creation: the external environment influencing the organisation, the incoming and outgoing resources and the way that the organisation interacts with the external environment. The value creation model is used to record the results.

Internal Governance Framework (IGF): Overview of the internal governance organisation that forms the basis for internal decision-making. The IGF describes the Three Lines of Defence model and the position of risk management within this model.

Leverage ratio: The ratio between a bank's Tier 1 capital and the adjusted balance sheet total.

Liquidity and financing risk: The risk of losses to earnings and capital due to the possibility, at any given time, that the bank will not be able to fulfil its payment obligations without incurring unacceptable costs or losses. Liquidity risk comprises of short-term liquidity risk and long-term liquidity risk (or refinancing risk).

Loans subject to solvency: Loans for which regulations require a certain amount of equity to be held as a buffer against the risk of non-repayment.

Long-term lending: The provision of loans with a term of more than one year.

Market leader in the public domain (material topic 2022): BNG Bank wants to be market leader in the public domain by financing governments and public/social organisations. As an indicator the scoring percentage for new long-term loans is used. This is calculated as the volume of actually concluded long-term loans divided by the volume of loans that clients requested a quotation for.

Market risk: The risk of losses to earnings and capital due to the fluctuation of market prices. Market risk includes the interest rate risk, exchange risk and fluctuations in credit spreads and liquidity spreads.

Material topics: Topics identified using the 'materiality analysis' which are sufficiently important to be reported on in the annual report.

Materiality analysis: Process in which it is determined with input from stakeholders which topics, known as 'material topics', are sufficiently important to be reported on in the Annual Report.

Net promoter score (NPS): In order to calculate the NPS, BNG Bank asks how likely it is that a client recommends the bank to a colleague or relation. Clients can answer with a score on a 0-10 scale, with the following distribution: promoters (9 or 10); passives (7 or 8); detractors (0-6). NPS is calculated as the percentage promoters minus the percentage detractors.

Operational risk: The risk of losses of earnings or capital due to shortcomings of internal processes, people and systems, or as a result of external events. Operational risk comprises process risk, people risk, model risk, IT risk, data management risk, outsourcing risk, legal risk, business continuity risk and external event risk.

Promotional loan: A loan granted directly or via an intermediary credit institution, by a credit institution under public law or an entity established by the central, regional or local government of a member state, on a non-competitive, not-for-profit basis, in order to promote the policy objectives of the central, regional or local government of a member state of the European Union.

Regulatory Change Framework: Policy, working methods, roles and responsibilities to ensure that BNG Bank implements new and changing legislation and regulations in a timely manner, thereby reducing the risk of financial loss or loss of reputation due to insufficient compliance with legislation and regulations and making it manageable.

Return on equity (ROE): Calculated by dividing the net profit minus the distributed dividend on additional Tier 1 capital divided by the aggregate of the equity minus the additional Tier 1 capital and the unrealised reserves at the start of the financial year. The unrealised reserves are the revaluation reserve, the cash-flow hedge reserve, the own credit adjustment and the cost of hedging reserve.

Risk Appetite Framework (RAF): Includes policy, processes, controls and systems used to determine, communicate and monitor the bank's risk appetite, including the Risk Appetite Statement, risk limits and an overview of the roles and responsibilities of those who supervise the implementation and monitoring of the framework.

Risk Appetite Statement (RAS): Description of the risks that the bank wishes to accept in order to achieve its objectives.

Risk management and risk control: Identifying and controlling potential risks in an institution's business operations.

Risk Management Framework (RMF): Consists of overarching policy on general and specific risk-related topics: risk governance, risk appetite framework and specific risks, and is tailored to the specific company profile. The framework forms part of the Internal Governance Framework.

Scope 1: Direct CO_2 emissions caused by fuels that the institution itself purchases and consumes. This concerns emissions from the institution's own buildings and transport and production-related activities.

Scope 2: Indirect CO_2emissions in the business operations of the institution. This concerns the consumption of electricity and heat, physically generated elsewhere.

Scope 3: Other indirect CO_2emissions for which the institution does not itself handle procurement, as well as direct emissions beyond the institution's direct control. This includes, among other things, the commuting by employees of the institution without lease cars and the consumption by external parties from which the institution procures services (such as air travel).

Scoring percentage: The volume of actually concluded long-term loans divided by the volume of loans that clients requested a quotation for.

Services of general economic interest: Economic activities that serve the public interest but could not typically be carried out profitably (DAEB: Diensten van Algemeen Economisch Belang). This allows companies assessed with a DAEB to be compensated.

Social impact: BNG Bank's impact on social issues, translated into SDGs.

Social impact on 5 SDGs (material topic 2022): BNG Bank strives to create social impact through its client partnerships in line with SDGs 3, 4, 7, 11 and 13.

Social Return On Investment (SROI): Agreement between the contracting authority (government) and the contractor regarding the provision of a social contribution as part of the contract. An SROI obligation can be met by deploying people who are at a disadvantage on the labour market in the execution of the contract, or by making a social contribution by purchasing from a social enterprise or by carrying out a social activity.

Solvency-free loans: Loans for which no equity is required because they are considered to be (virtually) free of credit risk. Loans to or under guarantee from the Dutch government are considered to be (nearly) free of credit risk.

Stakeholders: Groups or individuals who can reasonably be expected to be significantly affected by the institution's activities, products or services and/or whose actions affect the ability of the institution to implement its strategies or achieve its objectives.

Strategic risk: The risk that an organization's strategic decisions result in losses of earnings and capital due to changes beyond its control with regard to political climate, regulatory developments, reputation, business climate and ESG.

Supervisory Board (SB): BNG Bank's management body in its supervisory function.

Sustainable Finance Framework: Framework in line with which various types of sustainable financial instruments can be issued, such as bonds, loans, commercial papers and deposits.

Sustainable Development Goals (SDGs): 17 sustainability goals aimed at ensuring peace and prosperity for people and the planet, now and in the future. These goals are endorsed by all member states of the United Nations in 2015.

Three Lines of Defence: Risk management framework that spreads responsibility for operational risk management across three roles. Line management in the first line is the owner of and directly manages risks. The second line supervises the first line, determines policy, defines risk tolerance limits and ensures that these are observed. The third line, consisting of internal audit, provides independent assurance of the first two lines.

Tier 1 Capital ratio: Ratio between the core Tier 1 capital of a bank (equity and reserves) and total risk-weighted assets. The Tier 1 capital ratio is an important measure of the financial strength of a bank.

Value creation and the value creation model: Value creation models in integrated reporting provide stakeholders with an understanding how the business model of a company create value on the short-, medium- and long term.

8 FINANCIAL STATEMENTS

8.1 Consolidated financial statements

Consolidated balance sheet

Amounts in millions of euros	NOTE	31-12-2022	31-12-2021
Assets			
Cash and balances held with central banks	1	6,821	9,264
Amounts due from banks	2, 34	346	163
Cash collateral posted	3, 34	4,144	12,993
Financial assets at fair value through the income statement	4	901	1,383
Derivatives	5	3,737	5,685
Financial assets at fair value through other comprehensive income	6, 34	7,398	8,572
Interest-bearing securities at amortised cost	7, 34	7,636	7,632
Loans and advances at amortised costs	8, 34	89,624	89,738
Value adjustments on loans in portfolio hedge accounting	9	-8,679	13,555
Associates and joint ventures	10	24	28
Property & equipment	11	13	15
Other assets	12, 34	109	21
Assets held for sale	10	-	8
Total assets		**112,074**	**149,057**
Liabilities			
Amounts due to banks	13	4,012	19,525
Cash collateral received	14	1,173	984
Financial liabilities at fair value through the income statement	15	185	310
Derivatives	16	6,129	16,935
Debt securities	17	90,774	101,355
Funds entrusted	18	4,785	4,525
Subordinated debts	19	38	36
Current tax liabilities	20	11	32
Deferred tax liabilities	20	14	77
Other liabilities	21	338	216
Total liabilities		**107,459**	**143,995**
Equity			
Share capital		139	139
Share premium reserve		6	6
Retained earnings		3,824	3,736
Revaluation reserve		4	83
Cash flow hedge reserve		14	1
Own credit adjustment		2	3
Cost of hedging reserve		17	125
Net profit		300	236
Equity attributable to shareholders	22	**4,306**	**4,329**
Additional Tier 1 capital	22	309	733
Total equity	22	**4,615**	**5,062**
Total liabilities and equity		**112,074**	**149,057**

Consolidated income statement

Amounts in millions of euros	NOTE		2022		2021
Interest revenue calculated using the effective interest method		3,759		4,195	
Other interest revenue		403		216	
Total interest revenue		4,162		4,411	
Interest expenses calculated using the effective interest method		3,607		3,919	
Other interest expenses		74		85	
Total interest expenses		3,681		4,004	
Interest result	23		481		407
Commission income		23		20	
Commission expenses		4		3	
Commission result	24		19		17
Result on financial transactions	25		113		100
Results from associates and joint ventures	26		12		4
Other results	27		1		1
Total income			**626**		**529**
Staff costs	28		75		57
Other administrative expenses	29		38		47
Depreciation	30		2		3
Other operating expenses			0		0
Total operating expenses			**115**		**107**
Net impairment losses on financial assets	31		52		20
Net impairment losses on associates and joint ventures	32		0		-2
Contribution to resolution fund	33		20		1
Bank levy	33		32		53
Total other expenses			**104**		**72**
Profit before tax			**407**		**350**
Income tax expense	20		107		114
Net profit			**300**		**236**
of which attributable to the holders of Additional Tier 1 capital			21		25
of which attributable to shareholders			279		211

The references refer to the notes to the consolidated financial statements. The notes to the consolidated financial statements are an integral part of the consolidated financial statements.

Consolidated statement of comprehensive income

Amounts in millions of euros. All figures in the statement are after taxation.			2022			2021
Net profit			**300**			**236**
Recyclable results recognised directly in equity						
Changes in cash flow hedge reserve:						
- Unrealised value changes	13			-10		
- Realised value changes transferred to the income statement	0			0		
		13			-10	
Changes in cost of hedging reserve:						
- Unrealised value changes	-109			-62		
- Realised value changes transferred to the income statement	1			3		
		-108			-59	
Changes in the revaluation reserve for financial assets at fair value through other comprehensive income:						
- Unrealised value changes	-36			45		
- Realised value changes transferred to the income statement	-43			-48		
		-79			-3	
Total recyclable results		**-174**			**-72**	
Non-recyclable results recognised directly in equity:						
Change in fair value attributable to change in credit risk of financial liabilities designated at FVTPL	-1			-2		
Total non-recyclable results		**-1**			**-2**	
Results recognised directly in equity			**-175**			**-74**
Total			**125**			**162**
- of which attributable to the holders of Additional Tier 1 capital			21			25
- of which attributable to shareholders			104			137

Consolidated cash flow statement

Amounts in millions of euros	2022	2021
Cash flow from operating activities		
Profit before tax	407	350
Adjusted for:		
Depreciation	2	3
Impairments	52	18
Unrealised results through the income statement	-73	-43
Changes in operating assets and liabilities:		
Changes in Amounts due from and due to banks (not due on demand)	-830	-194
Changes in Cash collateral posted and received	11,731	6,359
Changes in Loans and advances	1,783	1,145
Changes in Funds entrusted	264	-1,131
Changes in Derivatives	1,782	574
Corporate income tax paid	-127	-81
Other changes from operating activities	-421	-394
Net cash flow from operating activities	**14,570**	**6,606**
Cash flow from investing activities		
Investments and acquisitions pertaining to:		
Financial assets at fair value through the income statement	-108	-9
Financial assets at fair value through other comprehensive income	-5,407	-8,322
Interest-bearing securities at amortised cost	-1,544	-850
Property and equipment	-	-1
Disposals and redemptions pertaining to:		
Financial assets at fair value through the income statement	195	82
Financial assets at fair value through other comprehensive income	5,192	9,215
Interest-bearing securities at amortised cost	1,011	1,211
Investments in associates and joint ventures	3	-
Net cash flow from investing activities	**-658**	**1,326**
Cash flow from financing activities		
Amounts received on account of:		
Central bank financing (TLTRO)	-	7,500
Debt securities	474,163	285,071
Amounts paid on account of:		
Central bank financing (TLTRO)	-14,787	-
Financial liabilities at fair value through the income statement	-105	-354
Debt securities	-475,071	-292,980
Subordinated debt	-	-1
Compensation on Additional Tier 1 capital	-23	-25
Dividend distribution to shareholders	-127	-172
Repayments on Additional Tier 1 capital	-424	-
Net cash flow from financing activities	**-16,374**	**-961**
Net change in cash and cash equivalents	**-2,462**	**6,971**
Cash and cash equivalents as at 1 January	9,286	2,315

Continuation of previous page

Amounts in millions of euros	2022	2021
Cash and cash equivalents as at 31 december	**6,824**	**9,286**
Cash and cash equivalents as at 31 December:		
Cash and balances held with central banks	6,821	9,264
Cash equivalents in the Amount due from banks item	4	23
Cash equivalents in the Amount due to banks item	-1	-1
	6,824	**9,286**
Notes to cash flow from operating activities		
Interest income received	4,292	4,365
Interest expenses paid	-3,754	-3,991
	538	**374**

Consolidated statement of changes in equity

Amounts in millions of euros. All figures in the statement are after taxation.	Share capital	Share premium reserve	Revaluation reserve	Cashflow hedge reserve	Own credit adjustment	Cost of hedging reserve	Retained earnings	Unappropriated profit	Equity attributable to shareholders	Additional Tier 1 capital	Total
Balance as at 01/01/2021	**139**	**6**	**86**	**11**	**5**	**184**	**3,933**	**0**	**4,364**	**733**	**5,097**
Total comprehensive income			**-3**	**-10**	**-2**	**-59**		**236**	**162**		**162**
Dividend distribution to the bank's shareholders							-172		-172		**-172**
Compensation to holders of Additional Tier 1 capital							-25		-25		**-25**
Balance as at 31/12/2021	**139**	**6**	**83**	**1**	**3**	**125**	**3,736**	**236**	**4,329**	**733**	**5,062**
Total comprehensive income			**-79**	**13**	**-1**	**-108**		**300**	**125**		**125**
Redemption of Additional Tier 1 capital										-424	**-424**
Dividend distribution to the bank's shareholders							-127		-127		**-127**
Compensation to holders of Additional Tier 1 capital							-21		-21		**-21**
Appropriation from previous year's profit							236	-236	0		**0**
Balance as at 31/12/2022	**139**	**6**	**4**	**14**	**2**	**17**	**3,824**	**300**	**4,306**	**309**	**4,615**

BNG Bank has not recognised any results from minority interests in the consolidated equity which is attributable to third parties. With the exception of Additional Tier 1 capital, the entire equity is attributable to the shareholders.

Accounting principles for the consolidated financial statements

General company information
BNG Bank, based in The Hague,is a statutory two-tier company under Dutch law, that is guided by social impact. Our focus is exclusively on the public domain and on increasing our social impact. Half of the Bank's share capital is held by the Dutch State and the other half by municipal authorities, provincial authorities and a district water board. BNG Bank N.V. is a listed limited company in The Netherlands and has its registered office at Koninginnegracht 2, 2514 AA, The Hague(listed under Chamber of Commerce number 27008387) in The Netherlands and has no branch offices. The principal place of business is the Netherlands. The name of the ultimate parent of the group is BNG Bank N.V..

The consolidated financial statements were prepared and issued for publication by the Executive Board on 17 March 2023 and will be presented to the General Meeting of Shareholders for adoption on 20 April 2023.

Applicable laws and regulations
The consolidated financial statements are prepared in accordance with IFRS, as issued by the International Accounting Standards Board (IASB) and adopted throughout the European Union (EU), and with Part 9, Book 2 of the Dutch Civil Code.

Critical accounting principles applied for valuation and the determination of the result
Going concern
The consolidated financial statements are prepared on the basis of the going-concern principle. The Executive Committee consider this to be appropriate considering that the bank is liquid, has a high quality loan portfolio with impairments that are limited in size and number and proven track record of stability. This is supported by the triple A rating of the bank, the high Core Equity Tier 1 capital and Liquidity Coverage Ratio. No substantial changes are expected based on the outcome of BNG Banks funding plan, forecast and budget process.

Valuation of balance sheet items
Most balance sheet items are valued at amortised cost. The balance sheet items Financial assets at fair value through the income statement (FVPL), Financial assets at fair value through other comprehensive income (FVOCI), Derivatives and Financial liabilities at fair value through the income statement (FVPL) are recognised at fair value. The balance sheet item Associates and joint ventures is stated according to the equity method. The balance sheet item Property and equipment is stated at cost less accumulated depreciation.

Income is recognised if it is likely that the economic benefits will accrue to BNG Bank and the income can be reliably determined. Expenses are allocated where possible to the period in which the services were provided or to the related income counterbalancing these expenses. For a detailed description, please refer to the accounting principles for the individual balance sheet items.

Reporting currency
The euro is the functional and reporting currency used by BNG Bank. All amounts in the consolidated financial statements are stated in millions of euros, unless stated otherwise.

Accounting principles for consolidation

Each year, BNG Bank prepares, as the parent company, the consolidated financial statements for the company and its subsidiaries. The financial statements of the parent company and its subsidiaries which are used to prepare the consolidated financial statements are drawn up at the same reporting date, and are based on uniform principles.

All intra-group transactions and balances, including income, expenses and dividends, have been fully eliminated in the consolidated financial statements. The consolidated financial statements comprise all subsidiaries over which BNG Bank has control. The consolidation base subject to prudential regulation(CRR/CRD IV) is identical to the consolidation base under International Financial Reporting Standards (IFRS). Section 'Other information' of this document contains a list of BNG Bank's consolidated subsidiaries.

Control exists if BNG Bank is exposed as an investor to variable returns due to its involvement and is able to influence these returns by exercising power over the relevant activities of the investment. Group companies are consolidated in full from the date that control has been acquired until such time as control ceases to exist. In determining whether BNG Bank has control over investment funds in which it holds units or shares, the financial interests held by BNG Bank as a participant are taken into consideration.

Impact of events on Financial Statements

Impact of Covid-19

In the first months of 2022 Covid-19 restrictions were lifted in the Netherlands. The impact of Covid-19 on the bank's financial results remained very limited.

Impact of war between Ukraine and Russia

The beginning of year 2022 was marked by war between Ukraine and Russia. BNG Bank does not have direct exposures in Russia and therefore there are no direct consequences on the bank's continuity, business model and financial results. Indirectly, the war has noticeable impact on inflation and other macro-economic factors. The impact on the bank's operations is elaborated on below and in the report of the Executive Committee.

Impact of inflation and other macro-economic factors

During 2022 the inflation was pushed to record levels in the Eurozone. Thanks to our excellent capital and liquidity position, BNG Bank was able to continue providing the public domain clients with funding at competitive rates. The increasing inflation has led to major fluctuations of financial markets and affected the results of 2022.

BNG Bank clients were also affected by inflation. Particularly, the energy prices increased significantly, which has negative consequences for clients of BNG Bank. The bank monitors whether clients are experiencing financial difficulties due to higher energy prices, construction costs, personnel costs and rising interest rates. The creditworthiness of BNG Bank's portfolio is high and impact on our financial results is limited, however, taking the above mentioned factors into consideration we are closely monitoring developments of creditworthiness in the Healthcare sector. We refer to the management report for a further description of the consequences for clients of BNG Bank.

If relevant, further details of the impact on significant estimates and methods used is provided in the relevant notes.

Involvement in non-consolidated structured entities

BNG Bank assesses involvement in non-consolidated structured entities on a case-by-case basis, with due regard for the nature, purpose, size and activities of those entities. Investments in investment funds through participating interests or in securitisation positions and covered bond programmes (issued by 'special-purpose entities') are non-consolidated structured entities for BNG Bank. Due to its involvement in these entities, BNG Bank is exposed to variable returns, partly based on their performance. These structured entities have been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, but rather control is determined by contractual provisions. As a result, BNG Bank does not have control over these non-consolidated entities, in which it only acts as an investor.

Accounting estimates and judgements
The most significant accounting estimates and judgements applied in these consolidated financial statements relate to fair value measurement of financial instruments and impairment of financial assets. The most important methods and estimates relate to the fair value measurement of financial instruments for which there is no active market (for a more detailed description, see section 'Fair value of Financial Instruments’).
BNG Bank uses generally accepted valuation models to measure the fair value of these financial instruments. For level 2 instruments, BNG Bank uses observable inputs to determine forward curves, discounting curves, volatility curves, inflation curves and spread curves. For level 3 instruments, the main unobservable inputs relate to recovery rates and correlation factors for bonds with credit and liquidity spreads.

The results of these models are based on various assumptions, including the discount rate and the future expected cash flows. Differences in the assumptions may have an effect on the reported values.

For the estimates and judgements to determine the impairment of financial assets we use internal estimation techniques to determine forward-looking information, Probability of Default (PD), Loss Given Default (LGD), Exposure At Default (EAD) and Significant Increase Credit Risk (SICR). Furthermore, for non-performing assets the bank assesses the net present value of expected future cash flows (including the valuation of underlying collateral) for three probability weighted scenarios. For further details please refer to 'Impairment of financial assets'.

For a detailed description of the methods and assumptions used, please refer to the accounting principles for the individual balance sheet items or topics. BNG Bank periodically evaluates the estimates and assumptions that it applies. Any revisions are reported in the year in which the estimate is revised.

Balance sheet netting
Financial assets and financial liabilities are only netted on the balance sheet if and insofar it is certain that the net and simultaneous settlement of the amount receivable and the amount payable can be legally enforced under normal circumstances as well as in the event of default, insolvency and liquidation, and if there is a distinct intention to settle either the net amount as such, or both items simultaneously. Balance sheet item 'Amounts due from Banks' include a netted amount of repos. These items only netted when there is an enforceable master agreement. For derivatives and taxes, please refer to the specific additional netting rules for the relevant balance sheet items.

Foreign currency
Foreign currency transactions are translated into functional currency on initial recognition at the exchange rate applicable on the transaction date. At the balance sheet date, foreign currency monetary assets and liabilities are translated into functional currency at the closing rate. Exchange rate results are recognised at the balance sheet date in the income statement, under the Result on financial transactions item, with the exception of (the effective portion of) the foreign currency transactions that were designated in a cash flow hedge accounting relationship. These exchange rate differences are recognised in the cash flow hedge reserve.

Segmented information
When deciding on the deployment of resources and performance measurement, BNG Bank distinguishes between lending activities and area development activities. In the management and set-up of its lending operations, BNG Bank does not distinguish between different segments or business units. The Bank's area development activities are not material compared with its lending activities. Therefore, no segmented information is included in this Annual Report.

Applied accounting standards adopted by the EU effective on or after 1 January 2022
BNG Bank applied the mandatory IFRS standards, amendments and interpretations stated below, as issued by the IASB and adopted by the European Union effective 1 January 2022, to our 2022 financial statements.
- Amendments to IFRS 3 Business Combinations; IAS 16 Property, Plant and Equipment; IAS 37 Provisions, Contingent Liabilities and Contingent Assets; and Annual Improvements 2018-2020: issued by the IASB on 14 May 2020 and is endorsed by the EU on 28 June 2021. These amendments became effective on 1 January 2022 but had no impact on the financial statements.

Accounting standards endorsed by the EU effective on or after 1 January 2023
BNG Bank does not apply new or amended standards and interpretations issued by the IASB if they have not been endorsed by the EU. BNG Bank has also decided against early application of amended standards and interpretations endorsed by the EU whose application is mandatory for the financial years after 1 January 2023.

Application of the following new or amended standards, interpretations and improvements might have led to limited adjustments in the 2022 financial statements in respect of valuation, the determination of the result and the disclosures of the bank.
- Amendments to IFRS 17 Insurance Contracts: Initial Application of IFRS 17 and IFRS 9 - Comparative information: issued by the IASB on 9 December 2021 and endorsed on 8 September 2022. These amendments will become effective as per 1 January 2023. The Bank does not have any insurance contracts with clients, therefore no impact on the financial statements.
- Amendments to IFRS 8 Accounting policies, Changes in Accounting Estimates and Erros: definition of Accounting Estimates: issued by the IASB on 12 February 2021 and is endorsed by the EU on 2 March 2022. These amendments will become effective as per 1 January 2023. This only contains a change in a definition and therefore no impact on the financial statements is expected.
- Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting policies: issued by the IASB on 12 February 2021 and is endorsed by the EU on 2 March 2022. These amendments will become effective as per 1 January 2023. This will impact the internal process regarding compiling the consolidated financial statement, but the impact on the financial statements is expected to be limited.
- Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction: issued by the IASB on 7 May 2021 and is endorsed by the EU on 11 August 2022. No impact on the financial statements is expected because BNG Bank does not have any exemptions based on IAS 12.15(b) or IAS 12.24.

Accounting standards not adopted by the EU which are not yet applied
BNG Bank does not apply new or amended standards and interpretations issued by the IASB if they have not been adopted by the EU. BNG Bank has also decided against early application of amended standards and interpretations adopted by the EU whose application is mandatory for the financial years on or after 1 January 2023.

Interest Rate Benchmark Reform ("IBOR reform")

The Interest Rate Benchmark Reform ("IBOR reform") consist of 2 phases. The execution of phase 1 started in 2020 and is almost finalised in 2022 with the transfer of all non-centrally cleared loans with GBP Libor rates to SONIA in 2022. The last transfer will be done for the transition of USD LIBOR. The transition was scheduled for 2022 but the regulator decided to postpone the transition till 30 June 2023.

For Phase 2, BNG Bank is closely monitoring the market and the output from the various industry working groups managing the transition of the remaining benchmark interest rates. This includes announcements made by 'IBOR' regulators regarding the Secured Overnight Financing Rate (SOFR) and the Tokyo Overnight Average Rate (TONA).

The Bank applies temporary reliefs which enable its hedge accounting practices to continue during the period of uncertainty. For the purpose of determining whether an intended transaction is highly probable, the reliefs require to be assumed that the IBOR on which the hedged cash flows are based is not altered as a result of IBOR reform.

BNG Bank will continue to apply the amendments to IFRS 9/IAS 39, until the uncertainty arising from the interest rate benchmark reforms ends. The bank assumes that this uncertainty will not end until BNG Bank's contracts are amended to the new reference rates. Timelines mainly depend on negotiation with counterparties, resulting in implementation of fall back clauses in the bank's contracts.

The main exposure on non-derivative financial assets not involved in hedge accounting is, as of December 2022, EUR 17 million and relates to a non-centrally cleared USD floating rate note. The exposure on non-derivative financial liabilities not involved in hedge accounting is nil.

Below are details of the hedging instruments and hedged items in scope of the IFRS 9/IAS 39 amendments due to benchmark interest rate reform, by hedge type. At the end of 2022, the transition of all hedging instrument with SONIA, SOFR, SARON, TONA and €STR is finalised. Respect to USD (SOFR), the transition of the hedging relationships engaged in cash flow hedging will take place in the first quarter of 2023. Only the details are shown of the hedge relationships of which the the IBOR reform is not finalised. The terms of the hedged items listed match those of the corresponding hedging instruments.

Hedge type	Instrument type		up to 1 year	1 to 5 years	over 5 years	Hedged item
Fair value hedges	Pay float EUR, receive fixed	AUD	5,977	630	2,291	Fixed rate issued debt matching critical terms to hedge interest rate risk, FX risk and option risk of the swap.
		CAD	367	-	367	
		Other	319	-	29	
Cash flow hedges	Pay float EUR, receive float USD		-	990	-	USD float rate issued debt matching critical terms to hedge interest rate risk, FX risk and option risk of the swap.
	Receive float EUR, pay float USD		-	-	17	USD float rate loan matching critical terms to hedge FX risk and option risk.
	Pay fixed EUR, receive fixed ZAR		-	165	-	ZAR fixed rate issued debt matching critical terms to hedge FX risk and option risk of the swap.

Summary of significant accounting policies

Classification and measurement of financial instruments

BNG Bank classifies its financial assets into the following measurement categories:
- those to be measured at fair value (either through other comprehensive income, or through the income statement); and
- those to be measured at amortised cost. The classification depends on BNG Bank's business model for managing financial assets and the contractual terms of the financial assets' cash flows.

BNG Bank classifies its financial liabilities at amortised cost, unless it has designated liabilities at fair value through the income statement or it is required to measure liabilities at fair value through the income statement, such as derivative liabilities.

Financial assets measured at amortised cost

Financial instruments are measured at amortised cost where they:
- have contractual terms that give rise to cash flows on specified dates, which represent solely payments of principal and interest (SPPI test) on the principal amount outstanding; and
- are held within a business model whose objective is achieved by holding to collect contractual cash flows.

These instruments are initially recognised at fair value plus directly attributable transaction costs and subsequently measured at amortised cost. The measurement of credit impairment is based on the three-stage expected credit loss model described below under Impairment of financial assets. Financial assets measured at amortised cost are included in the balance sheet items Cash and balances held with central banks, Amounts due from banks, Cash collateral posted, Interest-bearing securities at amortised cost and Loans and advances at amortised cost. Interest revenue from these financial assets is included in Interest revenue calculated using the effective interest method.

Financial assets measured at fair value through other comprehensive income

Investments in debt instruments are measured at fair value through other comprehensive income where they:
- have contractual terms that give rise to cash flows on specified dates, which represent solely payments of principal and interest (SPPI test) on the principal amount outstanding; and
- are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.

These debt instruments are initially recognised at fair value plus directly attributable transaction costs and subsequently measured at fair value. Gains and losses arising from changes in fair value are included in other comprehensive income within a separate component of equity, except for the recognition of impairment gains and losses, interest revenue and foreign exchange gains and losses. Interest revenue from these financial assets is included in Interest revenue calculated using the effective interest method. Impairment losses or reversals and foreign exchange gains and losses are also recognised in the income statement.

Upon disposal, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to the income statement. The measurement of credit impairment is based on the three-stage expected credit loss model as applied to financial assets at amortised cost. The expected credit loss model is described below under Impairment of financial assets.

Financial assets or liabilities at fair value through the income statement

Items at fair value through the income statement comprise:
- debt instruments with contractual terms that do not represent solely payments of principal and interest (mandatory);
- items specifically designated at fair value through the income statement on initial recognition;
- derivatives; and
- equity instruments.

Financial instruments held at fair value through the income statement are initially recognised at fair value, with transaction costs recognised in the income statement as incurred. Subsequently, they are measured at fair value and any gains or losses are recognised in the income statement within result on financial transactions as they arise. Interest revenue or expenses from these financial assets and liabilities (except for derivatives involved in hedge accounting) are included in Other interest revenue or Other interest expenses. Interest revenue or expenses from derivatives involved in hedge accounting are included in Interest revenue using the effective interest method or Interest expenses using the effective interest method.
Derivatives are measured at fair value, including market value changes due to the counterparty credit risk (Credit Valuation Adjustment) and due to own credit risk (Debit Valuation Adjustment) for derivative transactions without a daily or limited exchange of collateral.

Financial instruments designated as measured at fair value through the income statement

Upon initial recognition, financial instruments may be designated as measured at fair value through the income statement. A financial asset may only be designated at fair value through the income statement if doing so eliminates or significantly reduces measurement or recognition inconsistencies (i.e. it eliminates an accounting mismatch) that would otherwise arise from measuring financial assets or liabilities on a different basis.

A financial liability may be designated at fair value through the income statement if it eliminates or significantly reduces an accounting mismatch or:
- if a host contract contains one or more embedded derivatives; or
- if a group of financial assets and liabilities are both managed and their performance evaluated on a fair value basis in accordance with a documented risk management or investment strategy.

Where a financial liability is designated at fair value through the income statement, the movement in fair value attributable to changes in the Bank's own credit quality is calculated by determining the changes in credit spreads above observable market interest rates and is recognised separately in other comprehensive income within equity.

Equity instruments

BNG Bank does not make use of the option under the standard to measure equity instruments at fair value through other comprehensive income. As a result, investments in equity instruments are measured at fair value through the income statement.

Derecognition of financial instruments

A financial asset is derecognised if:
- the contractual right to receive cash flows from the asset has expired; or
- BNG Bank has retained the right to receive cash flows from the asset but has assumed a contractual obligation to pass on these cash flows, in full and without material delay, to a third party pursuant to a special arrangement; or
- the contractual rights to receive cash flows from the asset and virtually all the risks and benefits of this asset have been transferred, i.e. when control over the asset has been transferred.

A write-off is regarded as a derecognition event and is recognised when BNG Bank has no reasonable expectations of recovering (a portion of) the contractual cash flows on a financial asset. In case of a write-off, BNG Bank will directly reduce the gross carrying amount of the financial asset.

If the terms of a financial asset are modified, BNG Bank evaluates whether the cash flows of the modified asset are substantially different. If the cash flows are substantially different, the contractual rights to cash flows from the original financial asset are deemed to have expired. In this case, the original financial asset is derecognised and a new financial asset is recognised at fair value.

BNG Bank derecognises a financial liability when its terms are modified and the cash flows of the modified financial liability are substantially different. In this case, a new financial liability based on the modified terms is recognised at fair value. The difference between the carrying amount of the financial liability extinguished and the new financial liability with modified terms is recognised in profit and loss. A financial liability is also derecognised when the obligation specified in the contract has been discharged or cancelled or has expired.

In case of partial derecognition of financial instruments, BNG Bank applies the First In, First Out (FIFO) principle. The difference between the amount settled and the carrying amount of the asset or liability is immediately and fully recognised in the income statement. If an existing financial asset or liability is contractually exchanged for another contract with the same counterparty on substantially the same terms, the new asset or liability is treated as a continuation of the existing asset or liability. No result is recognised in this case.

Collateral (bonds) furnished by BNG Bank under standard repurchase agreements and securities lending and borrowing transactions are not derecognised because BNG Bank retains all the risks and rewards on the basis of the predetermined repurchase price, and the criteria for derecognition are therefore not met.

Transfer of financial assets
BNG Bank retains the financial assets transferred on its balance sheet if all or most of the risks and benefits attached to (components of) the financial assets transferred are retained. For example, the Bank may transfer financial assets while retaining all or nearly all of the risks and benefits in the context of repurchase transactions.

Impairment of financial assets
BNG Bank has assessed the current loan portfolio with regards to the macro economic factors. These macro economic factors are used to translate historical PDs into forward looking PDs, as required per IFRS 9 standard. These factors are determined on a portfolio basis. The economic situation of our clients present in the healthcare sector concerns us, due to the novelty of the situation, high volatility, low unemployment and high inflation. As a result we applied an overlay on the Healthcare portfolio. Considering the credit reviews performed earlier in the year and did not take recent developments into account and that there are no signs of early recovery, the Healthcare portfolio has been subjected to a two notches downgrade of the internal rating. The choice for two notches is based on discussions held within the bank and confirmed within the Credit Committee (KBC)

BNG Bank assesses whether the credit risk on an exposure has increased significantly on an individual basis. The expected credit losses (ECL) is calculated for the following categories of financial assets that are not measured at fair value through the income statement:
- debt instruments measured at amortised cost;
- debt instruments measured at fair value through other comprehensive income;
- loan commitments; and
- financial guarantee contracts.

Financial assets migrate through the following three stages based on the change in credit risk since initial recognition. When a modification of a financial asset results in the derecognition of the existing financial asset and the subsequent recognition of the modified asset, the date of modification shall be regarded as the date of initial recognition.

Stage 1: 12-month ECL
BNG Bank recognises an ECL allowance reflecting default events that are possible within the next 12 months for exposures without a significant increase in credit risk (SICR) since initial recognition. In addition, BNG Bank makes use of the Low Credit Risk Exemption (LCRE). This avoids exposures with a low credit risk to move to Stage 2 even when there is a SICR, provided that the increase is such that the total credit risk is still low. In both cases, a 30-day past due period acts as a backstop indicator for movement to Stage 2. The 12-month ECL allowance is calculated for all individual exposures as a function of the Exposure At Default (EAD), Probability of Default (PD) and Loss Given Default (LGD) and incorporates forward-looking information.

Stage 2: lifetime ECL – performing exposures
BNG Bank recognises an ECL allowance reflecting default events that are possible during the remaining lifetime of the financial assets for exposures which have had a significant increase in credit risk since initial recognition, but which are not considered credit-impaired. This mainly includes exposures with a credit rating that is not considered to be investment grade and for which the credit rating dropped at least one notch since initial recognition.

In addition, it also includes exposures with payment arrears between 30 and 90 days, as well as exposures subject to forbearance measures. Other qualitative factors considered are significant adverse changes in business, financial and/or economic conditions in which the borrower operates and actual or expected significant adverse change in operating results of the borrower.

The Stage 2 lifetime ECL is calculated for all individual exposures as a function of the Exposure At Default (EAD), Probability of Default (PD) and Loss Given Default (LGD) and incorporates forward-looking information.

Stage 3: lifetime ECL – non-performing exposures

BNG Bank assesses on an individual exposure level whether exposures are non-performing which is fully aligned with the definition of default. This assessment is based on whether one or more events have occurred that have a detrimental impact on the estimated future cash flows of that asset. This includes, but is not limited to, exposures with payment arrears exceeding 90 days. In the event that BNG Bank determines that a counterparty is in default, all related financial assets are considered to be in Stage 3. For exposures that have become non-performing, the Bank recognises a lifetime ECL that is determined by taking into account all relevant information, including any collateral or guarantees that apply to the exposure at hand. An instrument is considered to no longer be in default (i.e. to have cured) when it no longer meets any of the default criteria. This will be assessed for each instrument individually.

Determining the stage for impairment

At each reporting date, the Bank assesses whether there has been a significant increase in credit risk for exposures since initial recognition by comparing the risk of default occurring over the remaining expected life from the reporting date and the date of initial recognition. The Bank considers reasonable and supportable information that is relevant and available without undue cost or effort for this purpose. This includes quantitative and qualitative information, as well as forward-looking analysis. BNG Bank also makes use of the Low Credit Risk Exemption (LCRE) in order to avoid exposures to move to Stage 2 even when there is a significant increase in credit risk, as long as the total credit risk is still low. An exposure will always migrate to a higher probability of default as asset quality deteriorates.

If asset quality improves up to a point that there is no longer any question of SICR since origination, the ECL allowance reverts from lifetime ECL to 12-month ECL. The allowance for these financial assets is based on a 12-month ECL. When an asset is uncollectible, it is written off against the related provision. Such assets are written off after all the necessary procedures have been completed and the amount of the loss has been determined. Subsequent recoveries of amounts previously written off reduce the amount of the expense in the income statement.

Classification of ECL

The classification of the ECL depends on the type of instrument and is as follows:

- Financial assets that are performing at the reporting date: as the present value of all cash shortfalls over the expected life of the financial asset discounted by the effective interest rate. The cash shortfall is the difference between the cash flows due to BNG Bank in accordance with the contract and the cash flows that the Bank expects to receive.
- Financial assets that are non-performing at the reporting date: as the difference between the gross carrying amount and the present value of estimated future cash flows discounted by the effective interest rate.
- Undrawn loan commitments: as the present value of the difference between the contractual cash flows that are due to the Bank if the commitment is drawn down and the cash flows that the Bank expects to receive.
- Financial guarantee contracts: as the expected payments to reimburse the holder less any amounts that the Bank expects to recover.

ECLs are recognised using a net impairment of financial assets account in the income statement. In the case of debt instruments measured at fair value through other comprehensive income, the measurement of ECLs is based on the three-stage approach as applied to financial assets at amortised cost. The Bank recognises the impairment charge in the income statement, with the corresponding amount recognised in other comprehensive income, with no reduction in the carrying amount of the asset in the balance sheet.

Hedge accounting

The Bank's derivative instruments used to manage interest rate and currency risk are recognised on a trade-date basis at fair value as derivative either on the asset or on the liability side of the balance sheet. The goal is to achieve stability of the annual result, in particular the interest result and to manage the unrealised gains and losses. BNG Bank applies micro hedge accounting in accordance with IFRS 9 and portfolio hedging in accordance with IAS 39 when the conditions set out by the standard are met. The hedge accounting is based on a clearly documented relationship between the item hedged and the hedging instrument. When there is a high (negative) correlation between the hedging instrument on the one hand and the value change of the hedged item or the cash flows generated by the hedged item on the other hand, the hedge is regarded as effective. The hedging relationship is documented at the time that the hedge transaction is entered into. The hedging relationship is then continually tested in order to assess whether it meets the hedge accounting requirements.

In principle, BNG Bank only uses derivatives as hedging instruments. They are mandatorily measured at fair value in the balance sheet. The counterpart in the hedging relationship is the hedged item, which is generally recognised at amortised cost. Insofar as the hedge accounting relationship is effective, hedge accounting enables the Bank to neutralise the difference in measurement and result recognition between the hedging instruments and the hedged items. BNG Bank applies both fair value and cash flow hedge accounting.

Fair value hedge accounting

BNG Bank applies two types of fair value hedge accounting: micro hedge accounting and portfolio hedge accounting.

Micro hedge accounting

When a derivative is designated as the hedging instrument in a hedging relationship, the changes in the fair value of the derivative are recognised immediately in the income statement together with changes in the fair value of the hedged item that are attributable to the hedged risk. Sometimes, a derivative may be a component of a hybrid financial instrument that includes both the derivative and a host contract. Such embedded derivative instruments are part of a structured financing transaction that is hedged against changes in fair value by means of matching swap contracts. In such cases, both the hedged transaction and the hedging derivative instrument are recognised at fair value with changes in fair value in the statement of comprehensive income or as a value adjustment of the hedged transaction (item). Currently the Bank's fair value hedges mainly relate to swapping fixed to floating rate transactions. The balance sheet items Financial assets measured at fair value through other comprehensive income, Financial assets measured at amortised cost, Funds entrusted and Debt securities are involved.

If the hedging instrument expires or is sold, terminated or exercised, or when the hedge no longer meets the criteria for hedge accounting, or BNG Bank decides to voluntarily discontinue the hedging relationship, the hedge relationship is discontinued prospectively. If the relationship does not meet the hedge effectiveness criteria, BNG Bank discontinues hedge accounting from the last date on which compliance with hedge effectiveness was demonstrated.

Portfolio hedge accounting

Portfolio hedge accounting concerns a group of transactions in euros that are hedged for interest rate risk using a portfolio of derivatives. BNG Bank applies portfolio hedge accounting to the majority of long-term fixed rate loans (Loans and advances item) and a limited number of fixed rate securities. There is no direct relationship between individual hedged items and hedging instruments, but it is shown at the portfolio level that the derivatives involved offset the value changes in the related assets arising from interest rate movements.

Due to the lack of a direct relationship between the assets and the derivatives used for hedging, the value adjustments of the hedged interest rate risk are recognised in the Value adjustments on loans in portfolio hedge accounting balance sheet item.

Cash flow hedge accounting
When a derivative is designated as the hedging instrument in a cash flow hedge relationship, the effective portion of changes in the fair value of the derivative is recognised directly in other comprehensive income and presented in the cash flow hedging reserve within equity. Any ineffective portion of changes in the fair value of the derivative is recognised immediately in the income statement.
The amount recognised in the cash flow hedge reserve is reclassified to the income statement as a reclassification adjustment in the same period as the hedged cash flows affect the income statement. BNG Bank applies cash flow hedge accounting on floating foreign currency transactions and the credit spread of fixed foreign currency transactions. The balance sheet line items Funds entrusted and Debt securities are involved. If the hedge accounting relationship is terminated, the accumulated fair value hedge adjustment is amortised over the remaining term of the financial instrument. If the hedged item is derecognised, the unamortised fair value adjustment is recognised immediately in the income statement.

Foreign currency basis spread
Following the adoption of IFRS 9 the forward component of a hedging instrument is no longer part of the hedge relationship. The foreign currency basis spread of a cross-currency interest rate swap is accounted for the same way as the forward element of a forward contract. The change in the foreign currency basis spread of this derivative that relates to the hedged item is recognised in the cost of hedging reserve within equity. The amount accumulated in the cost of hedging reserve is reclassified to the income statement at the same time as the hedged item affects the income statement.

Discontinuance of hedge accounting
The hedge accounting relationship is discontinued when it no longer meets the conditions for hedge accounting, or when the hedged item or hedging instrument is sold or matures. The difference between the preceding balance sheet value and the amortised cost of the hedged item is amortised over the remaining period of the hedged item, to the extent that it is retained on the balance sheet. If all or part of a hedged item is sold or purchased, the relevant portion of the cumulative fair value changes is taken into account in the income statement when determining the result on sales.

Recognition and accounting of financial assets and liabilities
Financial assets and liabilities are recognised at settlement date. This means that they are recognised from the moment that the Bank is entitled to the benefits or is liable for the obligations arising from the contractual provisions of the financial instrument. This includes both traditional financial instruments (loans, interest-bearing securities and debt securities) and derivatives. Financial assets and liabilities are initially recognised at the transaction price, in other words the fair value plus the transaction costs that are directly attributable to the acquisition of the financial asset or the issuance of the financial liability, with the exception of the transactions recognised at fair value. The transactions included in the latter balance sheet item are measured at fair value without taking into account the transaction costs.

If the value of transactions recognised at fair value differs from the transaction price on initial recognition, the profit or loss is included as follows:
- For fair value level 1 or 2 transactions, the difference is recognised directly in the Result on financial transactions item of the income statement.
- For fair value level 3 transactions, the difference is included in the balance sheet as a transitory item, and amortised over the term of the transaction.

After initial recognition, financial assets and liabilities are measured at either amortised cost or fair value, depending on the classification of the transaction. In addition to the notional amount, the amortised cost consists of accrued interest, settled transaction costs and/or premiums or discounts distributed in accordance with the effective interest method over the interest rate maturity of the transaction.

Recognition and accounting of derivative financial instruments

Derivative financial instruments are contracts whose value is derived from one or more underlying prices, indexes or other variables, and typically comprise of instruments such as swaps, forward rate agreements, futures and options. From initial recognition, derivatives are in principle carried at fair value and classified as held for trading. The carrying value of a derivative is remeasured at fair value throughout the life of the contract and any fair value movements are recognised under the Result on financial transactions item in the income statement. Derivatives are included under assets if they have a net positive fair value or under liabilities for a net negative fair value, with the exception of derivative transactions entered under a ‘central clearing house’. For these derivatives, netting takes place of the fair value of all derivatives with a financial counterparty that acts as an intermediary between the Bank and the ‘central clearing house’. If the derivative transactions are entered under a central clearing house and are also part of a Settle to Market (STM) derivative contract the derivative position is also netted with the collateral posted/received.

Separated derivatives embedded in financial liabilities

Derivatives embedded in financial liabilities are classified and valued separately if all of the following conditions have been met:
- There is no close relationship between the economic characteristics and risks of the embedded derivative on the one hand and those of the financial instrument.
- The financial instrument is not carried at fair value, with value movements recognised through the income statement.
- A separate derivative instrument on the same terms would match the definition of a derivative.

Derivatives that meet these conditions are recognised in the Derivatives balance sheet item and carried at fair value. Contracts are only reassessed if there is a change in the contractual terms which materially affects the expected cash flows.

Non-separated derivatives embedded in financial liabilities

Derivatives that do not meet the conditions to be separated are included in the balance sheet item where the financial instrument is recognised. This usually concerns options relating to early redemption. The measurement of these derivatives follows the measurement of the financial instrument. If this is the amortised cost, the option is in principle measured at zero. In all other cases, the option is measured at fair value.

Fair value of financial instruments

The fair value is the price (not adjusted for transaction costs) which, regardless of the company’s intention or capability, would be received if a financial asset was sold, or the price that would be paid if a financial liability was transferred in an orderly transaction between market participants as at the measurement date under the current market conditions. The starting point is that the valuation must be viewed from the perspective of market parties, for which only the specific characteristics and limitations of the financial instrument may be taken into consideration. Fair value is based on quoted market prices in active markets or, if unavailable, on modelled valuation techniques. Valuation techniques are generally used to determine the fair value of unlisted assets and liabilities and OTC derivatives. This concerns generally accepted techniques and methods such as option pricing models, discounted cash flows, forward pricing and credit and liquidity spreads. Contractual conditions are taken into account and available objective market data are used, such as market-based yield curves for discounting, correlations, volatilities, cross-currency basis spreads, credit spreads, valuation adjustments and other factors, estimates and assumptions which market parties would use to determine the price. Fair value ‘level 3’ valuations are based in part on assumptions that are not observable in the market. For a detailed description of how the fair value measurement is determined, please refer to section 'Fair value of financial instruments' in the consolidated financial statements.

Value adjustments on loans in portfolio hedge accounting

This balance sheet item includes value adjustments resulting from the fair value portfolio hedge accounting. This refers to the effective portion of movements in market value resulting from hedging the interest rate risk in financial assets at the portfolio level. The value adjustments recognised are amortised over the maturity period of the hedged financial assets in the income statement.

Amounts due to banks, cash collateral received, debt securities, funds entrusted and subordinated debts

Borrowings (including repurchase transactions) and debt securities are carried in the balance sheet at amortised cost unless the liabilities are measured at fair value through the income statement. As regards transactions in Debt securities and Funds entrusted that are involved in a micro fair value hedge accounting relationship, the amortised cost is adjusted for the effective portion of the movements in fair value arising from interest rate risk. Any repurchased obligations are removed from the balance sheet, and the difference between the carrying amount and the transaction value is recognised in the income statement.

With regard to TLTRO III funding, the non-market based interest rate including the expected bonus rate is used to calculate the interest result of the TLTRO transactions in both 2022 and 2021.

Associates and joint ventures
Associates and joint ventures are stated according to the equity method. Associates are companies over which BNG Bank has significant influence on operational and financial policy but no control. In general, significant influence is assumed when BNG Bank holds between 20% and 50% of the shares or voting rights. Joint ventures are collaborations in which BNG Bank and other parties with joint control over the contractual agreements have contractual entitlements to the net assets. These contractual agreements are structured by means of separate legal entities. The joint control of the arrangement is contractually agreed and only exists if the relevant activities under the arrangement require the unanimous consent of the parties sharing control. For a description of the Bank's associates and joint ventures, please refer to section 'Other information' of this document.

Property and equipment
All property and equipment owned by the Bank is valued at cost less accumulated depreciation. Property relates to land, buildings and technical installations. Equipment relates to office machinery, inventory, furniture, hardware, software and artworks.

The depreciation period is determined on the basis of the estimated useful life of the assets (see note 11 to the consolidated financial statements). The estimated useful life and residual value are reviewed annually. Depreciation is calculated on a straight-line basis and charged to the income statement. Land is not depreciated.

Impairment of non-financial assets
The carrying amount of BNG Bank's non-financial assets (property and equipment, investments in associates and joint ventures), with the exception of deferred tax assets, is assessed when there is an objective indication of impairment. To determine impairments, an estimate is made of the realisable value and individual assets are divided into groups at the lowest level at which future cash flows can be identified (cash flow generating units). BNG Bank has not recognised any goodwill. The realisable value of an asset or cash flow generating unit is equal to the higher of the value in use and the fair value minus selling costs.

In determining the value in use, the present value of the estimated future cash flows is calculated using a discount rate before tax which reflects both the current market appraisals of the time value of money and the specific risks relating to the asset. Impairments recognised in respect of cash flow generating units are first offset against the carrying amount of any goodwill allocated to the units and subsequently offset pro rata against the carrying amount of the other assets of the unit (or group of units). Non-financial assets which were subject to impairment are reassessed at each balance sheet date. Impairment of a non-financial asset, with the exception of goodwill included in non-financial assets, is reversed through the income statement (Impairments item) if it is possible to establish reliably that the negative effects of the indication for the impairment recognised earlier are mitigated. An impairment is only reversed to the extent that the carrying amount of the asset does not exceed the carrying amount minus depreciation or amortisation, which would have been determined if no impairment had been recognised.

Employee pensions
The Bank classifies its multi-employer pension plan as a defined contribution plan. Under this plan, the members bear almost all of the actuarial and investment risks, while the employer members of the plan are under no obligation to make any supplementary contributions if a deficit occurs in the fund. The obligation consists of payment of the contribution determined by the pension fund. The pension fund determines the contribution each year based on the information contained in its own dataset, taking account of the parameters and requirements specified by the regulatory authority. The obligation to pay a contribution takes effect upon becoming a pension fund member in the relevant year, and not from membership in previous years. The employer's share of the

pension contribution and any supplementary amounts are charged to the result in the year to which the contribution relates.

Other employee benefits

Other employee benefits are classified as defined benefit plans for which separate provisions have been formed. These other employee benefits include the future costs of interest rate discounts on mortgage loans for the benefit of both active and retired BNG Bank employees. The level of the provision is determined on the basis of calculations using the Projected Unit Credit Method (PUCM). The provision associated with the mortgage interest rate discount is stated under the Other liabilities balance sheet item. The costs relating to the employee benefits are recognised as staff costs in the income statement. All actuarial results are recognised directly through equity and cannot be recycled to the income statement in subsequent periods. This item also includes a provision for a vitality leave scheme. Under this scheme, active employees with seven or more years of service can take two consecutive months of leave once every seven years while retaining part of their monthly income. The vitality leave scheme is recognised as a defined benefit plan and the costs are recognised as staff costs in the income statement.

Taxes

The nominal tax amount is calculated on the basis of the statutory nominal tax rates and the tax legislation in force. Tax rate adjustments relating to previous years, participation exemptions and non-deductible costs are also applied when determining the effective tax amount in the income statement. Group companies that form part of the fiscal unit use the applicable nominal tax rate.
Deferred tax assets and deferred tax liabilities are both carried at nominal value. All deferred tax assets and liabilities are stated in the accounts of the parent company of the fiscal unit. Deferred tax assets and liabilities are recognised as temporary differences between the carrying amounts on the one hand and the tax bases of assets and liabilities on the other. The bank has registered deferred tax assets and liabilities for the actuarial results for the employee benefits provision, for the revaluation reserve, for own credit adjustments and for the cash flow hedge reserve.

These deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the periods in which they are expected to be realised. Differences in deferred tax assets and liabilities resulting from a change in tax rates are recognised in the income statement. Deferred tax assets are recognised only to the extent to which taxable profits are expected to be available in the near future to compensate for these temporary differences. Tax assets and liabilities, both current and deferred separately, are netted if they concern the same tax authority and the same type of tax and if netting of these assets and liabilities is permitted by law.

Equity

The balance sheet is drawn up before profit appropriation. This means that the total net result for the financial year is presented in equity. The revaluation reserve for financial assets at fair value through other comprehensive income and the cash flow hedge reserve are adjusted by recognising a deferred tax liability.

Additional Tier 1 capital

Additional Tier 1 capital concerns perpetual loans involving an annual non-cumulative discretionary payment on the outstanding principal amount, subject to temporary write-down in the event that the CET1 ratio falls below 5.125%. In case of write-down, this amount will be transferred to the Retained earnings. Write-down from the Retained earnings can be reversed (write-up) under certain conditions at the moment that the trigger ratio is back above 5.125% again. BNG Bank is entitled to distribute the interest payment on a discretionary basis in the form of a compensation charged to the Other reserves. The compensation is determined on the basis of the prevailing principal amount. BNG Bank has the unilateral contractual option to call the Additional Tier 1 capital issued. As per May 2021 the tranches issued in 2015 (a nominal amount of EUR 424 million) could be repurchased at par each year in May. On 22 March 2022, the ECB authorised the redemption of these tranches as per 16 May 2022.

As a result, equity decreased by an amount of EUR 424 million. As from May 2022, the tranches issued in 2016 (a nominal amount of EUR 309 million) can be redeemed every year in May.

Revaluation reserve

Equity includes a revaluation reserve in which the unrealised changes in fair value of Financial assets at fair value through other comprehensive income, net of tax, are recognised. In the event of a sale of a financial instrument, the cumulative revaluation is recognised in Results on financial transactions. The effective portion of fair value changes in transactions involved in hedge accounting is either credited or charged to the income statement during the period in which the transactions are involved in a hedge accounting relationship.

Own credit adjustment

Financial liabilities at fair value through the income statement are recognised at the relevant funding curve, including the spread for 'own credit risk'. The Bank recognises the amount related to changes in fair value attributable to change in credit risk of financial liabilities designated at fair value through the income statement as Own Credit Adjustment (net of deferred tax assets and liabilities) in equity.

Cost of hedging reserve

Under IFRS 9, the foreign currency basis spread of a hedging instrument is no longer part of a hedge relationship. The cost of hedging reserve records movements in foreign currency basis spreads in cross-currency (interest rate) swaps involved in hedge accounting. The amount accumulated in the cost of hedging reserve is reclassified to the income statement at the same time as the hedged item affects the income statement.

Cash flow hedge reserve

Furthermore, equity includes a cash flow hedge reserve, in which the effective portion of the unrealised changes in the fair value of derivatives in cash flow hedge accounting, net of taxes, resulting from changes in the foreign exchange rates and the credit spread component is recognised. The ineffective portion of the hedged risk for cash flow hedge accounting is recognised under Results on financial transactions.

Interest revenue and interest expenses

Interest revenue and Interest expenses for all interest-bearing instruments included in the balance sheet are calculated on the basis of amortised cost. The effective interest method is used to determine amortised cost. If a transaction measured at amortised cost is sold, the difference between the carrying amount and the net proceeds of the sale is recognised under Interest result.

Commission income and commission expenses

In this item, the commission and fees paid or received are recognised in the period in which the services were provided.

Result on financial transactions

This item comprises unrealised market value changes in:
- all financial instruments due to foreign exchange rate fluctuations;
- derivatives measured at fair value, including market value changes due to the counterparty credit risk (Credit Valuation Adjustment) and due to own credit risk (Debit Valuation Adjustment) for derivative transactions without a daily or limited exchange of collateral;
- financial instruments measured at fair value, with changes in fair value recognised through the income statement;
- effective portions of the hedged interest rate risk in financial assets involved in a fair value hedge accounting relationship;

- the amortisation of changes in value to loans and advances in the hedge accounting portfolio; and
- the ineffective portion of the hedged risk for cash flow hedge accounting.

This item also includes sales and buy-out results for financial instruments measured at fair value. These realised results consist of the difference between the net proceeds of the sale and the carrying amount, including the release of value movements accumulated in equity. Returns from the participating interests (equity instruments) measured at fair value are also recognised under this item. Finally, differences between the fair value on initial recognition and the transaction price regarding to level 1 and 2 financial instruments measured at fair value are also included.

Results from associates and joint ventures
This item includes the results from associates and joint ventures, valued in accordance with the equity method. Dividend payments are recognised in the income statement when they are received.

Other results
The other results includes the results not relating to BNG Bank's core operational activities. This mainly consists of income from consultancy services provided by BNG Gebiedsontwikkeling.

Depreciation
Please refer to the Property and equipment section.

Contribution to resolution fund
The European resolution regime is based on the EU Bank Recovery and Resolution Directive (BRRD). The full amount payable will be charged to the income statement in the month of payment. The annual contribution to the European resolution fund is recognised in the income statement under the item Contribution to resolution fund.

Bank levy
In accordance with the Banking Tax Act, banks are required to pay a bank levy in October each year. The full amount payable will be charged to the income statement in the month of payment. The annual levy is recognised in the income statement under the item Bank levy.

Consolidated statement of comprehensive income
The consolidated statement of comprehensive income presents the aggregate net result of the reporting period and the direct changes in equity, net of taxes where applicable. In the statement, the amounts net of taxes are presented in groups of items that can be reclassified from equity to the income statement in the future on the one hand and items that can never be reclassified on the other.

Consolidated cash flow statement
The consolidated cash flow statement has been drawn up in accordance with the indirect method. The cash flows are categorised as cash flows from operating, investing and financing activities. Cash and cash equivalents include cash at hand, the available balances with banks and central banks and overnight interbank loans. These funds have less than three months' maturity from the date of acquisition, are readily convertible into a known amount of cash and are subject to a negligible risk of changes in value. The changes in loans and advances, funds entrusted, derivatives and amounts due from and due to banks are included in the cash flow from operating activities. Investing activities comprise purchases, sales and redemptions in the investment portfolio, purchases and sales of associates and joint ventures as well as property and equipment. Drawdowns and repayments of subordinated debt and bond loans, as well as the dividend paid, are presented as financing activities.

Notes to the consolidated financial statements

Amounts in millions of euros.

Note 34 includes a breakdown of balance sheet values by remaining contractual maturity (due on demand and not due on demand).

Notes 31 and 37 provide an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2022.

1 Cash and balances held with central banks

	31-12-2022	31-12-2021
Cash on hand	0	0
Current account balances with the central bank (due on demand)	6,821	9,264
Total	**6,821**	**9,264**

2 Amounts due from banks

The Amounts due from banks item includes all receivables from banks measured at amortised cost.

	31-12-2022	31-12-2021
Short-term loans and current account balances	4	23
Long-term lending	342	140
Repos	0	0
Total	**346**	**163**

We refer to section 'Credit Risk' for a detailed overview of repos under netting conditions.

3 Cash collateral posted

The cash collateral amounts to EUR 4,144 million (2021: 12,993) and is posted with third parties under netting agreements and as such is not freely available to BNG Bank. The steep decrease of cash collateral is mainly due to the decrease in negative fair value of derivatives.

As from June 2020, a discounting switch from EONIA to €STR has taken place at clearinghouses as part of the Interest Rate Benchmark Reform. To compensate the lower return on cash collateral cash payments has been received. This amount is stated as part of 'Other liabilities' and amounts to EUR 178 million as per 31 December 2022 (2021: EUR 167 million). This amount will be amortised over the weighted average of underlying derivatives at the moment of the switch.

4 Financial assets at fair value through the income statement

This item includes:
- Financial assets mandatorily measured at fair value through profit or loss. This concerns financial assets that have failed to pass the SPPI test;
- Financial assets designated as measured at fair value through profit or loss.

	31-12-2022	31-12-2021
Mandatorily measured at FVTPL		
Loans and advances	33	69
Designated as measured at FVTPL		
Loans and advances	238	464
Interest-bearing securities	630	850
Total	**901**	**1,383**

The total redemption value of these loans and advances and interest-bearing securities at year-end 2022 is EUR 877 million (2021: EUR 979 million). Note 25 explains the changes in fair value recognised through the income statement.

5 Derivatives

This balance sheet item includes the positive fair value of derivatives settled and not settled-to-market.

Note 25 explains the changes in fair value recognised through the income statement.

	31-12-2022	31-12-2021
Derivatives not involved in a hedge accounting relationship	77	267
Derivatives involved in a portfolio hedge accounting relationship	1,763	2,248
Derivatives involved in a micro hedge accounting relationship	1,721	3,156
Receivables related to STM derivative contracts	176	14
Total	**3,737**	**5,685**

Almost all derivatives are part of an economic hedge, the bank does not have speculative positions in derivatives.

6 Financial assets at fair value through other comprehensive income

This includes purchased interest-bearing securities that are held within the Hold to Collect and Sell business model and for which the bank has not used the fair value option.

	31-12-2022	31-12-2021
Governments	3,852	5,267
Supranational organisations	1,405	1,405
Credit institutions	2,131	1,900
Other institutions	10	-
Total	**7,398**	**8,572**

Transfers without derecognition

At year-end 2022, BNG Bank had transferred EUR 332 million (2021: 218 million) of financial assets at fair value through other comprehensive income without derecognition in repurchase transactions.

7 Interest-bearing securities at amortised cost

This includes purchased interest-bearing securities that are held within the Hold-to-Collect business model and for which the bank has not used the fair value option.

	31-12-2022	31-12-2021
Governments	1,314	1,318
Other financial corporations	5,615	5,295
Non-financial corporations	709	1,021
Allowance for credit losses	-2	-2
Total	**7,636**	**7,632**

At year-end 2022, BNG Bank had transferred EUR 333 million (2021: 520 million) of interest-bearing securities at amortised cost without derecognition in repurchase transactions.

8 Loans and advances at amortised costs

The Loans and advances item includes short-term and long-term loans to clients insofar as they pass the SPPI test, as well as current account debit balances held by clients. All positions are held within the Hold-to-Collect business model.

	31-12-2022	31-12-2021
Short-term loans and current account balances	1,481	2,594
Long-term lending	88,301	87,381
Total loans and advances	**89,782**	**89,975**
Allowance for credit losses	-158	-237
Total	**89,624**	**89,738**

9 Value adjustments on loans in portfolio hedge accounting

This refers to the value adjustments of the effective portion of the hedged interest rate risk of loans and advances involved in a portfolio hedge accounting relationship.

	2022	2021
Movements of value adjustments on loans in portfolio hedge accounting		
Opening balance	13,555	20,816
Movements in the unrealised portion in the financial year	-22,154	-6,021
Amortisation in the financial year	-61	-1,164
Realisation from sales in the financial year	-19	-76
Closing balance	**-8,679**	**13,555**

10 Associates and joint ventures

	31-12-2022	31-12-2021	31-12-2022	31-12-2021
	Participating share		**Balance sheet value**	
Associates				
Dataland BV, Rotterdam	30%	30%	0	0
Data B Mailservice BV, Leek	0%	45%	-	3
Subtotal			**-**	**3**
Joint ventures				
BNG Gebiedsontwikkeling BV, various immaterial participations			24	25
Total			**24**	**28**

BNG Gebiedsontwikkeling B.V. is, as a 100% subsidiary, part of the consolidated financial statements. The joint ventures referred to are held by BNG Gebiedsontwikkeling B.V.

In 2021, the amount presented as "held for sale" related to a participation held by BNG gebiedsontwikkeling. This participation was sold in 2022 and produced a positive result of EUR 4 million.

In 2022, BNG Bank sold its shares in Data B. Mailservice B.V.. This produced a positive result from participating interests of EUR 6 million.

For summarised financial information on associates and joint ventures, please refer to 'Related parties'-section of the consolidated financial statements.

11 Property and equipment

	2022	2021	2022	2021	2022	2021	2022	2021
	Property		Equipment		Right-of-use-asset		Total	
Historical cost								
Opening balance	**49**	**49**	**27**	**26**	**2**	**2**	**78**	**77**
Investments	-	-	0	1	-	-	0	1
Value as at 31 December	**49**	**49**	**27**	**27**	**2**	**2**	**78**	**78**
Depreciation								
Accumulated depreciation as at 1 January	39	38	24	22	0	0	63	60
Depreciation during the year	0	1	1	2	1	0	2	3
Accumulated depreciation as at 31 December	**39**	**39**	**25**	**24**	**1**	**0**	**65**	**63**
Total	**10**	**10**	**2**	**3**	**1**	**2**	**13**	**15**

Estimated useful life	
Buildings	33 ⅓ years
Technical installations	15 years
Machinery and inventory	5 years
Right-of-use asset	5 years
Hardware and software	3 years

No property or equipment is pledged as security of liabilities.

12 Other assets

The other assets at year-end 2022 of EUR 109 million (2021: EUR 21 million) primarily comprise amounts receivable from lending to clients.

13 Amounts due to banks

	31-12-2022	31-12-2021
Current account balances	1	1
Central bank funding (TLTRO)	3,471	18,350
Deposits	140	666
Private loans	400	508
Total	**4,012**	**19,525**

An amount of EUR 3,471 million relates to ECB's third Targeted Longer-Term Refinancing Operation (TLTRO). On 21 December 2022, early redemption took place for three of the total five transactions. As per year-end 2022, the total TLTRO consists of two transactions. These floating rate notes have a maturity of three years, from the date of participating in a tranche, with an early redemption option after each year.

14 Cash collateral received

The cash collateral at year-end 2022 of EUR 338 million (2021: EUR 216 million) is received from third parties under netting agreements and as such is not freely available to BNG Bank.

15 Financial liabilities at fair value through the income statement

This item includes debt securities designated as measured at fair value with changes in fair value recognised through the income statement.

	31-12-2022	31-12-2021
Publicly placed debt securities	169	292
Privately placed debt securities	16	18
Total	**185**	**310**

The total redemption value of the debt securities at year-end 2022 is EUR 168 million (2021: EUR 265 million). The difference between the financial liability's carrying amount and the redemption value at year-end 2022 is EUR 17 million (2021: EUR 44 million). Financial liabilities are measured at fair value through the income statement on the relevant funding curve including a mark-up for 'own credit risk'. The total change in value (before tax) was EUR 3 million positive (2021: EUR 4 million positive). Changes in fair value due to own credit risk are recognised through other comprehensive income. These changes are determined by comparing the valuation using the relevant funding curve including a mark-up for 'own credit risk' and the valuation using the relevant funding curve without this mark-up. Note 25 explains the changes in value recognised through the income statement.

16 Derivatives

This balance sheet item includes the negative fair value of derivatives not settled-to-market and the fair value of payables related to settle-to-market derivatives. Note 25 explains the changes in fair value recognised through the income statement.

	31-12-2022	31-12-2021
Derivatives not involved in a hedge accounting relationship	390	724
Derivatives involved in a portfolio hedge accounting relationship	3,341	14,878
Derivatives involved in a micro hedge accounting relationship	2,398	1,332
Payables related to STM derivative contracts	-	1
Total	**6,129**	**16,935**

17 Debt securities

This includes bonds and other issued debt securities with either fixed or variable interest rates. Any sold portion of an issue is deducted from the relevant bond.

	31-12-2022	31-12-2021
Bond loans	81,970	90,482
Commercial Paper	3,729	3,475
Privately placed debt securities	5,075	7,398
Total	**90,774**	**101,355**

18 Funds entrusted

	31-12-2022	31-12-2021
Current account balances	3,472	2,799
Short-term deposits	51	321
Long-term deposits	1,262	1,405
Total	**4,785**	**4,525**

19 Subordinated debt

	31-12-2022	31-12-2021
Subordinated debt	38	36
Total	**38**	**36**

20 Taxes

The bank has registered deferred tax liabilities for the actuarial results for the employee benefits provision, the revaluation reserve, the own credit adjustment, the compensation on Additional Tier 1 capital and for the cash flow hedge reserve, which all directly change into equity.

	31-12-2022	31-12-2021
Current tax assets	-	-
Current tax liability	-11	-32
Deferred tax liabilities	-14	-77
Total	**-25**	**-109**

BNG Bank and the Dutch tax authorities have concluded a bilateral agreement ('vaststellingsovereenkomst') on 11 november 2021 in accordance with IFRS 9, for the period 2021-2023. The bilateral agreement applies to the BNG Bank fiscal unit. Pursuant to the agreement, all financial instruments are stated – for both reporting and tax purposes – in accordance with the IFRS principles of valuation, with the exception of transactions classified as Financial assets at fair value through other comprehensive income. All transactions within this category are valued for tax purposes at the lower of either the cost price or the market value. The result for tax purposes differs from the result for reporting purposes if, on balance, unrealised gains have arisen.

The reconciliation between the effective tax rate and the nominal tax rate is as follows:

	2022	2021
Nominal and effective tax rate		
Profit before tax	407	350
Tax levied at the nominal tax rate	-105	-88
Tax adjustment from previous years	0	-
Participation exemption	2	-
Deductible interest on Additional Tier 1 capital	4	6
Non-deductible costs (bank levy and thin cap)	-8	-32
Effective tax	**-107**	**-114**
Nominal tax rate	25.8%	25.0%
Effective tax rate	26.3%	32.5%

In 2022 the upper tax rate increased to 25.8%.

The deferred taxes are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled.

2022

	Opening balance	Changes through equity	Changes through the income statement	Closing balance
Changes in deferred taxes				
Financial assets at fair value through other comprehensive income	-28	27	-	-1
Cash flow hedge reserve	-45	33	-	-12
Own Credit Adjustment	-1	1	-	0
Additional Tier 1 capital	-4	2	-	-2
Employee benefits provision	1	0	-	1
Total	**-77**	**63**	**-**	**-14**

2021

	Opening balance	Changes through equity	Changes through the income statement	Closing balance
Changes in deferred taxes				
Financial assets at fair value through other comprehensive income	-29	1	-	-28
Cash flow hedge reserve	-65	20	-	-45
Own Credit Adjustment	-1	-	-	-1
Additional Tier 1 capital	-4	0	-	-4
Employee benefits provision	1	-	-	1
Total	**-98**	**21**	**-**	**-77**

21 Other liabilities

	31-12-2022	31-12-2021
Employee benefits provision	2	2
Other provisions	21	-
Other liabilities	315	214
Total	**338**	**216**

The employee benefits provision is made up of two parts, a provision for the interest rate discount on mortgage loans to both active and retired employees of EUR 1 million (2021: EUR 1 million) and a provision for vitality leave of EUR 1 million (2021: EUR 1 million). Both provisions have a long-term character.

The other provision are the result of a claim on collateral received by BNG Bank.

The movements in the present value of the net liability in relation to the defined benefits relating to the mortgage interest rate discount and the provision for vitality leave are as follows:

	2022	2021
Employee benefits provision		
Net liability as at 1 January	2	2
Movements in the provision	0	0
Net liability as at 31 december	**2**	**2**

The other liabilities are mainly composed of amounts payable related to derivatives and other financial transactions which are settled in the next period.

22 Group equity

Since BNG Bank has no minority interests after consolidation, the entire consolidated equity, excluding Additional Tier 1 capital, is attributable to shareholders. The items included in equity are explained in note 22 of the company financial statements.

	31-12-2022	31-12-2021
Share capital	139	139
Share premium reserve	6	6
Revaluation reserve	4	83
Cash flow hedge reserve	14	1
Own Credit Adjustment	2	3
Cost of hedging	17	125
Retained earnings	3,824	3,736
Unappropriated profit	300	236
Equity attributable to shareholders	**4,306**	**4,329**
Additional Tier 1 capital	309	733
Total	**4,615**	**5,062**

	2022	2021
Number of paid-up shares outstanding	55,690,720	55,690,720
Proposed dividend per share in euros	2.50	2.28
Proposed dividend		
- Primary dividend pursuant to the Articles of Association	7	7
- Proposed dividend above the primary dividend	132	120
Total	**139**	**127**

The proposed dividend distribution for 2022 is EUR 2.50 per share (2021: EUR 2.28 per share). For 2022, this takes into account the EUR 23 million compensation (before tax) that has already been paid on the Addtional Tier 1 capital in 2022. This payment was charged to the Retained earnings.

Share capital
The authorised capital is divided into 100 million shares with a nominal value of EUR 2.50 each, of which 55,690,720 shares have been issued and fully paid up. The number of shares in circulation remained unchanged during the financial year. BNG Bank and its subsidiaries hold no company shares. None of the shares carry preferential rights, nor are they subject to restrictions. There are no options that can be exercised to obtain entitlement to the issue of shares.

Share premium reserve
There were no movements in 2022 and 2021.

Revaluation reserve
At year-end 2022, the revaluation reserve includes EUR 883 million in unrealised value changes, excluding the value of the hedged part of the interest-rate risk of interest-bearing securities involved in hedge accounting, which is a part of the Financial assets at fair value through other comprehensive income. The revaluation reserve has been adjusted for taxes. Upon the sale of these assets, the associated cumulative result recognised in equity is transferred to the income statement.

Cash flow hedge reserve
The effective portion of the unrealised changes in the value of derivatives involved in a cash flow hedge relationship, resulting from changes in the foreign exchange rates, are recognised in the cash flow hedge reserve. The cash flow hedge reserve is adjusted for taxes.

Own Credit Adjustment
The Own Credit Adjustment amounts to EUR 2 million net of taxes (2021: EUR 3 million). This adjustment relates to changes in credit risk of financial liabilities measured at fair value through the income statement.

Cost of hedging reserve
The cost of hedging reserve records movements in foreign currency basis spreads in cross currency swaps involved in hedge accounting and is amortised over the life of the hedge. The cumulative movements will reduce to nil by maturity of the hedging instrument.

Retained earnings
After determination of the appropriations of the distributable profit pursuant to the Articles of Association, the General Meeting of Shareholders decides which portion of the remaining profit is added to the Retained earnings. In 2022, payment of dividend of EUR 127 million for 2021 to the bank's shareholders were scheduled. Payments took place in April 2022. Also an amount of EUR 23 million (before tax) was distributed to the holders of the Additional Tier 1 capital in 2022 (2021: EUR 25 million) and charged to the Retained earnings.

Unappropriated profit
The balance sheet is prepared prior to profit appropriation. This item represents the total result achieved after deduction of corporate income tax.

Addtional Tier 1 capital
The tranches issued in 2015 (a nominal amount of EUR 424 million) have been redeemed at par on 16 May 2022. As per 31 December 2022 the bank's Addtional Tier 1 capital amounts to EUR 309 million. The instruments are structured in line with CRR requirements and the EBA guidelines and qualifies as additional Tier 1 capital. Addtional Tier 1 capital concerns perpetual loans involving an annual non-cumulative discretionary payment on the outstanding principal amount, subject to temporary write-down in the event that the CET1 ratio falls below

5.125%. In case of write-down, this amount will be transferred to the Retained earnings. Write-down from the Retained earnings can be reversed (write-up) under certain conditions at the moment that the trigger ratio is back above 5.125% again. BNG Bank is entitled to distribute the interest payment on a discretionary basis in the form of a compensation charged to the Other reserves. The compensation is determined on the basis of the prevailing principal amount. The distributed compensation is deductible for corporate income tax. BNG Bank has the unilateral contractual option to call the Additional Tier 1 capital issued. The tranches issued in 2016 (a nominal amount of EUR 309 million) can be redeemed every year from May 2022. The bank chose not to redeem the tranche in 2022.

23 Interest result

Interest revenue calculated by using the effective interest method includes all positive interest results from both financial instruments and derivatives involved in hedge accounting, including negative interest expenses on financial liabilities. In addition, other credit-related income received is included in this item. Interest revenues on assets that were subject to impairment are recognised on the original effective interest percentage, as long as the expected interest cash flows are received.

Interest expenses calculated by using the effective interest method include all negative interest results from both traditional financial instruments and derivatives involved in hedge accounting, including negative interest revenue on financial assets. The costs of borrowing as well as other interest-related charges are also recognised.

Other interest revenue and expenses consist mainly of interest results of derivatives not involved in hedge accounting and interest results of financial assets and liabilities measured at fair value.

		2022		2021
Interest revenue				
Interest revenue calculated by using the effective interest method:				
- Financial assets at amortised cost	1,943		1,861	
- Financial assets at fair value through other comprehensive income	64		70	
- Derivatives involved in hedge accounting	1,611		2,102	
- Negative interest expenses on financial liabilities	141		162	
		3,759		4,195
Other interest revenue:				
- Financial assets designated at fair value through the income statement	61		54	
- Financial assets mandatory at fair value through the income statement	1		2	
- Derivatives not involved in hedge accounting	327		160	
- Other	14		-	
		403		216
Total interest revenue		**4,162**		**4,411**
Interest expenses				
Interest expenses calculated by using the effective interest method:				
- Financial liabilities at amortised cost	1,628		1,285	
- Derivatives involved in hedge accounting	1,832		2,352	
- Interest expenses on financial assets	147		282	
		3,607		3,919
Other interest expenses				
- Financial liabilities designated at fair value through the income statement	8		25	
- Derivatives not involved in hedge accounting	59		57	
- Other	7		3	
		74		85
Total interest expenses		**3,681**		**4,004**
Total interest result		**481**		**407**

The interest revenue in 2022 includes EUR 22 million (2021: EUR 11 million) in interest revenue for financial assets, relating to Financial assets at amortised cost (notes 7 and 8) and Financial assets at fair value through other comprehensive income (note 6), which were subject to impairment.

The interest revenue on the TLTRO-III transaction amounts to EUR 91 million (2021: EUR 101 million). Due to the early redemption of three transactions in 2022 an amount of EUR 77 million was already received in 2022. The residual interest of EUR 14 million will be received on the maturity date. The net interest rate including the conditional bonus rate is used to calculate the interest result of the TLTRO transactions in 2022. For this year, all the conditions of the bonus rate are met and the interest result will not be reversed.

24 Commission result

Commission income

This item includes income from services provided to third parties.

	2022	2021
Income from loans and credit facilities	13	11
Income from payment services	10	9
Total	**23**	**20**

Commission expenses

This item comprises expenses totalling EUR 4 million (2021: EUR 3 million) relating to services rendered by third parties in relation to loans, credit facilities and payment services.

25 Result on financial transactions

This item includes the result on financial transactions broken down into realised and unrealised market value adjustments.

		2022		2021
Market value changes in financial assets at fair value through the income statement resulting from changes in credit and liquidity spreads, consisting of:				
- Interest-bearing securities	-25		-13	
- Structured loans	-5		4	
		-30		-9
Result on hedge accounting				
- Portfolio fair value hedge accounting	-32		65	
- Micro fair value hedge accounting	62		-9	
- Micro cash flow hedge accounting	0		0	
		30		56
Change in counterparty credit risk of derivatives (CVA/DVA)		16		16
Realised sales and buy-out results		47		59
Other market value changes		50		-22
Total		**113**		**100**

In 2022, the result on financial transactions was positively affected by high other market value changes. The realised results of EUR 47 million (2021: 59 million) are mainly due to on balance positive results on the sales of interest-bearing securities from the liquidity portfolio of the bank.

The unrealised results of EUR 66 million positive (2021: 41 million negative) are mainly due to the increase of long-term interest rates. On the one hand, the increase of the interest rate in the reporting period had a negative impact of the result from Portfolio hedging. Portfolio hedging consist of assets hedged by using paying fixed IRS. Although portfolio hedging is almost 100% effective during the reporting period a negative result occurred as a result of the increase of interest rates. The negative result is mitigated by the results from Micro hedging. This is mainly hedging of liabilities by using IRS en CCIRS. The impact on the results are therefore opposite from the results from portfolio hedging.

On the other hand the higher credit and liquidity risk spreads of most interest-bearing securities recorded under Financial assets at fair value through the income statement led to a higher negative result of market value changes compared to 2021. In 2022 the result amounted to EUR 25 million negative (2021: 13 million negative).

26 Results from associates and joint ventures

	2022	2021
Associates	6	1
Joint ventures	6	3
Total	**12**	**4**

For a description of the bank’s associates and joint ventures, please refer to item 'Related parties' of the consolidated financial statements.

27 Other results

The other results consist mainly of income from consultancy services provided by BNG Gebiedsontwikkeling.

28 Staff costs

	2022	2021
Wages and salaries	35	32
Pension costs	6	6
Social security costs	3	3
Additions to the employee benefits provision	0	0
External employees	27	11
Other staff costs	4	5
Total	**75**	**57**

The increase in staff costs is mainly due to the increase of external employees.

Expressed in FTEs, the number of employees with a fixed or indefinite contract was 392.0 (2021: 353.3 FTEs).

There was no variable remuneration of individual staff members in 2022 and 2021. We refer to section 'Related parties' for the remuneration of the Executive Board.

29 Other administrative expenses

These expenses include, among other things, outsourcing costs, maintenance costs of property and equipment, consultancy costs, training expenses and IT expenses. The total other administrative expenses for 2022 amounted to EUR 38 million (2021: EUR 47 million).

The fees paid to independent auditors are also included in Other administrative expenses. In conformity with Section 382a of Part 9, Book 2 of the Dutch Civil Code, a breakdown of the fees paid to the independent auditors for audits and audit-related and non-audit-related services is given in note 32 to the company financial statements.

30 Depreciation

A breakdown of this item is included in the note on Property and equipment (note 11). In total, the depreciation charges amounted to EUR 2 million in 2022 (2021: EUR 3 million).

31 Net impairment losses on financial assets

The impairments in 2022 amounted to a loss of EUR 52 million in the income statement (2021: EUR 20 million loss). The increase of impairments are due to the transfer of items to Stage 3 as a result of individual assessments and the less positive economic outlook which results in a switch of items from Stage 1 to Stage 2. This is partly due to the management overlay as described in section 'Credit Risk' further in this report.

2022

	Stage 1	Stage 2	Stage 3	Total
Impairment results due to movements in allowances:				
- Increases in allowances due to origination and acquisition	2	2	3	7
- Decreases in allowances due to derecognition	-2	-3	0	-5
- Changes in allowances due to changes in credit risk (net)	3	13	35	51
	3	**12**	**38**	**53**
Impairment results not due to movements in allowances:				
- Reversal of impairment due to cash flows received from past write-offs	-	-	-1	-1
- Impairments due to write-offs	-	-	0	0
	-	**-**	**-1**	**-1**
Net impairment result on financial assets	**3**	**12**	**37**	**52**

2021

	Stage 1	Stage 2	Stage 3	Total
Impairment results due to movements in allowances:				
- Increases in allowances due to origination and acquisition	3	1	12	16
- Decreases in allowances due to derecognition	-4	-1	-12	-17
- Changes in allowances due to changes in credit risk (net)	-5	-23	49	21
	-6	**-23**	**49**	**20**
Impairment results not due to movements in allowances:				
- Freefall in allowance due to write-off	-	-	-1	-1
- Reversal of impairment due to cash flows received from past write-offs	-	-	1	1
- Impairments due to write-offs	-	-	-	-
	0	**0**	**0**	**0**
Net impairment result on financial assets	**-6**	**-23**	**49**	**20**

Movement in allowances for expected credit losses

2022

	Stage 1	Stage 2	Stage 3	Total
Movements in allowances taken through the income statement:				
- Increases in allowances due to origination and acquisition	2	2	3	7
- Decreases in allowances due to derecognition	-2	-3	0	-5
- Changes in allowances due to changes in credit risk (net)	3	13	35	51
	3	**12**	**38**	**53**
Movements in allowances not taken through the income statement:				
- Decreases in allowance due to write-offs	-	-	-131	-131
	-	**-**	**-131**	**-131**
Total movements in allowances	**3**	**12**	**-93**	**-78**

2021

	Stage 1	Stage 2	Stage 3	Total
Movements in allowances taken through the income statement:				
- Increases in allowances due to origination and acquisition	3	1	12	16
- Decreases in allowances due to derecognition	-4	-1	-12	-17
- Changes in allowances due to changes in credit risk (net)	-5	-23	49	21
	-6	**-23**	**49**	**20**
Movements in allowances not taken through the income statement:				
- Decreases in allowance due to write-offs	-	-	-	-
	-	**-**	**-**	**-**
Total movements in allowances	**-6**	**-23**	**49**	**20**

Note 37 provides an overview of the breakdown of financial assets subject to impairment into impairment stages.

32 Net impairment losses on associates and joint ventures

	2022	2021
Impairment of associates and joint ventures	0	0
Reversal of impairment of associates and joint ventures	0	-2
Total	**0**	**-2**

In 2022, no impairments on BNG Gebiedsontwikkeling participations occured. Also, there was no reversal of impairments on participations (2021: EUR 2 million). All participations are valued on a going concern basis.

33 Contribution to resolution fund and bank levy

Contribution to resolution fund

The European resolution regime arising from the Bank Recovery and Resolution Directive entered into force on 1 January 2015. The expenses for the resolution fund are deductible for corporate income tax purposes. The EUR 20 million payable for 2022 (2021: EUR 1 million) was paid in June 2022 and charged to the income statement. The fee in 2021 was much lower because that fee contained a refund due to recalculations for previous years.

Bank levy

The expenses concerning the bank levy are not deductible for corporate income tax purposes. As a consequence, the effective tax burden exceeds the nominal tax rate in 2022 and 2021. BNG Bank is due to pay the bank levy in October of every year, which for 2022 amounted to EUR 32 million (2021: EUR 53 million). The steep decrease is caused by the one-off increase of the bank levy rate of 50% in 2021. The calculation of the levy is stated in note 31 of the Company financial statements.

34 Breakdown of balance sheet value by remaining contractual maturity of financial instruments

31-12-2022

	Due on demand	up to 3 months	3 - 12 months	1 - 5 years	over 5 years	Total
Cash and balances held with central banks	420	6,401	-	-	-	6,821
Amounts due from banks	4	1	23	125	193	346
Cash collateral posted	-	4,144	-	-	-	4,144
Financial assets at fair value through the income statement	-	-	-	148	753	901
Derivatives	-	473	250	855	2,159	3,737
Financial assets at fair value through other comprehensive income	-	71	164	2,594	4,569	7,398
Interest-bearing securities at amortised cost	-	-	54	469	7,113	7,636
Loans and advances	589	1,932	6,005	23,749	57,349	89,624
Value adjustments on loans in portfolio hedge accounting	-	-2	-39	-755	-7,883	-8,679
Current tax assets	-	-	-	-	-	0
Other assets	-	109	-	-	-	109
Total assets	**1,013**	**13,129**	**6,457**	**27,185**	**64,253**	**112,037**
Amounts due to banks	1	81	59	3,471	400	4,012
Cash collateral received	-	1,173	-	-	-	1,173
Financial liabilities at fair value through the income statement	-	-	-	20	165	185
Derivatives	-	91	68	994	4,976	6,129
Debt securities	-	4,618	12,917	36,572	36,667	90,774
Funds entrusted	3,483	78	137	857	230	4,785
Subordinated debt	-	11	8	19	-	38
Current tax liabilities	-	-	11	-	-	11
Deferred tax liabilities	-	-	1	3	10	14
Other liabilities	-	168	10	35	125	338
Total liabilities	**3,484**	**6,220**	**13,211**	**41,971**	**42,573**	**107,459**

31-12-2021

	Due on demand	up to 3 months	3 - 12 months	1 - 5 years	over 5 years	Total
Cash and balances held with central banks	9,264					9,264
Amounts due from banks	23	2	13	54	71	163
Cash collateral posted		12,993				12,993
Financial assets at fair value through the income statement		40	104	501	738	1,383
Derivatives		186	251	1,589	3,659	5,685
Financial assets at fair value through other comprehensive income		85	150	2,260	6,077	8,572
Interest-bearing securities at amortised cost		149	654	4,765	2,064	7,632

Continuation of previous page

31-12-2021

Loans and advances	929	3,412	7,993	28,211	49,193	89,738
Value adjustments on loans in portfolio hedge accounting		9	82	1,209	12,255	13,555
Current tax assets						-
Other assets		21				21
Total assets	**10,216**	**16,897**	**9,247**	**38,589**	**74,057**	**149,006**
Amounts due to banks	1	682	8	18,472	362	19,525
Cash collateral received		984				984
Financial liabilities at fair value through the income statement		59	64	24	163	310
Derivatives		101	426	1,094	15,314	16,935
Debt securities		7,697	10,579	43,163	39,916	101,355
Funds entrusted	2,800	343	291	439	652	4,525
Subordinated debt		1	-	27	8	36
Current tax liabilities			32			32
Deferred tax liabilities			4	15	58	77
Other liabilities		61	8	31	116	216
Total liabilities	**2,801**	**9,928**	**11,412**	**63,265**	**56,589**	**143,995**

35 Breakdown of financial instruments by category

31-12-2022

	Amortised cost	Fair value through profit or loss	Fair value through other comprehensive income	Total
Cash and balances held with central banks	6,821			**6,821**
Amounts due from banks	346			**346**
Cash collateral posted	4,144			**4,144**
Financial assets at fair value through the income statement		901		**901**
Derivatives		3,737		**3,737**
Financial assets at fair value through other comprehensive income			7,398	**7,398**
Interest-bearing securities at amortised cost	7,636			**7,636**
Loans and advances	89,624			**89,624**
Value adjustments on loans in portfolio hedge accounting	-8,679			**-8,679**
Total assets	**99,892**	**4,638**	**7,398**	**111,928**
Amounts due to banks	4,012			**4,012**
Cash collateral received	1,173			**1,173**
Financial liabilities at fair value through the income statement		185		**185**
Derivatives		6,129		**6,129**

Continuation of previous page

31-12-2022

Debt securities	90,774			**90,774**
Funds entrusted	4,785			**4,785**
Subordinated debt	38			**38**
Total liabilities	**100,782**	**6,314**	**-**	**107,096**

31-12-2021

	Amortised cost	Fair value through profit or loss	Fair value through other comprehensive income	Total
Cash and balances held with central banks	9,264	-	-	9,264
Amounts due from banks	163	-	-	163
Cash collateral posted	12,993	-	-	12,993
Financial assets at fair value through the income statement	-	1,383	-	1,383
Derivatives	-	5,685	-	5,685
Financial assets at fair value through other comprehensive income	-	-	8,572	8,572
Interest-bearing securities at amortised cost	7,632	-	-	7,632
Loans and advances	89,738	-	-	89,738
Value adjustments on loans in portfolio hedge accounting	13,555	-	-	13,555
Total assets	**133,345**	**7,068**	**8,572**	**148,985**
Amounts due to banks	19,525	-	-	19,525
Cash collateral received	984	-	-	984
Financial liabilities at fair value through the income statement	-	310	-	310
Derivatives	-	16,935	-	16,935
Debt securities	101,355	-	-	101,355
Funds entrusted	4,525	-	-	4,525
Subordinated debt	36	-	-	36
Total liabilities	**126,425**	**17,245**	**-**	**143,670**

36 Reconciliation of movements of liabilities to cash flows arising from financing activities

2022

	Financial liabilities at fair value through the income statement	Debt securities	Subordinated debt	Additional Tier 1 capital	Total
Balance at 1 January 2022	**310**	**101,355**	**36**	**733**	**102,434**
Cash flows from financing activities					
- Proceeds from financing activities	-	474,082	-	-	474,082
- Repayments on financing activities	-100	-473,084	-	-424	-473,608
- Interest and other cash flows	-5	-1,906	0	-	-1,911
- Compensation on Additional Tier 1 capital	-	-	-	-23	-23
	-105	**-908**	**0**	**-447**	**-1,460**
Non-cash changes					
Unrealised results:					
- Foreign exchange movement	-4	1,924	-		1,920
- Fair value changes	-24	-13061	-		-13,085
Realised results	8	1521	2		1,531
Movement to Other liabilities (derecognised but not yet repaid)		-57			-57
	-20	**-9,673**	**2**	**-**	**-9,691**
Compensation distributed from Retained earnings				23	23
Balance at 31 December 2022	**185**	**90,774**	**38**	**309**	**91,306**

2021

	Financial liabilities at fair value through the income statement	Debt securities	Subordinated debt	Additional Tier 1 capital	Total
Balance at 1 January 2021	**656**	**108,615**	**35**	**733**	**110,039**
Cash flows from financing activities					
- Proceeds from financing activities	-	284,877	-	-	284,877
- Repayments on financing activities	-347	-291,401	-	-	-291,748
- Interest and other cash flows	-7	-1,225	-1	-	-1,233
- Compensation on Additional Tier 1 capital	-	-	-	-25	-25
	-354	**-7,749**	-1	**-25**	**-8,129**
Non-cash changes					
Unrealised results:					
- Foreign exchange movement	26	2,986	-	-	3,012
- Fair value changes	-38	-3,744	-	-	-3,782
Realised results	20	1,247	2	-	1,269

Continuation of previous page

2021

	8	**489**	**2**	**-**	**499**
Compensation distributed from					
Retained earnings	-	-	-	25	25
Balance at 31 December 2021	**310**	**101,355**	**36**	**733**	**102,434**

37 Impairment of financial assets and off-balance sheet commitments

Breakdown of financial assets and off-balance sheet commitments into impairment stages

The following tables provide a breakdown of the financial assets subject to impairment and off-balance sheet commitments into the 3 impairment stages:
Stage 1: performing exposures without significant increase in credit risk (SICR) since initial recognition.
Stage 2: performing exposures with significant increase in credit risk since initial recognition.
Stage 3: non-performing exposures.

31-12-2022

		Gross carrying amount			Allowance for credit loss		
	Carrying amount	**Performing**		**Non-performing**	**Performing**		**Non-performing**
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Financial assets subject to impairment							
Cash and balances held with central banks	6,821	6,821	-	-	-	-	-
Amounts due from banks	346	346	0	0	0	0	0
Cash collateral posted	4,144	4,144	-	-	-	-	-
Financial assets at fair value through OCI[1]	7,398	7,398	0	-	0	0	0
Interest-bearing securities at amortised cost	7,636	7,552	86	-	0	-2	0
Loans and advances	89,624	86,885	2,049	848	-8	-21	-129
Total	**115,969**	**113,146**	**2,135**	**848**	**-8**	**-23**	**-129**

31-12-2021

		Gross carrying amount			Allowance for credit loss		
	Carrying amount	**Performing**		**Non-performing**	**Performing**		**Non-performing**
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Financial assets subject to impairment							
Cash and balances held with central banks	9,264	9,264	-	-	-	-	-
Amounts due from banks	163	163	-	-	0	-	-
Cash collateral posted	12,993	12,993	-	-	-	-	-
Financial assets at fair value through OCI[1]	8,572	8,572	-	-	0	-	-
Interest-bearing securities at amortised cost	7,632	7,566	68	-	0	-2	-
Loans and advances	89,738	89,014	412	549	-6	-8	-223
Total	**128,362**	**127,572**	**480**	**549**	**-6**	**-10**	**-223**

1 The allowance for credit loss for financial assets at FVOCI is included in OCI and not in the (net) carrying amount.

31-12-2022

	Nominal amount			Provision		
	Performing		Non-performing	Performing		Non-performing
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Off-balance sheet commitments						
Contingent liabilities	485	3	1	0	0	-1
Revocable facilities	5,781	228	239	-	-	-
Irrevocable facilities	4,341	43	42	0	-1	-1
Total	**10,607**	**274**	**282**	**0**	**-1**	**-2**

31-12-2021

	Nominal amount			Provision		
	Performing		Non-performing	Performing		Non-performing
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Off-balance sheet commitments						
Contingent liabilities	499	1	1	0	0	-1
Revocable facilities	5,736	69	66	-	-	-
Irrevocable facilities	4,486	1	0	0	0	-
Total	**10,721**	**71**	**67**	**0**	**0**	**-1**

Movements in allowances and provisions for expected credit losses

The following table shows the movements in allowances for expected credit losses for financial assets and the provision for expected credit losses for off-balance sheet commitments.

2022

	Opening balance	Increases due to origination and acquisition	Decrease due to derecognition repayments and disposals	Changes due to change in credit risk (net)	Decrease in allowance account due to write-offs	Closing balance
Allowances						
Cash and balances held with central banks	-	-	-	-	-	-
Amounts due from banks	0	-	-	0	-	0
Financial assets at fair value through OCI	0	0	0	0	-	0
Interest-bearing securities at amortised cost	2	0	0	0	-	2
Loans and advances	237	7	-4	50	-132	158
	239	**7**	**-4**	**50**	**-**	**160**
Provision						
Off-balance sheet commitments	1	0	0	2	-	3

2021

	Opening balance	Increases due to origination and acquisition	Decrease due to derecognition repayments and disposals	Changes due to change in credit risk (net)	Decrease in allowance account due to write-offs	Closing balance
Allowances						
Cash and balances held with central banks	-	-	-	-	-	-
Amounts due from banks	0	0	0	0	-	0
Financial assets at fair value through OCI	1	0	0	-1	-	0
Interest-bearing securities at amortised cost	5	0	0	-3	-	2
Loans and advances	210	15	-16	28	-	237
	216	**15**	**-16**	**24**	**-**	**239**
Provision						
Off-balance sheet commitments	4	0	-1	-2	-	1

Modifications of contractual cash flows

There were no financial assets for which the contractual cash flows have been modified during 2022 while they had a loss allowance measured at an amount equal to lifetime expected credit loss (i.e. stage 2 or 3). No financial assets which were modified in previous reporting periods while they had a loss allowance measured at an amount equal to lifetime expected credit loss (stage 2 or 3) have been moved back to stage 1 during 2022.

Key inputs and assumptions

The Expected Credit Loss(ECL) of the financial asset is measured on either a 12-month or lifetime basis depending on whether a significant increase in credit risk has occurred. The total Expected Credit Loss is a discounted product of the Probability of Default (PD), Loss Given Default (LGD) and Exposure At Default (EAD).

Probability of default

PDs are used as a key component in the determination of ECLs and SICR. BNG Bank has developed PD-models, largely based on expert judgements, for exposures for which no external rating is available. To ensure IFRS 9 compliance and so-called ‘point-in-time’ PDs, the bank developed overlay models that include Forward-Looking Information (FLI). For staging purposes, credit ratings are used which are adjusted for forward-looking information. BNG Bank applies three internally developed scenarios based on economic forecasts which are consistent with inputs to other relevant estimates within the financial statements. The proposed macroeconomic forecasts are benchmarked with an external macroeconomic forecast to ensure the external validity of the scenarios. The scenarios are approved in the Asset and Liability Committee (ALCO). In doing so, BNG Bank ensures that the PDs are reasonable and supportable.

Loss given default

Because of its low default credit portfolio and the lack of historical internal LGD data, BNG Bank is not able to create LGD models. Therefore, BNG Bank applies a basic flat LGD approach, with four different LGD percentages for its entire exposure:

- 0% for exposures granted to or guaranteed by (Dutch) central or regional governments;
- 10% for government bonds issued by central or regional governments in the EU;
- 35% for exposure without a guarantee of a central or regional government and senior unsecured bonds; and
- 75% for subordinated loans.

Exposure at default

The EAD for loans and for interest-bearing securities (excluding securitisations) is based on contractual repayments owed by the obligor over a 12-month or lifetime period. Voluntary repayments or early redemptions are not taken into account, as these are historically infrequent. For securitisations, the future contractual repayments are based on estimated Constant Prepayment Rates which are derived from external sources. In case of committed (off-balance sheet) facilities, the maximum exposure is adjusted in order to reflect the expected drawdown behaviour for either a 12-month or lifetime period (in accordance with the impairment stage).

Significant increase in credit risk

BNG Bank applies the Point-in-Time PD, which is adjusted for forward-looking information, as an input parameter for the assessment of significant changes in credit risk since recognition. In addition, the bank uses forbearance measures as well as a 30-day past-due period as backstop criteria to determine a significant increase in credit risk. On the other hand, the bank also applies a low credit risk exemption for monitoring significant changes in credit risk since recognition. In this case, an impairment is measured using the 12-month ECL, without determining if a significant increase in credit risk has occurred. BNG Bank will consider financial assets with an investment grade rating to be of ‘low credit risk’. For bonds, BNG Bank considers a BBB- or higher to be an investment grade. With regards to loans, the bank uses its internal counterparty credit rating to determine whether it is investment grade. Internal counterparty credit ratings are derived from a number of market sector specific internal rating models, which have been externally validated.

BNG Bank applies an expert judgement approach when determining the stage 3 impairment figures. The approach is performed on an instrument level by the Financial Restructuring & Recovery department.

Forward-looking macroeconomic information

Historical analysis are performed to identify the key macroeconomic variables, which are provided by the bank’s economist on a quarterly basis. Expert judgement is applied. In 2022 the macroeconomic factors applied in determining the probability of default for non-securitisations are the nominal GDP, the unemployment rate, and the employment rate. For securitisations the applied macroeconomic factors are the house price index, the long term interest rate, and debt.

The weightings of the scenarios have been adjusted due to the unfavorable economic outlook as a result of the sharp rise of inflation, climate-related matters and in lesser extent the war between Russia and Ukraine.

Impact of inflation

The impact of high inflation and increased economic uncertainty is reflected in the decrease of domestic spending and use of consumable goods. In 2022 there were no significant events related to inflation in the sectors in which the bank operates or to individual clients relating to BNG Bank’s client portfolio. However, the bank closely monitors the impact of inflation, in particular the healthcare and energy sectors receive additional attention.

Impact of climate-related matters

BNG Bank has started to incorporate ESG credit risks in the internal control and risk management framework. To identify the material sectors for monitoring purposes, the bank is conducting an analysis per sector in which it operates, to define the material ESG-related credit risks. So far, the analysis demonstrates that most ESG-related credit risks are related to emissions and energy. BNG Bank has not identified material impairment indications with respect to ESG risks. However, the bank will continue with the analysis in 2023 and plans to implement monitoring metrics as one of the next steps. Furthermore we are working on improving the modelling, amongst others the modelling for accouting ECL calculation, to include climate-related matters.

Non-securitisations

Macro economic variable	Horizon as per 31/12/2022	Horizon as per 31/12/2021
Gross Domestic Product (GDP) for The Netherlands	3 years	3 years
Unemployment rate for The Netherlands	3 years	3 years
Employment rate	3 years	3 years
Scenario	**Weight as per 31/12/2022**	**Weight as per 31/12/2021**
Base scenario	50%	60%
Upward scenario	10%	15%
Downward scenario	40%	25%

Securitisations

Macro economic variable	Horizon as per 31/12/2022	Horizon as per 31/12/2021
House price indices in the Euro area (17 countries)	3 years	3 years
Long-term interest rates in the Euro area (19 countries)	3 years	3 years
Debt (Credit to households and NPISHs) in the Euro area[1]	3 years	3 years
Scenario	**Weight as per 31/12/2022**	**Weight as per 31/12/2021**
Base scenario	50%	60%
Upward scenario	10%	15%
Downward scenario	40%	25%

1 Non-profit institutions serving households

Non-performing exposures

BNG Bank applies the following criteria to designate exposures as non-performing:
- BNG Bank considers that the obligor is unlikely to pay its credit obligations to the bank; and
- The obligor is past due 90 days or more on any material credit obligation to the bank.

The bank employs the following indicators for ‘Unlikeliness to pay’:
- The obligor’s source of income is considered insufficient to meet its payment obligations;
- There are indications that future cash flows are under pressure;
- The obligor’s debt ratio has increased significantly;
- One or more covenants have been breached;
- BNG Bank has called upon a guarantee or seized collateral;
- Significant delayed payments to other creditors (recorded in a register);
- There is a crisis in the obligor’s market sector, in which the obligor is considered to be a weak party;
- The obligor can no longer be active in its market sector as a result of its financial difficulties; and
- Another creditor has filed for the obligor’s bankruptcy.

Sensitivity analysis of credit loss allowances

In order to measure the sensitivity of the credit loss allowances to changes in the input factors, different scenarios are determined to (re)calculate the size of the credit loss allowances.

Scenario A:

In scenario A, the credit rating of all individual exposures subject to impairment are downgraded by 1 notch (e.g. from AAA to AA+). These (lower) credit ratings, as well as the accompanying PDs, are then applied in the staging assessment and the calculation of the credit loss allowances. As a result, a portion of the exposures migrated from stage 1 to stage 2. The EADs and LGDs are unchanged compared with the base line calculation.

Scenario B:

In scenario B, the exposures which normally have an LGD of 0% are assigned a 10% LGD. The LGD of exposures that are normally assigned a 10%, 35% or 75% LGD remain unchanged. The EADs, credit ratings and PDs are also unchanged compared with the base line calculation.

Scenario C:

In scenario C, the calculation of the credit loss allowances is performed using 'Through-the-Cycle' PDs rather than Point-in-Time PDs. In other words, PDs without incorporation of forward-looking macroeconomic information are used in the calculation. The EADs, credit ratings, stage levels and LGDs are unchanged compared with the base line calculation.

As per 31 December 2022 three different scenarios are used to calculate the sensitivity (in millions of euros) of the total credit loss allowances and are stated below.

31-12-2022

	Actual Balance	Scenario A (1 notch down)	Scenario B (LGD from 0% to 10%)	Scenario C (through-the-cycle PDs)
Allowances				
Cash and balances held with central banks	-	-	-	-
Amounts due from banks	0	0	0	0
Financial assets at fair value through OCI	0	0	0	0
Interest-bearing securities at amortised cost	2	3	2	1
Loans and advances	158	165	182	159
	160	**168**	**184**	**160**
Provision				
Off-balance sheet commitments	3	3	3	3

31-12-2021

	Actual Balance	Scenario A (1 notch down)	Scenario B (LGD from 0% to 10%)	Scenario C (through-the-cycle PDs)	Scenario D (EWMA of 70%)	Scenario E (EWMA of 0%)
Allowances						
Cash and balances held with central banks	-	-	0	-	-	-
Amounts due from banks	0	0	0	0	0	0
Financial assets at fair value through OCI	0	0	0	0	0	0
Interest-bearing securities at amortised cost	2	4	3	2	3	3
Loans and advances	237	248	256	240	238	242
	239	**252**	**259**	**242**	**241**	**245**
Provision						
Off-balance sheet commitments	1	1	2	1	1	1

Hedging of risks with derivatives

BNG Bank applies economic hedging in order to mitigate foreign exchange risks and keep interest rate risks at a desired level. To this end, the bank has put in place a system of limits and procedures that is strictly adhered to and is monitored on a daily basis. Foreign exchange and interest rate risks are hedged with derivatives. The treatment of derivatives and hedged items in the balance sheet and income statement is such that they are aligned as much as possible with the actual economic hedging. For accounting purposes, BNG Bank processes this hedging relationship under IFRS by applying micro and portfolio fair value hedging, as well as cash flow hedging. The Accounting principles for the consolidated financial statements section describes the conditions that need to be met before these forms of hedge accounting can be applied.

Micro fair value hedge accounting (MH) is applied to individual transactions involved in an economic hedge relationship to offset interest rate risks and foreign exchange risks when applicable. This form of hedging is applied to nearly all debt securities issued. The foreign exchange risks and interest rate risks are hedged by means of (cross-currency) interest rate swaps. The issues are fully offset against the derivatives so that, on a net basis, the fixed coupons of the issues are converted into variable interest amounts in euros. Both the issues and the accompanying derivatives can contain structures, such as options, which are also fully offset. The revaluation effect of hedged MH transactions with regard to fair value hedging is accounted for in the same balance sheet item as the hedged items.

BNG Bank applies (micro) cash flow hedge accounting to virtually all long-term funding transactions in foreign currencies with a floating coupon in order to protect the bank's result against possible variability in future cash flows due to exchange rate fluctuations.
The bank also applies cash flow hedge accounting to hedge the foreign currency risk of the credit spread of fixed foreign currency transactions. With the exception of voluntary early redemption of funding in foreign currencies or an immediate and complete withdrawal from the banking business, there are no circumstances under which these revaluations can lead to a realised result.

The cross currency basis swap spread is an important building block of the value of cross-currency (interest rate) swaps. The fluctuations of this basis spread can never be part of the hedge relationship. If micro hedging is applied the fluctuations of this basis spread are separated as 'cost of hedging' reserve within equity.

In portfolio fair value hedge accounting (PH), the interest rate risks of a group of transactions in euro are hedged by means of a group of derivatives. The hedging relationship is constructed and controlled at an aggregate level, thus precluding relationships with individual transactions. Within BNG Bank, portfolio hedging, like micro hedging, has been highly effective. Any ineffectiveness that occurs is recognised in the income statement.

The effective part of PH is accounted for in the balance sheet item Value adjustments on loans in portfolio hedge accounting.

Although BNG Bank uses derivatives for economic hedging purposes, it is not possible in all cases to include these in a hedge accounting relationship, as permitted by IFRS. Virtually all derivatives that are not involved in a hedge accounting relationship are hedged economically with a financial instrument which is also recognised at fair value through the income statement. Consequently, in total, the volatility of the result due to interest rate and foreign exchange risks is limited.

The following table shows the maturity profile as at 31 December 2022 of all derivatives based on their notional amounts.

	31-12-2022				31-12-2021			
	Up to 1 year	1 to 5 years	Over 5 years	Total	Up to 1 year	1 to 5 years	Over 5 years	Total
Derivatives involved in portfolio hedge accounting								
Interest rate swaps	7,734	28,137	98,530	134,401	7,508	27,304	90,203	125,015
Derivatives involved in micro hedge accounting								
Interest rate swaps	6,654	23,341	44,533	74,528	3,378	23,127	37,528	64,033
Cross-currency swaps	6,378	17,721	6,063	30,162	9,770	18,111	6,568	34,449
Derivatives not involved in hedge accounting								
Interest rate swaps	6,369	251	388	7,008	533	154	540	1,227
Cross-currency swaps	0	100	428	528	147	140	427	714
FX-swaps	3,829	0	0	3,829	4,337	-	-	4,337
Other derivatives	10	-2,629	-200	-2,819	-18	-571	147	-442
Total	**30,974**	**66,921**	**149,742**	**247,637**	**25,655**	**68,265**	**135,413**	**229,333**

The following table shows the total notional amounts of the derivatives in relation to the fair value.

	31-12-2022		31-12-2021	
	Notional amount	Fair value	Notional amount	Fair value
Derivatives involved in portfolio hedge accounting				
Interest rate swaps	110,204	-2,308	52,281	2,260
Derivatives involved in micro hedge accounting				
Interest rate swaps	72,137	4,377	38,984	1,099
Cross-currency swaps	13,460	1,589	22,134	2,060
Derivatives not involved in hedge accounting				
Interest rate swaps	6,441	13	380	23
Cross-currency swaps	298	64	368	85
FX-swaps	34	1	4,024	158
Other derivatives	63	1	65	-
Total derivatives stated as assets	**202,637**	**3,737**	**118,236**	**5,685**
Derivatives involved in portfolio hedge accounting				
Interest rate swaps	24,197	3,341	72,734	15,393
Derivatives involved in micro hedge accounting				
Interest rate swaps	2,391	707	25,049	123
Cross-currency swaps	16,702	1,690	12,315	1,168
Derivatives not involved in hedge accounting				
Interest rate swaps	567	194	847	-150
Cross-currency swaps	230	106	346	249
FX-swaps	3,795	54	313	4
Other derivatives	-2,882	37	-507	148
Total derivatives stated as liabilities	**45,000**	**6,129**	**111,097**	**16,935**

BNG Bank receives collateral from counterparties with respect to credit risk on derivatives. As at 31 December 2022, this collateral amounted to EUR 1,173 million (2021: EUR 1,054 million), all in cash.

With regard to derivatives, BNG Bank provided EUR 4,950 million in collateral in 2022 (2021: EUR 16,583 million), of which EUR 2,008 million in cash (2021: EUR 13,598 million) and EUR 2,942 million in interest-bearing securities (2021: EUR 2,985 million).

Fair value hedge accounting

The following table shows the changes in fair value of the hedged items and the hedging instruments due to fair value hedge accounting in the reporting period, used as the basis for recognising ineffectiveness.

31-12-2022

	Gross carrying amount of hedged items	Accumulated amount of fair value adjustments on the hedged items or through OCI	Gains/Losses attributable to the hedged item	Gains/Losses attributable to the hedging instrument	Hedge ineffectiveness
Fair value hedges					
Micro fair value hedges (hedged items stated as assets)					
Fixed rate bonds in Financial assets at FVOCI	7,089	-874	-1328	1320	-8
Fixed rate bonds in Interest-bearing securities at AC	880	-331	-592	588	-4
	7,969	**-1,205**	**-1,920**	**1,908**	**-12**
Micro fair value hedges (hedged items stated as liabilities)					
Fixed rate loans in Amounts due to banks	-399	61	89	0	89
Fixed rate bonds in Debt securities	-83,193	10,998	12,029	-11,955	74
Fixed rate loans in Funds entrusted	-38	-2	4	-93	-89
	-83,630	**11,057**	**12,122**	**-12,048**	**74**
Total micro fair value hedges	**-75,661**	**9,852**	**10,202**	**-10,140**	**62**
Portfolio fair value hedges (hedged items stated as assets)					
Fixed rate loans in Amounts due to banks	50	-4	-10	10	0
Fixed rate bonds in Financial assets at FVOCI	309	-13	-52	34	-18
Fixed rate bonds in Interest-bearing securities at AC	1,349	-141	-361	365	4
Fixed rate loans in Loans and advances	82,924	-8,535	-21,844	21,826	-18
Total portfolio fair value hedges	**84,632**	**-8,693**	**-22,267**	**22,235**	**-32**
Total fair value hedges	**8,971**	**1,159**	**-12,065**	**12,095**	**30**

31-12-2021

	Gross carrying amount of hedged items	Accumulated amount of fair value adjustments on the hedged items or through OCI	Gains/Losses attributable to the hedged item	Gains/Losses attributable to the hedging instrument	Hedge ineffectiveness
Fair value hedges					
Micro fair value hedges (hedged items stated as assets)					
Fixed rate bonds in Financial assets at FVOCI	7,754	105	-332	331	-1
Fixed rate bonds in Interest-bearing securities at AC	1,214	211	66	-77	-11
	8,968	**316**	**-266**	**254**	**-12**
Micro fair value hedges (hedged items stated as liabilities)					
Fixed rate loans in Amounts due to banks	-508	-28	26	-27	-1
Fixed rate bonds in Debt securities	-90,555	-2,005	1,990	-1,987	3
Fixed rate loans in Funds entrusted	-42	-4	-25	26	1
	-91,105	**-2,037**	**1,991**	**-1,988**	**3**
Total micro fair value hedges	**-82,137**	**-1,721**	**1,725**	**-1,734**	**-9**
Portfolio fair value hedges (hedged items stated as assets)					
Fixed rate loans in Amounts due to banks	56	0	0	0	0
Fixed rate bonds in Financial assets at FVOCI	802	122	-42	66	24
Fixed rate bonds in Interest-bearing securities at AC	1,344	53	-28	29	1
Fixed rate loans in Loans and advances	81,245	13,502	-7,129	7,169	40
Total portfolio fair value hedges	**83,447**	**13,677**	**-7,199**	**7,264**	**65**
Total fair value hedges	**1,310**	**11,956**	**-5,474**	**5,530**	**56**

Cash flow hedge accounting

The following table shows the notional amount and the changes in fair value of the hedging instruments, as well as the gross carrying amounts of the hedged items involved in micro cash flow hedge accounting in the reporting period, used as the basis for recognising ineffectiveness.

31-12-2022	Notional amount of hedging instruments	Gross carrying amount of hedging items		Changes in fair value of hedging		Reclassified as interest result calculated using the effective interest method
		Assets	Liabilities	Effective portion recognised in OCI	Hedge ineffectiveness recognised in profit or loss	
Cash flow hedges						
Micro cash flow hedges						
Cross currency swaps	-931	19	-1,127	-20	0	-2
Total cash flow hedges	**-931**	**19**	**-1,127**	**-20**	**0**	**-2**

31-12-2021	Notional amount of hedging instruments	Gross carrying amount of hedging items		Changes in fair value of hedging		Reclassified as interest result calculated using the effective interest method
		Assets	Liabilities	Effective portion recognised in OCI	Hedge ineffectiveness recognised in profit or loss	
Cash flow hedges						
Micro cash flow hedges						
Cross currency swaps	2,317	20	-2,472	8	0	9
Total cash flow hedges	**2,317**	**20**	**-2,472**	**8**	**0**	**9**

Foreign exchange rates

The following table shows the weighted average FX rates for the major currencies of the final exchange of cross-currency swaps involved in a micro cash flow hedge accounting relationship as at 31 December 2022.

31-12-2022

FX rate	up to 1 year	1 to 5 years	over 5 years	Total
USD to EUR	1.10025	1.05856	1.08086	1.07434
GBP to EUR	0.00000	1.02672	1.02462	1.02701
AUD to EUR	0.93821	0.94792	1.00198	0.97377
CHF to EUR	0.80122	0.69487	0.69128	0.70243

31-12-2021

FX rate	up to 1 year	1 to 5 years	over 5 years	Total
USD to EUR	0.88050	0.85705	0.86837	0.86872
GBP to EUR	1.13969	1.13023	1.29100	1.11276
AUD to EUR	0.66310	0.63360	0.77610	0.66131
CHF to EUR	0.70338	0.69974	0.82218	0.72007

Fair value of financial instruments

The fair value is the transfer price (not adjusted for transaction costs) which, regardless of the intention or capability, would be received if an asset was sold or the price which would be paid if a liability was transferred in an orderly transaction between market participants at the measurement date under the current market conditions. The assumption is that the valuation is viewed from the perspective of market participants, whereby only the specific characteristics and limitations of the financial instrument are taken into consideration.

A distinction is made between three levels of fair value, with the nature of the input factors and their significance for the total valuation being decisive for the correct classification in the hierarchy.

Fair value hierarchy

- Level 1: valuation based on (unadjusted) quoted market prices of the instrument itself or, if unavailable, of identical instruments, in an active market. A financial instrument is regarded as quoted in an active market if the quoted price is regularly available, and if these prices reflect current and regularly occurring arm's length market transactions. The quoted market prices for financial assets and liabilities are based on mid-market prices.
- Level 2: valuation based on a valuation technique using directly/indirectly observable market data other than quoted market prices as used at Level 1. This category includes instruments with a valuation that uses quoted prices in an active market for comparable instruments, quoted prices for identical or comparable instruments in markets deemed to be less than active or other valuation techniques whereby all significant input variables are directly or indirectly observable from market data.
- Level 3: valuation based on valuation techniques that make significant use of input data which are not publicly observable in the market. This category includes instruments with a valuation technique that uses input variables that are not based on observable market data and whereby the non-observable market data significantly influence the valuation of the instrument. This category also includes the instruments valued in accordance with the quoted prices for comparable instruments, whereby significant not publicly observable changes or presumptions are necessary for expressing the differences between the instruments.

Where possible, BNG Bank uses quoted market prices (Level 1). Quoted market prices are based on bid prices (for financial assets) and ask prices (for financial liabilities). Using mid-market prices is permitted if the market risk of the financial assets and liabilities is offset. BNG Bank uses mid-market prices on the reporting date for valuation purposes.

In many cases, the bank is reliant on theoretical valuations (Level 2). In such cases, the fair value is determined on the basis of valuation models and techniques that are customarily used in the financial sector. These are mostly models based on net present value calculations and option pricing models. The input for these models is based on direct or indirect objectively observable input data such as market prices, forward pricing, market-based yield curves for discounting, correlations, volatilities, cross-currency basis spreads, counterparty creditworthiness and other factors, estimates and assumptions which market parties would use to determine the price. The bank uses so-called spread curves to determine the fair value of financial instruments that involve credit and liquidity risk and for which a theoretical valuation is required. These spread curves are constructed on the basis of the relevant interest rate curve and a spread for credit and liquidity risk. The credit risk spread is dependent on the creditworthiness of the debtor, taking into account the collateral received, guarantees and maturities. The liquidity risk spread depends on the degree of marketability of the instrument. The risk profiles of individual clients and financial instruments are assessed at least once per quarter. If necessary, the credit-risk spread will be adjusted.

In one case, the valuation of the bank's financial instrument is based to a significant extent on input data and management estimates which are not publicly observable in the market (Level 3).

In determining the fair value of derivative transactions, a credit value adjustment (CVA) and a debit valuation adjustment (DVA) are applied to all derivative transactions with all clients and financial counterparties with which the bank does not have an agreement for the daily exchange of collateral. CVA and DVA are also applied to all derivative transactions with clients or counterparties with which the bank has an agreement for the daily exchange of collateral but where significant thresholds are applicable in determining the collateral amount.

The bank applies a spread over the relevant swap curve to determine its own credit risk: the 'own credit adjustment (OCA)'. The OCA only relates to instruments included under Financial liabilities at fair value through the income statement.

Insofar as financial instruments have the character of a forward contract, official forward prices are used, including forward yield curves and forward exchange rates. In the case of complex instruments, the constituent parts of the instrument are measured separately on the basis of the above techniques and models. The fair value of the entire instrument is determined as the sum of the fair values of its constituent parts. BNG Bank applies only recurring fair values, which are measured on an ongoing basis for processing in the financial position at the end of each reporting period.

	31-12-2022		31-12-2021	
	Balance sheet-value	**Fair value**	**Balance sheet-value**	**Fair value**
Cash and balances held with central banks	6,821	6,821	9,264	9,264
Amounts due from banks	346	346	163	165
Cash collateral posted	4,144	4,144	12,993	12,993
Financial assets at fair value through the income statement	901	901	1,383	1,383
Derivatives	3,737	3,737	5,685	5,685
Financial assets at fair value through other comprehensive income	7,398	7,398	8,572	8,572
Interest-bearing securities at amortised cost	7,636	7,462	7,632	7,665
Loans and advances	89,624	81,162	89,738	104,146
Total financial assets	**120,607**	**111,971**	**135,430**	**149,873**
Amounts due to banks	4,012	4,004	19,525	19,488
Cash collateral received	1,173	1,173	984	984
Financial liabilities at fair value through the income statement	185	185	310	310
Derivatives	6,129	6,129	16,935	16,935
Debt securities	90,774	90,662	101,355	102,301
Funds entrusted	4,785	4,826	4,525	4,651
Subordinated debt	38	40	36	44
Total financial liabilities	**107,096**	**107,019**	**143,670**	**144,713**

When effecting a transaction, the fair value hierarchy is determined on the basis of the relevant characteristics of the valuation, with the nature of the input factors and their significance for the total valuation being decisive for the classification. The classification takes place on the basis of the lowest input level that is significant for the fair value in the transaction as a whole.

Significance is assessed by determining the influence of non-observable input factors on the outcome of the total valuation, with due regard for the range of possible alternative assumptions concerning those non-observable input factors. Each quarter, the classification of each transaction is assessed and adjusted where necessary.

The following table provides an overview of the fair value hierarchy for transactions recognised at fair value.

31-12-2022

	Level 1	Level 2	Level 3	Total
Financial assets at fair value through the income statement	58	834	9	901
Derivatives	-	3,737	-	3,737
Financial assets at fair value through other comprehensive income	7,322	76	-	7,398
Total financial assets	**7,380**	**4,647**	**9**	**12,036**
Financial liabilities at fair value through the income statement	-	185	-	185
Derivatives	-	6,129	-	6,129
Total financial liabilities	**-**	**6,314**	**-**	**6,314**

31-12-2021

	Level 1	Level 2	Level 3	Total
Financial assets at fair value through the income statement	106	1,267	10	1,383
Derivatives	-	5,685	-	5,685
Financial assets at fair value through other comprehensive income	8,482	90	-	8,572
Total financial assets	**8,588**	**7,042**	**10**	**15,640**
Financial liabilities at fair value through the income statement	123	187	-	310
Derivatives	-	16,935	-	16,935
Total financial liabilities	**123**	**17,122**	**0**	**17,245**

As per 31 december 2022 one asset is stated under Level 3, this is a subordinated loan where the interest rate risk has been hedged with a swap. This is a structured interest-bearing security that is rarely traded in the market. Therefore, the observable market data available for similar securities is not fully representative of the current fair value. The fair value of this transaction is determined on the basis of public market data that is adjusted using significant input variables not publicly observable in the market.

Fair value hierarchy of amortised cost transactions

The table below provides an overview of the way in which the fair value is determined for transactions recognised at amortised cost in the balance sheet on the basis of the hierarchical classification referred to above.

31-12-2022

	Level 1	Level 2	Level 3	Total
Cash and balances held with central banks	6,821	-	-	6,821
Amounts due from banks	4	339	3	346
Cash collateral posted	-	4,144	-	4,144
Interest-bearing securities at amortised cost	439	6,760	263	7,462
Loans and advances	590	74,086	6,486	81,162
Total financial assets	**7,854**	**85,329**	**6,752**	**99,935**
Amounts due to banks	1	4,003	-	4,004
Cash collateral received	-	1,173	-	1,173
Debt securities	79,599	11,063	-	90,662
Funds entrusted	3,484	792	550	4,826
Subordinated debt	-	40	-	40
Total financial liabilities	**83,084**	**17,071**	**550**	**100,705**

31-12-2021

	Level 1	Level 2	Level 3	Total
Cash and balances held with central banks	9,264	-	-	9,264
Amounts due from banks	23	138	4	165
Cash collateral posted	-	12,993	-	12,993
Interest-bearing securities at amortised cost	206	6,994	465	7,665
Loans and advances	861	95,255	8,030	104,146
Total financial assets	**10,354**	**115,380**	**8,499**	**134,233**
Amounts due to banks	1	19,487	-	19,488
Cash collateral received	-	984	-	984
Debt securities	87,599	14,703	-	102,302
Funds entrusted	2,800	1,079	772	4,651
Subordinated debt	-	44	-	44
Total financial liabilities	**90,400**	**36,297**	**772**	**127,469**

The financial assets at amortised cost under Level 3 mainly relate to loans and advances subject to solvency requirements to BNG Bank's statutory market parties. Loans and advances to statutory counterparties under government guarantees are included in Level 2, on account of the strong correlation with bonds issued by the Dutch State. The financial liabilities at amortised cost under Level 1 mainly consist of tradable benchmark bonds issued by BNG Bank (Debt securities item).

Risk section

Institutional risk management approach

The process of accepting and controlling risks is inherent to the day-to-day operations of any bank. In order to conduct its operations, a bank must accept a certain amount of credit, market, liquidity and operational risk. This section provides an overview of the main characteristics of the risk profile of BNG Bank and only covers the risk management practices that directly impact the financial statements.

The BNG Bank is operating in an highly complex environment and is subject to national and international rules and regulations. Although the bank spends significant effort to ensure compliance to all relevant rules and regulations, the implementation process is prone to human errors that cannot be completely prevented.

Credit risk

Credit risk
Credit risk is defined as the risk of losses in earnings or capital resulting from the potential risk that a borrower or a counterparty will fail to meet its obligations in accordance with agreed terms. It includes counterparty risk, settlement risk and concentration risk. The bank is working on integrating climate-related risks within the credit risk framework. As this is stil in progress, no further consideration is given.

Total credit risk exposure
The total gross exposure value for credit risk consists of the total balance sheet value of the assets, adjusted for the balance sheet value of derivatives, cash collateral posted for either derivative transactions or secured financing transactions and receivables related to Settle to Market (STM) derivative contracts under the Amounts due from banks item. The gross exposure value for off-balance sheet commitments is included, as well as the exposure value for counterparty credit risk (divided into derivative and secured financing transactions). The table below provides insight into the total gross credit risk exposure value.

	31-12-2022	31-12-2021
Balance sheet total	112,074	149,363
-/- Derivatives	-3,737	-5,685
-/- Cash collateral posted	-4,144	-12,993
Total on-balance sheet exposure	**104,193**	**130,685**
Total off-balance sheet exposure	**11,164**	**10,859**
Exposure value for derivatives	3,090	3,199
Exposure value for secured financing transactions	87	61
Total counterparty credit risk exposure	**3,177**	**3,260**
Total gross exposure	**118,534**	**144,804**

As at 31 December 2022, the balance sheet value of the loans granted to or guaranteed by public authorities, the WSW Housing guarantee fund and the WfZ Healthcare guarantee fund in the Loans and advances balance sheet item totalled EUR 81.2 billion (2021: EUR 80.5 billion). The contingent liabilities and the irrevocable facilities are explained in the section ‘Off-balance sheet commitments’. Section 'Encumbered financial assets and liabilities' indicates which parts of the financial assets are not freely disposable.

The calculation of the market value of financial assets and financial liabilities at fair value through the income statement includes a credit and liquidity risk spread. Changes in value due to credit-risk and liquidity-risk fluctuations are derived from changes in these spreads. The risk profiles of individual customers and financial instruments are periodically assessed. If necessary, the credit-risk spread is adjusted for the purpose of valuation.

Cumulative changes in the market value of financial assets at fair value through the income statement as a result of adjusted credit and liquidity risk spreads totalled EUR 164 million negative (2021: EUR 131 million negative) and amounted to EUR 33 million negative over 2022 (2021: EUR 29 million negative). Cumulative changes in the market value of financial liabilities at fair value through the income statement as a result of adjusted credit and liquidity risk spreads totalled EUR 11 million positive (2021: EUR 4 million positive) and amounted to EUR 7 million positive for 2022 (2021: EUR 10 million negative). Financial liabilities at fair value through the income statement are recognised on the relevant funding curve including a mark-up for 'own credit risk' in the accounts.

Counterparty risk

The bank is exposed to counterparty risk in relation to public sector entities (loans and advances), financial counterparties (derivatives) and issuers of interest-bearing securities (IBS) in which the bank has invested. BNG Bank applies the following credit risk mitigation measures:

- Guarantees received from a central or local authority or by the guarantee funds WSW (Social Housing) and WfZ (Healthcare). Because loans subject to solvency requirements are often extended under partial of full guarantees or suretyships, the loan remains partly or fully zero-risk-weighted on balance for BNG Bank (see the section on statutory market parties).
- Other forms of security such as pledges and mortgages are used to minimise possible losses due to credit risks. The potential risk-reducing effect, however, is not used in the calculation of the regulatory capital requirement.
- Bilateral netting and collateral agreements based on a daily collateral exchange with financial counterparties, also the section on financial counterparties.

Statutory market parties

The bank's Articles of Association restrict lending to parties subject to some form of government involvement. As a result, the credit portfolio is largely comprised of zero-risk-weighted loans and advances provided to or guaranteed by the Dutch government.

Lending is subject to initial and periodic credit assessment. This contains a detailed assessment of the creditworthiness of the client concerned, based in part on the bank's own internal rating model. Additionally, the bank has an internal risk assessment process for tailored transactions that includes operational risk elements. Moreover, the bank uses extensive qualitative product descriptions, in which the appropriateness of the product for different types of clients is made explicit.

Credit risk models

Most of BNG Bank's clients are not rated by external rating agencies, such as Moody's, Fitch or S&P. The bank applies internally developed rating models to assess creditworthiness of clients. These expert models are sector specific and subject to periodic review and validation in accordance with the banks' model governance policy. These models are not applied for capital calculations under Pillar I, where the bank uses the Standardised approach.

The significance of the internal ratings is the following:

Internal rating	Description
0	Zero risk-weighted lending.
1 through 11	The credit risk is deemed acceptable. A regular annual review is performed.
12 through 13	Watch list: there is an increased credit risk. A review takes place at least twice a year.
14 through 16	Financial restructuring and recovering department: there is an increased credit risk. At least three times a year, a report on these debtors is submitted to the Executive Board.
17 through 19	Financial restructuring and recovering department: there is an increased credit risk and/or the debtor repeatedly fails to fulfil the payment obligations and/or there is no expectation of continuity. At least three times a year, a report on these debtors is submitted to the Executive Board.

Forborne exposures

Forbearance concerns credit agreements for which the credit conditions have been amended in the debtor's favour as a result of the debtor's precarious financial position, so as to enable it to fulfil its obligations.

31-12-2022

		Of which: Forborne		
	Total exposure	Gross of impairment	Net of impairment	**in % of total**
Financial assets (excl. derivatives)				
Cash and balances held with central banks	6,821	-	-	0.0%
Amounts due from banks	346	-	-	0.0%
Cash collateral posted	4,144	-	-	0.0%
Financial assets at fair value through the income statement	901	-	-	0.0%
Financial assets at fair value through other comprehensive income	7,398	-	-	0.0%
Interest-bearing securities at AC	7,636	-	-	0.0%
Loans and advances	89,624	353	302	0.4%
	116,870	**353**	**302**	**0.3%**
Off-balance sheet commitments				
Contingent liabilities	489	2	2	0.4%
Revocable facilities	6,248	35	35	0.6%
Irrevocable facilities	4,427	-	-	0.0%
	11,164	**37**	**37**	**0.3%**

31-12-2021

		Of which: Forborne		
	Total exposure	Gross of impairment	Net of impairment	**in % of total**
Financial assets (excl. derivatives)				
Cash and balances held with central banks	9,264	-	-	0.0%
Amounts due from banks	163	-	-	0.0%
Cash collateral posted	12,993	-	-	0.0%
Financial assets at fair value through the income statement	1,383	-	-	0.0%
Financial assets at fair value through other comprehensive income	5,685	-	-	0.0%
Interest-bearing securities at AC	8,572	-	-	0.0%
Loans and advances	89,738	365	313	0.4%
	127,798	**365**	**313**	**0.3%**
Off-balance sheet commitments				
Contingent liabilities	501	-	-	0.0%
Revocable facilities	5,871	-	-	0.0%
Irrevocable facilities	4,487	-	-	0.0%
	10,859	**-**	**-**	**0.0%**

The financial assets of which contractual terms have been changed as a result of the debtor's unfavourable financial position amounted to EUR 353 million as at 31 December 2022 (year-end 2021: EUR 365 million). The share of forborne exposure in the total portfolio is 0.3% (year-end 2021: 0.3%) and concerns 14 debtors (year-end 2021: 23 debtors). Forbearance is used as a backstop indicator in the impairment staging assessment, as a result of which all forborne exposures are classified in impairment stage 2.

Non-performing exposures

Please refer to Note 37 (Impairment of financial assets and off-balance sheet commitments) for disclosure of BNG Bank's definition of non-performing exposures. An exposure classified as non-performing can once again be regarded as performing if all of the following conditions are met:
- The debtor once again complies with all contractual terms (no default).
- The debtor's situation has improved to the extent that the debtor is able to meet payment obligations according to an existing or adjusted payment profile ('likely to pay'); and
- The debtor has no payment arrears exceeding 90 days.

The tables below provide insight into the total exposure in financial assets (excluding derivatives) and off-balance sheet commitments, indicating which portions have been classified as non-performing.

31-12-2022

		Of which: Non-performing		
	Total exposure	Gross of impairment	Net of impairment	**in % of total**
Financial assets (excl. derivatives)				
Cash and balances held with central banks	6,821	-	-	0.0%
Amounts due from banks	346	-	-	0.0%
Cash collateral posted	4,144	-	-	0.0%
Financial assets at fair value through the income statement	901	-	-	0.0%
Financial assets at fair value through other comprehensive income	7,398	-	-	0.0%
Interest-bearing securities at amortised cost	7,636	-	-	0.0%
Loans and advances	89,624	848	719	0.9%
	116,870	**848**	**719**	**0.7%**
Off-balance sheet commitments				
Contingent liabilities	489	1	0	0.2%
Revocable facilities	6,248	239	239	3.8%
Irrevocable facilities	4,427	42	41	0.9%
	11,164	**282**	**280**	**2.5%**

31-12-2021

	Total exposure	Of which: Non-performing		in % of total
		Gross of impairment	Net of impairment	
Financial assets (excl. derivatives)				
Cash and balances held with central banks	9,264	-	-	0.0%
Amounts due from banks	163	-	-	0.0%
Cash collateral posted	12,993	-	-	0.0%
Financial assets at fair value through the income statement	1,383	-	-	0.0%
Financial assets at fair value through other comprehensive income	8,572	-	-	0.0%
Interest-bearing securities at amortised cost	7,632	-	-	0.0%
Loans and advances	89,738	549	324	0.6%
	129,745	**549**	**324**	**0.4%**
Off-balance sheet commitments				
Contingent liabilities	501	1	0	0.2%
Revocable facilities	5,871	66	66	1.1%
Irrevocable facilities	4,487	0	0	0.0%
	10,859	**67**	**66**	**0.6%**

On-balance non-performing exposure totalled EUR 848 million as at 31 December 2022 (year-end 2021: EUR 549 million). The increase of this exposure in 2022 is caused by the transfer of four obligors to Stage 3, as the result of an individual assessment. The total non-performing exposure is still low in relation to the total exposure of the portfolio of BNG Bank. At year-end 2022 the share of non-performing exposure in the total portfolio is 0.8% (year-end 2021: 0.4%) and concerns 28 debtors (year-end 2021: 14 debtors). BNG Bank received EUR 391 million of government guarantees (2021: EUR 160 million) with respect to non-performing exposures.

The following table shows the development of non-performing exposures.

	2022	2021
Total non-performing exposure as at 1 January	**549**	**397**
Change in existing non-performing exposures	10	-5
Shift from performing to non-performing exposure	510	213
Shift from non-performing to performing exposure	-	-34
Repayments on and settlement of non-performing exposure	-221	-22
Total non-performing exposure as at 31 December	**848**	**549**

Maturity analysis of performing past due exposures

The following table comprises past due exposures that are not included in impairment stage 3 under IFRS 9.

	31-12-2022	31-12-2021
Less than 31 days	2	1
31 through 60 days	0	-
61 through 90 days	-	-
Over 90 days	-	-
Closing balance	**2**	**1**

Impairments

The impairments of financial assets are explained in note 31.

External rating

BNG Bank uses the external ratings awarded by rating agencies, specifically S&P, Moody's, Fitch and DBRS. In determining the capital requirement, the bank uses the ratings of these four agencies if such ratings are available. The ratings relate either to the counterparty or specifically to a securities purchased.

Financial counterparties

The market risks associated with loans to clients are mitigated primarily through derivative transactions with financial counterparties. The bank only conducts business with financial counterparties that have been rated by an external agency. Financial counterparties are periodically assessed for creditworthiness. If necessary, the limit on the maximum exposure to such a counterparty is re-adjusted accordingly.

	31-12-2022		31-12-2021	
Exposure values for derivatives by exposure class (SA)	**Exposure value**	**Risk-weighted exposure amount**	**Exposure value**	**Risk-weighted exposure amount**
Regional governments or local authorities	143	-	521	-
Public sector entities	4	1	25	5
Institutions	1,912	494	1,130	444
Corporates	1,031	600	1523	1,025
Total	**3,090**	**1,095**	**3,199**	**1,474**

In order to reduce credit risk, netting agreements are in place with financial counterparties with which BNG Bank actively enters into derivatives transactions or (reverse) repos. In addition, collateral agreements are concluded. These ensure that market value developments are mitigated on a daily basis by collateral. The agreements are updated where necessary in response to changing market circumstances, market practices and regulatory changes. The table on the next page shows the gross positions before balance sheet netting and if the collateral agreements were taken into account.

31-12-2022

	Derivatives (states as assets)	Derivatives (states as liabilities)	Net
Netting of financial assets and financial liabilities (derivatives)			
Gross value of financial assets and liabilities before balance sheet netting	17,203	-19,595	**-2,392**
Gross value of the financial assets and liabilities to be netted	-13,466	13,466	**0**
Balance sheet value of financial assets and liabilities (after netting)	**3,737**	**-6,129**	**-2,392**
Value of financial netting instrument that does not comply with IAS 32 (netting of derivatives with the same counterparty) for netting purposes	-2,134	2,134	0
Exposure before collateral	**1,603**	**-3,995**	**-2,392**
Value of financial collateral that does not comply with IAS 32 for netting purposes	-1,173	4,144	**2,971**
Net exposure	**430**	**149**	**579**

31-12-2021

	Derivatives (states as assets)	Derivatives (states as liabilities)	Net
Netting of financial assets and financial liabilities (derivatives)			
Gross value of financial assets and liabilities before balance sheet netting	10,685	-21,936	**-11,251**
Gross value of the financial assets and liabilities to be netted	-5,000	5,000	**0**
Balance sheet value of financial assets and liabilities (after netting)	**5,685**	**-16,936**	**-11,251**
Value of financial netting instrument that does not comply with IAS 32 (netting of derivatives with the same counterparty) for netting purposes	-3,799	3,799	**0**
Exposure before collateral	**1,886**	**-13,137**	**-11,251**
Value of financial collateral that does not comply with IAS 32 for netting purposes	-1,054	13,229	**12,175**
Net exposure	**832**	**92**	**924**

At year-end 2022, the collateral posted for derivative transactions amounted to EUR 4.5 billion (2021: EUR 14.6 billion). The deterioration of BNG Bank's rating by three notches would not increase this amount (2021: EUR nil). The strength of the bank's liquidity position is sufficient to meet, and to absorb fluctuations in collateral obligations.

	31-12-2022		31-12-2021	
	Reverse repos (assets)	Repos (liabilities)	Reverse repos (assets)	Repos (liabilities)
Netting of reverse repo and repo agreements subject to enforceable master netting agreements				
Gross balance sheet value before balance sheet netting	857	-857	998	-998
Balance sheet netting of reverse repo and repo agreements	-857	857	-998	998
Net balance sheet value of financial assets and liabilities	**0**	**0**	**0**	**0**

Investments in interest-bearing securities (IBS)

BNG Bank's IBS portfolio is held predominantly for liquidity management purposes. The portfolio is composed of high-quality bonds, the majority of which are accepted as collateral by the ECB. BNG Bank's total IBS portfolio can be subdivided into a liquidity portfolio and an Asset & Liability Management (ALM) portfolio. The liquidity portfolio consists exclusively of highly negotiable securities and is subdivided according to the various LCR levels. The ALM portfolio is subdivided according to type of security. Each month, the development of the portfolio is reported to and evaluated by the Investment Committee. Using factors such as external ratings and – in part – internal ratings, the bank monitors the development on an individual basis. All assets within these portfolios undergo an impairment analysis twice a year. Asset backed securities (including RMBS) are subject to a due diligence review process.

The amounts shown below per rating category are remaining principal amounts in millions of euros. The total balance sheet value is also shown in the final column.

31-12-2022

	AAA	AA	A	BBB	Non-investment grade	Total nominal value	Total balance sheet value
Liquidity portfolio							
Level I – Government/ Supranational	3,844	2,739	1083	46	-	7,712	7,018
Level I B – Covered bonds	1,517	-	-	-	-	1,517	1,422
Level II A – Government/ Supranational	-	56	-	-	-	56	58
Level II A – Covered bonds	275	-	-	-	-	275	266
Level II B – Corporates	-	-	-	-	-	-	-
Level II B – RMBS	1,492	-	-	-	-	1,492	1,509
	7,128	**2,795**	**1,083**	**46**	**-**	**11,052**	**10,273**
ALM portfolio							
Initial margin	-	-	-	-	-	-	-
RMBS	11	168	42	16	-	237	238
ABS	40	-	16	23	48	127	125
RMBS-NHG	3,375	48	101	-	-	3,524	3,536
Other	25	507	521	423	-	1,476	1,493
	3,451	**723**	**680**	**462**	**48**	**5,364**	**5,392**
Total	**10,579**	**3,518**	**1,763**	**508**	**48**	**16,416**	**15,665**

31-12-2021

	AAA	AA	A	BBB	Non-investment grade	Total nominal value	Total balance sheet value
Liquidity portfolio							
Level I – Government/ Supranational	4,839	1,370	-	-	46	6,255	6,540
Level I B – Covered bonds	913	-	-	-	-	913	927
Level II A – Government/ Supranational	-	59	-	-	-	59	106
Level II A – Covered bonds	330	-	-	-	-	330	338
Level II B – Corporates	-	-	25	-	-	25	25
Level II B – RMBS	971	-	-	-	-	971	983
	7,053	**1,429**	**25**	**0**	**46**	**8,553**	**8,919**
ALM portfolio							
Initial margin	389	1,227	220	-	-	1,836	2,100
RMBS	93	229	55	-	18	395	396
ABS	47	-	63	22	50	182	180
RMBS-NHG	3,277	62	120	-	-	3,459	3,465
Other	99	422	139	447	65	1,172	1,992
	3,905	**1,940**	**597**	**469**	**133**	**7,044**	**8,133**
Total	**10,958**	**3,369**	**622**	**469**	**179**	**15,597**	**17,052**

The liquidity portfolio improved in quality (AAA and AA) mainly due to investments in Government bonds with a better rating. The ALM portfolio also improved due to the purchase of high rated NHG securities.

Transfer of financial assets without derecognition

At year-end 2022 BNG Bank has transferred EUR 665 million in interest-bearing securities in repurchase transactions without derecognition (2021: EUR 738 million). At year-end 2022, BNG Bank has no financial assets in its portfolio that were transferred and derecognised and in which it has a continuing involvement. Financial assets are not removed from the balance sheet if BNG Bank retains the credit risks and the rights to the underlying cash flows.

Concentration risk

Regarding concentration risk, the bank differentiates between:
- country risk with a distinction between domestic and foreign risk;
- sector risk; and
- risk for individual parties with a distinction between clients and financial counterparties.

Sector specific policies, annual internal targets and maximum exposure amounts on individual counterparties are applied to manage the concentration risks on sectors and individual parties. A considerable portion of the total outstanding is indirectly related to public sector property. However, these risks are generally mitigated by government guarantees on lending and by the WSW and WfZ guarantee funds. These guarantees result in a concentration risk in relation to public authorities and guarantee funds. The guarantee funds are guaranteed by the central government via backstop constructions, which, in the end, creates an exposure to the Dutch State. The concentration of this risk is high, but inherent to BNG Bank's business model.

The bank is exposed to foreign country risk as a result of transactions with financial counterparties to hedge market risks arising from lending and funding activities, as a result of its liquidity portfolio and, to a limited extent, in the context of lending and investments in the public sector abroad.

The bank invests in foreign securities for its liquidity portfolio because the vast majority of its loan portfolio already relates to the Netherlands. Foreign lending is in most cases also directly or indirectly guaranteed by the relevant governments.

All foreign exposures fall within limits set for each country. These limits mainly depend on the perceived credit quality of the country in question. Moreover, a general limit of 15% of the balance sheet total applies to foreign exposures excluding derivatives, collateral and short term loans and current account balances due from banks. Because the creditworthiness of certain countries in the Eurozone deteriorated, the bank has gradually reduced its positions in these countries. This was mainly realised by expiration of exposures.

Long-term foreign exposure

The following tables provide an overview of long-term foreign exposures. Derivative transactions and short-term transactions (including cash collateral with banks in particular) have not been included. The amounts shown are remaining principal amounts in millions of euros.

31-12-2022

	AAA	AA	A	BBB	Non-investment grade	Total nominal value	Total balance sheet value
Supranational institutions	1,554	-	-	-	-	1,554	1,405
Multilateral development banks	-	-	-	-	-	-	-
Austria	-	896	-	-	-	896	754
Belgium	-	387	-	122	-	509	492
Denmark	36	-	-	-	-	36	34
Finland	-	260	-	-	-	260	210
France	418	1,210	-	5	-	1,633	1,573
Germany	581	130	16	-	-	727	641
Italy	-	1	16	-	48	65	63
Luxembourg	499	-	-	-	-	499	420
Portugal	-	18	19	-	30	67	66
Spain	11	150	101	66	-	328	349
United Kingdom	275	457	130	458	51	1,371	1,397
United States	73	-	-	-	-	73	61
Total	**3,447**	**3,509**	**282**	**651**	**129**	**8,018**	**7,465**

31-12-2021

	AAA	AA	A	BBB	Non-investment grade	Total nominal value	Total balance sheet value
Supranational institutions	1,395	-	-	-	-	1,395	1,405
Multilateral development banks	203	-	-	-	-	203	195
Austria	-	700	-	-	-	700	713
Belgium	-	355	68	127	-	550	700
Denmark	42	-	-	-	-	42	41
Finland	-	260	-	-	-	260	260
France	150	1,286	85	19	-	1,540	1,775
Germany	1,028	55	16	-	-	1,099	1,147
Italy	-	8	17	-	50	75	73
Luxembourg	386	-	-	-	-	386	384
Portugal	-	16	26	50	30	122	121
Spain	14	206	244	42	64	570	655
United Kingdom	330	422	63	444	117	1,376	2,186
United States	22	-	-	-	-	22	23
Total	**3,570**	**3,308**	**519**	**682**	**261**	**8,340**	**9,678**

For a large part, the non-investment grade items (i.e. items with a rating below BBB-) consist of exposures in United Kingdom, Italy and Portugal. This concerns interest-bearing securities, including Covered bonds and RMBS transactions. The non-investment grade exposure in the United Kingdom concerns a limited number of private project financing schemes in the areas of infrastructure, education, energy and healthcare. The total fair value of foreign non-investment grade exposures at 31 December 2022 amounted to EUR 116 million (year-end 2021: EUR 288 million).

Exposures divided to internal-/external rating

The following table provide an overview of all exposures subdivided to internal and external rating.

Loans and advances solvency-free	31-12-2022 On-balance exposures (gross carrying amount)				31-12-2021 On-balance exposures (gross carrying amount)			
	Performing		Non-performing	Total	Performing		Non-performing	Total
	Stage 1	Stage 2	Stage 3		Stage 1	Stage 2	Stage 3	
- Low risk	79,969	1,099	1	81,069	80,700	23	-	80,723
- Medium risk	71	169	-	240	127	24	-	151
- High risk	8	123	116	247	-	42	113	155
- Non-performing	-	-	276	276	-	-	10	10
- Not rated	-	-	-	-				-
Total	**80,048**	**1,391**	**393**	**81,832**	**80,827**	**89**	**123**	**81,039**

Loans and advances subject to capital requirements	On-balance exposures (gross carrying amount)				On-balance exposures (gross carrying amount)			
	Performing		Non-performing	Total	Performing		Non-performing	Total
	Stage 1	Stage 2	Stage 3		Stage 1	Stage 2	Stage 3	
- Low risk	6,706	303	-	7,009	7,715	8	-	7,723
- Medium risk	17	175	-	192	265	207	-	472
- High risk	30	156	-	186	18	95	5	118
- Non-performing	-	-	326	326	-	-	197	197
- Not rated	76	3	-	79	184	5	-	189
Total	**6,829**	**637**	**326**	**7,792**	**8,182**	**315**	**202**	**8,699**

Interest-bearing securities	31-12-2022 On-balance exposures (gross carrying amount)				31-12-2021 On-balance exposures (gross carrying amount)			
	Performing		Non-performing	Total	Performing		Non-performing	Total
	Stage 1	Stage 2	Stage 3		Stage 1	Stage 2	Stage 3	
- Low risk	14,950	85	-	15,034	16,137	66	-	16,203
- Medium risk	-	-	-	-	-	-	-	-
- High risk	-	-	-	-	-	-	-	-
- Non-performing	-	-	-	-	-	-	-	-
- Not rated	-	-	-	-				-
Total	**14,950**	**85**	**-**	**15,034**	**16,137**	**66**	**-**	**16,203**

Loans and advances subject to capital requirements	On-balance exposures (gross carrying amount)				On-balance exposures (gross carrying amount)			
	Performing		Non-performing	Total	Performing		Non-performing	Total
	Stage 1	Stage 2	Stage 3		Stage 1	Stage 2	Stage 3	
- Low risk	6,706	303	-	7,009	7,715	8	-	7,723
- Medium risk	17	175	-	192	265	207	-	472
- High risk	30	156	-	186	18	95	5	118
- Non-performing	-	-	326	326	-	-	197	197
- Not rated	76	3	-	79	184	5	-	189
Total	**6,829**	**637**	**326**	**7,792**	**8,182**	**315**	**202**	**8,699**

Risk classes	Ratings based on	
	Internal ratings	External rating
- Low risk	1-11	AAA - BBB
- Medium risk	12-13	BB
- High risk	14-17	B or lower
- Non-performing	18-19	

Individual statutory market parties
For non-zero risk weighted parties, the exposures have to adhere to the Large Exposure Regulation under CRR. The bank has a significantly more conservative approach regarding the maximum size of individual exposures. This further limitation takes into account the degree to which sectors are anchored in the public sector. The party's individual rating is a further criterium for limit setting.

Individual financial counterparties
Transactions with financial counterparties primarily consist of interest rate and currency swaps undertaken to mitigate market risks. BNG Bank sets requirements for the minimum ratings of the financial counterparties with which it is willing to transact, taking into account the nature of the business conducted with that party. This limits the number of available parties. As a consequence, the number of transactions with approved parties is high. Daily exchange of collateral helps to mitigate the credit risk with respect to derivatives. A bankruptcy of a counterparty would result in market risks as the market is subject to fluctuations while the derivatives need to be rearranged with another party. The Financial Counterparties Committee limits and monitors positions with financial counterparties. BNG Bank clears parts of its derivatives centrally via clearing houses through clearing members. This results inevitably in a shift in concentration risk from individual financial counterparties to the clearing members and the clearing houses.

Due to Brexit, BNG Bank transferred all cleared derivatives from UK-based clearing members to EU-based clearing members. The London Clearing House (LCH) is temporarily being exempted from changes in regulations due to the Brexit. This means that cleared derivatives can remain with the LCH and that it is still possible to clear swaps at the LCH. However, both under the condition that the clearing members involved are EU entities. Nevertheless, BNG Bank onboarded Eurex as EU-based clearing house. This way continuity and flexibility with regard to central clearing is granted. Bilateral limits with UK-based individual financial counterparties have been withdrawn and replaced by limits with EU-based individual financial counterparties. The bilateral swaps with these UK-based individual financial counterparties are not yet fully transferred as this will trigger the clearing obligation. British clearing houses, despite Brexit, are allowed to serve EU customers until 30 June 2025.

Market risk

Definitions
Market risk is defined as an existing or future threat to the institution's capital and earnings as a result of market price fluctuations. It includes interest rate risk, foreign exchange risk, volatility risk, spread risk and index risk.

Interest rate risk
The bank's most important interest rate risk is the 'outright risk' to the interest rate swap curve, which is determined excluding the impact of spreads. This means that changes in spreads such as credit spreads, CVA/DVA and cross currency basis spreads do not influence the interest rate risk position and hedging. There is no material presence of early redemption options in BNG Bank's regular loan portfolio. Likewise, there is no material exposure in mortgages and the bank does not attract savings from private individuals. Consequently, client behaviour is not modelled in the bank's interest rate risk models.

The limits with respect to interest rate risk were not breached in 2022. In the bank's opinion, its interest rate risk management was adequate, compliant with the regulatory standards and within the limits as defined in the bank's risk appetite and risk policies. The table below outlines the Earnings at Risk as per end of 2022 in a scenario with an instantaneous parallel shock of plus 100 basis points for the 1-year and 2-year horizon. Usually, the most negative or least positive impact can be seen in the scenario with an instantaneous parallel shock of minus 100 basis points. The main reason for this switch is the end-of-year balance sheet management in combination with Euribor fixations in the banking book.

Earnings at risk (in millions of euros)	**2022**	**2021**
Horizon		
1 year	-22	9
2 years	-45	67

Foreign exchange risk
The bank obtains a large portion of its funding in foreign currencies and is therefore exposed to foreign exchange fluctuations. However, according to the bank's policy, foreign exchange risks are hedged in terms of notional amounts. Incidentally, foreign exchange positions may occur in certain cases where it is not cost-efficient to hedge the risk. The foreign exchange risk of these minor positions is monitored on a daily basis, subject to limits. During 2022 and 2021, these limits were not breached.

Volatility risk
In order to be able to manage its interest rate risk exposure in a flexible and cost efficient way, the bank allows itself a limited range for assuming volatility risk to support the interest rate position in the Treasury book. This range is limited and is monitored by the Risk Management department.

During 2022, no additional volatility risk was assumed to support the active interest rate position. With regard to its other activities, BNG Bank's policy specifies that the volatility risks for new financial instruments should be hedged one-to-one. The resulting volatility risk is relatively small and is subject to monitoring by Risk Management.

Spread risk
The economic value of BNG Bank's equity is determined over its total portfolio of assets and liabilities. Both assets and liabilities are valued on the basis of an interest rate curve made up of market-based swap rates plus credit risk spreads. In case of interest rate swaps, the CVA risk (counterparty risk) and DVA risk (the bank's own default risk) are included. Spread risk is not hedged by the bank. The impact of changes in these spreads is measured and monitored on a daily basis. For the fair value instruments affecting profit and loss or regulatory capital, a warning level on the credit spread stress testing outcomes has been set.

Index risk
The bank has inflation-linked instruments in its portfolio. The bank's policy specifies that exposure to fluctuations in inflation risk should be hedged in full and it executes this policy. The inflation delta is monitored on a daily basis.

Liquidity and funding risk

Liquidity risk is defined as the existing or future threat to the institution's capital and earnings due to the possibility that it will not be able at any moment to fulfil its payment obligations, without incurring any unacceptable costs or losses. The public sector consists largely of institutions with a long-term investment horizon. This means that assets frequently have long maturities, which can be in excess of 25 years. As BNG Bank is not able to attract funding in large volumes for these maturities, a limited funding mismatch is accepted. In order to refinance at acceptable cost, also in times of stress, BNG holds sufficient liquidity buffers.

Liquidity risk
BNG Bank wants to provide a stable presence in the capital markets, because the bank wants to continue to meet the demand for credit even in difficult times. It also pursues a prudent liquidity policy to ensure that it can meet its obligations at all times. In this context, ongoing access to the money and capital markets is essential, along with the ongoing maintenance of attractive, varied and sufficiently large issuance programmes for investors. In addition, buffers are required in order to have access to liquidity in times of stress. One such buffer is formed by assets held explicitly for liquidity purposes, known as the liquidity portfolio. The management of the size and composition of this portfolio is one of the liquidity measures to comply with the requirement under the CRR to have an LCR of at least 100%. BNG Bank also holds an ample quantity of collateral with the ECB, which enables it to obtain short-term funding immediately. Since most of the bank's assets could serve as collateral at the ECB, this collateral may be further extended in the event of prolonged stress. The size of both buffers is tested in the liquidity stress tests, which are monitored on a monthly basis. Furthermore, the funding plan and corresponding planned liquidity gap is tested in an adverse stress scenario for the LCR and NSFR ratios. The bank considers its liquidity management to have been adequate in 2022 and that the strength of the bank's liquidity position is both amply sufficient and in compliance with the regulatory standards and limits set by the ALCO. As at end of 2022, the LCR ratio amounted to 189% (2021: 174%) and the NSFR ratio amounted to 125% (2021: 126%).

Funding risk
BNG Bank distinguishes between short-term and long-term funding. The majority of funding is from international capital markets. The bank maintains a number of programmes that enables it to have access to funding at all times at competitive levels. The bank pursues proactive investor relations which supports these efforts. The bank has a funding plan, in which the desired funding mix is described in more detail. Part of the funding plan is the annual issuance in benchmark size to maintain a 'BNG curve' in the market. These large-scale issues ensure that the bank has a high profile among institutional investors, allowing it to retain access to investors even in times of market stress. The actual realisation of this funding mix is monitored and evaluated by the ALCO.

Maturity analysis of financial assets and liabilities on the basis of the remaining contractual period
The amounts featured in the table below represent the non-discounted future cash flows of financial assets and liabilities. Because these amounts are non-discounted, these are different to the amounts in the balance sheet. For the maturity analysis of issued guarantees and irrevocable commitments, see the 'Off-balance sheet commitments' section.

31-12-2022

	Up to 3 months	3 - 12 months	1 - 5 years	over 5 years	Total
Cash and balances held with central banks	6,896	-	-	-	6,896
Amounts due from banks	4	27	155	239	425
Cash collateral posted	4,144	-	-	-	4,144
Financial assets at fair value through the income statement	96	21	304	1,195	1,616
Financial assets at fair value through other comprehensive income	-647	235	3,299	6,581	9,468
Interest-bearing securities at amortised cost	-833	1,478	4,521	5,246	10,412
Loans and advances	2,799	7,346	29,179	70,524	109,848
Current tax assets	-	-	-	-	-
Other assets	109	-	-	-	109
Total financial assets (excluding derivatives)	**12,568**	**9,107**	**37,458**	**83,785**	**142,918**
Amounts due to banks	-100	-70	-3,742	-373	-4,285
Cash collateral received	-1,173	-	-	-	-1,173
Financial liabilities at fair value through the income statement	0	0	-23	-200	-223
Debt securities	286	-15,517	-43,556	-54,174	-112,961
Funds entrusted	-10,695	-184	-4,751	-624	-16,254
Subordinated debt	-12	-9	-22	-	-43
Other liabilities	-87	-8	-41	-115	-251
Current tax liabilities	-	-11	-	-	-11
Total financial liabilities (excluding derivatives)	**-11,781**	**-15,799**	**-52,135**	**-55,486**	**-135,201**
Gross balanced derivatives					
Assets amounts receivable	2,152	10,815	16,538	22,036	51,541
Assets amounts payable	-1,788	-10,659	-16,025	-18,813	-47,285
Derivatives stated as assets	**364**	**156**	**513**	**3,223**	**4,256**
Liabilities amounts receivable	703	3,708	15,329	14,284	34,024
Liabilities amounts payable	-916	-4,774	-16,906	-18,910	-41,506
Derivatives stated as liabilities	**-213**	**-1,066**	**-1,577**	**-4,626**	**-7,482**
Grand total	**938**	**-7,602**	**-15,741**	**26,896**	**4,491**

31-12-2021

	Up to 3 months	3 - 12 months	1 - 5 years	over 5 years	Total
Cash and balances held with central banks	9,264	-	-	-	9,264
Amounts due from banks	23	19	59	74	175
Cash collateral posted	12,993	-	-	-	12,993
Financial assets at fair value through the income statement	37	41	341	1,238	1,657
Financial assets at fair value through other comprehensive income	301	138	2,008	6,135	8,582
Interest-bearing securities at amortised cost	40	603	4,689	3,257	8,589
Loans and advances	2,588	8,251	30,624	66,021	107,484
Current tax assets	-	-	-	-	0
Other assets	20	-	-	-	20
Total financial assets (excluding derivatives)	**25,266**	**9,052**	**37,721**	**76,725**	**148,764**
Amounts due to banks	-17	-13,384	-8	-396	-13,805
Cash collateral received	-984	-	-	-	-984
Financial liabilities at fair value through the income statement	-40	-65	-22	-200	-327
Debt securities	1,404	-14,151	-46,652	-50,237	-109,636
Funds entrusted	-3,017	-928	-18,952	-1,205	-24,102
Subordinated debt	-1	-	-32	-11	-44
Other liabilities	-59	-8	-38	-107	-212
Current tax liabilities	-	-29	-	-	-29
Total financial liabilities (excluding derivatives)	**-2,714**	**-28,565**	**-65,704**	**-52,156**	**-149,139**
Gross balanced derivatives					0
Assets amounts receivable	4,338	4,236	17,829	16,424	42,827
Assets amounts payable	-3,869	-3,420	-15,243	-11,013	-33,546
Derivatives stated as assets	**469**	**816**	**2,586**	**5,410**	**9,281**
Liabilities amounts receivable	2,358	4,019	6,756	10,344	23,476
Liabilities amounts payable	-2,841	-5,323	-10,479	-20,625	-39,268
Derivatives stated as liabilities	**-483**	**-1,304**	**-3,722**	**-10,282**	**-15,791**
Grand total	**22,538**	**-20,001**	**-29,120**	**19,698**	**-6,885**

Encumbered and unencumbered financial assets

Encumbered financial assets are not freely disposable to meet liquidity needs in the short term. The following table shows the balance-sheet values of the assets, broken down into encumbered (not freely available) and unencumbered (freely available) assets.

31-12-2022

	Encumbered	Unencumbered	Total
Cash and balances held with central banks	-	6,821	6,821
Amounts due from banks	-	346	346
Cash collateral posted	4,144	-	4,144
Financial assets at fair value through the income statement	-	901	901
Derivatives	-	3,737	3,737
Financial assets at fair value through other comprehensive income	3,277	4,121	7,398
Interest-bearing at amortised cost	392	7,244	7,636
Loans and advances	8,552	81,072	89,624
Value adjustments on loans in portfolio hedge accounting	-	-8,679	-8,679
Non-financial assets	-	146	146
Total	**16,365**	**95,709**	**112,074**
Average (total) in 2022	**33,681**	**107,690**	**141,371**

31-12-2021

	Encumbered	Unencumbered	Total
Cash and balances held with central banks	-	9,264	9,264
Amounts due from banks	-	163	163
Cash collateral posted	12,993	-	12,993
Financial assets at fair value through the income statement	-	1,383	1,383
Derivatives	-	5,685	5,685
Financial assets at fair value through other comprehensive income	4,594	3,978	8,572
Interest-bearing at amortised cost	1,443	6,189	7,632
Loans and advances	26,817	62,921	89,738
Value adjustments on loans in portfolio hedge accounting	-	13,555	13,555
Non-financial assets	-	64	64
Assets-held-for-sale	-	8	8
Total	**45,847**	**103,210**	**149,057**
Average (total) in 2021	**47,272**	**116,051**	**163,323**

Capital and solvency

Definitions
Regulatory capital relates to the minimum capital requirements under the Capital Requirements Regulations and Capital Requirements Directive IV. For regulatory purposes the capital requirement is based on the Pillar 1 requirement for the aggregated risk-weighted assets (RWA) for the three major risk types (credit, operational and market risk). This requirement is supplemented by the so-called combined buffer requirement (CBR) and a Pillar 2 requirement (P2R). The CBR consists of a capital conservation buffer, a systemic risk buffer, a countercyclical buffer and a systemic relevance buffer. The P2R is an institutional specific requirement stemming from the Supervisor Review and Evaluation Process (SREP) conducted by the supervisor. The P2R covers risks underestimated or not covered by Pillar 1. BNG Bank employs the 'Standardised Approach' to calculate the RWAs.

In addition to the regulatory required capital BNG Bank calculates economic capital (EC) for Pillar 2 purposes. Economic capital covers all risks in our risk taxonomy, for which capital is deemed to be the mitigating instrument to cover unexpected losses. It is used for internal risk measurement and management. It is the amount of capital the bank deems adequate to pursue its strategy and which achieve a sufficient level of protection against large unexpected losses that could result from extreme market conditions or events.

Governance
The Executive Board is responsible for determining the policy with respect to capital. This is laid down in a capital adequacy statement and management plan. The Executive Board is also responsible for the allocation of capital. Decision making is prepared by the Capital Committee. This committee comprises representatives of all relevant stakeholders: the Executive Board, Public Finance, Treasury, Capital Management, Risk Management and Finance and Control.

Developments
As at December 2022, the fully CRR/CRD IV Common Equity Tier 1 (CET1), Tier 1 and total capital ratios were respectively 35%, 37% and 37%. All capital ratios were well above regulatory minimum requirements.

BNG Bank is required in 2023 to meet a minimum CET1 ratio of 10.25%, composed of a SREP requirement of 9.75% (4.50% Pillar 1 requirement, 1.50% Pillar 1 Additional requirement, 2% Pillar 1 Tier 2 requirement and 1.75% Pillar 2 requirement), an Other Systemically Important Institution buffer (OSII) of 1.00% and a capital conservation buffer (CCB) of 2.50%. BNG Bank amply meets the requirements. The Overall Capital Requirement level for BNG Bank is 13.25%.

In 2011, BNG Bank lowered its dividend distribution policy to 25% in order to meet the additional capital requirements introduced by Basel III. Since 2019 BNG Bank the dividend distribution policy is 50%. BNG Bank did not change this policy in 2022.

Capital management
The primary objective of the capital management strategy is to ensure that internal as well as external capital adequacy requirements are met at all times and sufficient capital is available to support the bank's strategy.

The capital management strategy builds on the bank's risk appetite and its business plans. Besides, expectations and requirements of external stakeholders (e.g. regulators, investors, rating agencies, shareholders), the bank's capitalization relative to other financial institutions, market developments and the feasibility of capital management actions are taken into account. The capitalization policy is incorporated in the so-called Internal Capital Adequacy Assessment Process (ICAAP).

Key to this policy is the capital management plan, which determines the level and composition of the capital based on the risks to be insured by that capital. In the ICAAP, regulatory as well as economic capital is taken into account. As part of the ICAAP a number of stress scenarios is executed in order to determine the adequacy and robustness of the capitalization. Next to the level of capitalization, the ICAAP determines the allocation per relevant type of risk.

On an ongoing basis, capital adequacy is measured and monitored against target capital ratios. These target levels are derived from the bank's risk appetite and strategy and quantified by the ICAAP. The allocation is derived from the ICAAP. This process ensures that the bank is operating in line with its risk appetite.

Capital structure

BNG Bank's capitalization is well above the capital requirements laid down in the Capital Requirement Regulations and Capital Requirements Directive IV (CRD IV). The capital structure consists mainly of common equity. The other part consists of Additional Tier 1 instruments.

The two tables on the next pages show the structure of the regulatory capital. The tables present the capital.

31-12-2022

	Capital	IFRS Equity
Paid-up capital	139	139
Share premium	6	6
Retained earnings from previous years	3,824	3,824
Unappropriated profit		300
Accumulated other comprehensive income		
- Cash flow hedge reserve	14	14
- Cost of hedging	17	17
- Own credit adjustment	2	2
- Revaluation reserve	4	4
Common equity Tier 1 (CET1) capital before regulatory adjustments	**4,006**	**4,306**
Adjustments to CET1 capital as a result of prudential filters:		
- Distributable dividend (previous year)		
- Cash flow hedge reserve	-14	
- Cumulative gains and losses arising from the bank's own credit risk related to derivatives liabilities	-2	
- Own credit risk for Financial liabilities at fair value through the income statement	-1	
- Value adjustments due to the prudential valuation requirements	-9	
- Intangible assets		
- Expected credit loss allowance of Financial assets at fair value through OCI		
- Insufficient coverage for non-performing exposures	-15	
Deduction of capital for securitisation positions eligible as alternatives for a risk weight of 1250%		
CET1 capital	**3,965**	
Additional Tier 1 capital	309	309
Tier 1 capital	**4,274**	
Total equity	**4,274**	**4,615**

31-12-2021

	Capital	IFRS Equity
Paid-up capital	139	139
Share premium	6	6
Retained earnings from previous years	3,736	3,736
Unappropriated profit		236
Accumulated other comprehensive income		
- Cash flow hedge reserve	1	1

Continuation of previous page

31-12-2021		
- Cost of hedging	125	125
- Own credit adjustment	3	3
- Revaluation reserve	83	83
Common equity Tier 1 (CET1) capital before regulatory adjustments	**4,093**	**4,329**
Adjustments to CET1 capital as a result of prudential filters:		
- Distributable dividend (previous year)		
- Cash flow hedge reserve	-1	
- Cumulative gains and losses arising from the bank's own credit risk related to derivatives liabilities	-3	
- Own credit risk for Financial liabilities at fair value through the income statement	-	
- Value adjustments due to the prudential valuation requirements	-9	
- Intangible assets	-	
- Expected credit loss allowance of Financial assets at fair value through OCI	-	
- Insufficient coverage for non-performing exposures	-	
CET1 capital	**4,080**	
Additional Tier 1 capital	733	733
Tier 1 capital	**4,813**	
Total equity	**4,813**	**5,062**

Prudential filters

BNG Bank applies the following prudential filters to the CET1 capital:

- The cash flow hedge reserve is eliminated.
- The benefits arising from own credit risk (DVA) in derivatives transactions are eliminated.
- The benefits arising from 'own credit risk' in relation to obligations classified as Financial liabilities at fair value through the income statement are eliminated.
- Due to the regulations on prudent valuation, an adjustment is calculated in relation to the balance sheet valuation of assets and liabilities that are carried at fair value
- The investments in the development of software is activated and amortised over three years. After a correction for 'deferred tax', the total of these intangible assets is deducted.
- The expected credit loss allowance of Financial assets at fair value through OCI.

Deductible items

In 2018, BNG Bank opted to reduce the CET1 capital by securitisation positions that are eligible for 1,250% solvency weighting. In 2022, there were no securitisation positions with a solvency rating of 1,250%.

Adjustments in CRD IV/CRR transition phase

The portion of the revaluation reserve related to Financial assets at fair value through OCI are fully included in the CET1 capital in 2022 and 2021.

Additional Tier 1 capital

For a clarification, please refer to note 22 of the Notes to items of the consolidated financial statements.

Other notes

Related parties

Transactions with related parties

Transactions with related parties were made on terms equivalent to those that prevail in arm's length.

	31-12-2022	31-12-2021
State of the Netherlands		
Direct exposure in the form of purchased government securities	860	1,061
Lending with direct guarantees from the State	632	678
Lending with indirect guarantees from the State (WSW/WFZ)	48,184	46,818
Subsidiaries		
Lending to subsidiaries	3	76
Credit balances held by subsidiaries	12	16
Off-balance sheet commitments to subsidiaries	-	-

Continuation of previous page	31-12-2022	31-12-2021
Associates, joint ventures and joint operations		
Lending to associates, joint ventures and joint operations	30	49
Credit balances held by associates, joint ventures and joint operations	11	10
Off-balance sheet commitments to associates, joint ventures and joint operations	12	30

Entities with control, joint control or significant influence over BNG Bank
The State of the Netherlands owns 50% of the shares and voting rights of BNG Bank. As the other half of the shares is divided between a large number of shareholders, the State of the Netherlands has de facto control over BNG Bank. The holders of Additional Tier 1 capital do not fall within the definition of related parties, as they have no (joint) control or significant influence over BNG Bank. BNG Bank has direct exposure to the State of the Netherlands in the form of purchased, publicly tradable government securities. The bank also has a large portfolio of loans and advances with direct guarantees from the State, or with guarantees from the WSW (social housing) and WFZ (Healthcare) guarantee funds, for which the State of the Netherlands acts as a backstop.

Subsidiaries
This relates to the BNG Bank subsidiaries Hypotheekfonds voor Overheidspersoneel and BNG Gebiedsontwikkeling included in the consolidation. BNG Bank has intercompany transactions with these parties, which consist of the issue of private loans and advances, credit balances held in current accounts and off-balance sheet commitments. All of these intercompany transactions are eliminated from the figures in and notes to the consolidated financial statements.

In December 2022, Hypotheekfonds voor Overheidspersoneel sold the total mortgage portfolio to a third party resulting in a loss of EUR 6.7 million.

Associates, joint ventures and joint operations
This relates to associates, as well as joint ventures and joint operations entered into by BNG Gebiedsontwikkeling. A list of these parties is provided in a separate note in these financial statements. Transactions with these contacts consist of loans and advances, credit balances held in current accounts and off-balance sheet commitments (the undrawn portions of credit facilities).

Executive Committee members of the bank
BNG Bank has not granted any loans, advance payments or guarantees to individual members of the Executive Committee or Supervisory Board of BNG Bank.

BNG Bank’s principal decision-making bodies
The most important decisions and acts of management are taken and carried out by the Executive Board. The policy pursued is assessed and supervised by the Supervisory Board.

Remuneration
Since 2020, BNG Bank’s remuneration policy consists solely of fixed remuneration components. The total fixed remuneration, granted to ‘Identified Staff’, i.e. individuals with direct influence on the bank’s policy and risks, was EUR 6.8 million in 2022 (2021: EUR 6.0 million). The Identified Staff comprises 46 individuals in 2022 (2021: 38).

The remuneration of the Identified Staff can be divided into three groups: Executive Committee, senior management directly reporting to Executive Board members and other Identified Staff.

(amounts in thousands of euros)	2022		2021	
	Fixed remuneration	One-off payment	Fixed remuneration	One-off payment
Executive Committee	1,454	-	1,359	419
Senior management	3,339	625	2,790	417
Other identified staff	2,000	-	1,877	-
Total	**6,793**	**625**	**6,026**	**836**

In addition, the bank pays a monthly employer's pension contribution. Since 1 January 2015, pension accrual over salary in excess of EUR 100,000 is no longer possible under the current ABP pension plan. As a consequence of this cap for tax purposes and the lower pension accrual, BNG Bank decided to compensate the employees concerned who were in the bank's employment on 1 January 2015 for lower pension accrual. The compensation is fixed as per 1 january 2015 and will not change over the years. In 2022 the one-off payments solely consisted of severence payments to members of the identified staff.

Remuneration of the Executive Committee

The remuneration of the Executive Committee is based on the principles formulated in the Remuneration Policy, the highlights of which are included in the Report of the Supervisory Board. The complete Remuneration Policy is published on bngbank.nl. Since 2002, the fixed remuneration component has only been adjusted by the percentages set out in the general Collective Labour Agreement for the banking industry. As per 2021 no deferred variable remuneration occurs. Management and staff do not own BNG Bank shares or options and receive no additional remuneration through subsidiaries of the bank.

Remuneration awarded to Executive Committee members

(amounts in thousands of euros)	2022	2021	2022	2021	2022	2021	2022	2021
	Fixed remuneration		One-off payment		Pension contributions		Compensation for pension accrual over salary >100K	
G.J. Salden **CEO**	332	318	-	-	30	29	-	-
O.J. Labe **CFO**	353	344	-	-	30	30	29	29
J.C. Reichardt **CRO** (until 14-4-2021)	-	112	-	419	-	9	-	10
C.A.M. van Atteveldt **CRO** (from 15-02-2021)	303	258	-	-	28	24	-	-
T.M.P. Eterman **CCO** (from 01-06-2021)	233	138	-	-	26	15	-	-
J. van Goudswaard **COO** (from 01-03-2021)	233	189	-	-	26	22	-	-
Total	**1,454**	**1,359**	**-**	**419**	**140**	**129**	**29**	**39**

The Chief Executive Officer (CEO), Chief Financial Officer (CFO) and Chief Risk Officer (CRO) are also members of the Executive Board. The Chief Commercial Officer (CCO) and Chief Operational Officer (COO) are not.

The remuneration awarded in the reporting period is the remuneration which has been recognised as an expense in full in the income statement. The income statement for 2022 includes EUR 1.6 million (2021: EUR 2 million) in remuneration, one-off payments and pension costs. The total short-term remuneration comprises the fixed remuneration and the compensation for pension accrual over salary in excess of EUR 100,000.

The Chair of the Executive Committee received an allowance for business expenses of EUR 5,100 in 2022 (2021: EUR 5,100). The maximum allowance for the other statutory members of the Executive Committee is EUR 3,900 in 2022 (2021: EUR 3,900).

Remuneration of the Supervisory Board

Effective from 1 January 2017 the remuneration of the Supervisory Board can increase by the same percentage as the increases under the Collective Labour Agreement for the Banking Industry. The remuneration policy for the Supervisory Board is directed towards market compatible remuneration that is irrespective of the company's result. The total remuneration of the Supervisory Board decreased with 2% in 2022 (2021: increase of 11%). The decrease is due to a temporary increase of the number of Supervisory Board members in 2021. The remuneration of the supervisory board members reflects the nature of the company, the envisaged quality of the Supervisory Board members, the required availability for the task at hand, as well as the time required and aspects of responsibility and liability. Supervisory Board members do not own BNG Bank shares or options and receive no additional remuneration through subsidiaries of the bank.

Members of the Supervisory Board who were appointed or resigned during the financial year received pro rata remuneration. Members of the Audit Committee & Risk Committee, the Selection and Appointment Committee, the Remuneration Committee and the Market Strategy Committee received an additional allowance for these duties. Furthermore, the Chair of the Supervisory Board received an allowance in addition to the basic remuneration. These allowances are set out in the ‘Remuneration of Supervisory Board members’ statement. The Supervisory Board members received an expense allowance of EUR 1,128 (2021: EUR 1,100).

Members who served on one or more committees received an additional expense allowance per committee of EUR 513 (Audit Committee and Risk Committee) and EUR 308 (Remuneration Committee and Human Resource Committee), respectively.

The amounts presented below are in thousands of euros. These figures include additional payments and expense allowances and exclude VAT.

(amounts in thousands of euros)	2022	2021
H. Arendse, chair	48	48
J.C.M. van Rutte, Vice-chair	35	34
Ms K.T. Bergstein (from 22 April 2021)	39	26
C.J. Beuving (until 22 April 2022)	13	38
J.B.S. Conijn	39	34
Ms M.E.R. van Elst	35	34
L.K. Geluk (from 22 April 2021)	36	23
Ms J. Kriens (until 22 april 2021)	-	10
Ms M. Sint (until 22 april 2021)	-	16
Ms. F. de Vries (from 22 April 2021)	38	26
Total	**283**	**289**

Off-balance sheet positions

Contingent assets

Due to an internal procedural error, DNB did not grant BNG Bank the TLTRO-III interest rate rebate related to the period from 24 June 2020 up to and including 23 June 2021 for an amount of EUR 57 million before taxes, despite rectifying measures. Having received legal advice BNG Bank is in litigation against this DNB decision.

Contingent liabilities

This includes all commitments arising from transactions for which the bank has issued guarantees on behalf of a third party. To a limited extent, these guarantees are covered by a counter guarantee from public authorities. These are mainly Letters of Credit with a remaining contractual maturity of more than five years. BNG Bank records liabilities at the underlying principal amount that would need to be paid in the event of the borrower defaulting.

	31-12-2022	31-12-2021
Contingent liabilities	489	501

Revocable facilities

This includes all commitments attributable to revocable current-account facilities.

	31-12-2022	31-12-2021
Revocable facilities	6,248	5,871

Irrevocable facilities

This includes all irrevocable commitments which can lead to the granting of loans and advances, and is divided as follows:

	31-12-2022	31-12-2021
Outline agreements concerning the undrawn part of credit facilities	2,031	1,990
Contracted loans and advances to be distributed in the future	2,396	2,497
Total	**4,427**	**4,487**

According to contract, these contracted loans and advances will be distributed as follows:

	31-12-2022	31-12-2021
Up to 3 months	561	847
3 to 12 months	807	671
1 to 5 years	958	939
Over 5 years	70	40
Total	**2,396**	**2,497**

Nearly all these loans and advances have a contractual term to maturity of more than five years. The average interest rate is 1.87% (2021: 0.62%). BNG Bank states these obligations at the underlying, not yet recorded, principal amount.

Encumbered financial assets and liabilities

A part of the financial assets and liabilities is encumbered because these assets serve to secure and act as collateral for money market transactions and lending transactions. The following table shows the nominal sheet values and the collateral values.

	31-12-2022		31-12-2021	
	Nominal value	Collateral value	Nominal value	Collateral value
Type of collateral				
Collateral pledged to the central bank[1]	50,399	35,403	47,921	35,209
Securities provided in derivatives transactions	2,994	2,942	2,368	3,930
Cash deposited in relation to derivatives transactions	3,263	3,270	14,321	14,314
Given as collateral	**56,656**	**41,615**	**64,610**	**53,453**
Securities received in derivatives transactions	-	-	-	-
Cash received in relation to derivatives transactions	1,172	1,172	1,054	1,054
Received as collateral	**1,172**	**1,172**	**1,054**	**1,054**
Total	**55,484**	**40,443**	**63,556**	**52,399**

1 Of the total value of loans provided as collateral to the central bank, only a part has actually been used as collateral. At year-end 2022, the value of the collateral in use under the guarantee for clients' collection files amounted to EUR 5.856 million (year-end 2021: EUR 20.825 million).

Liability of Board members

Members of the Executive and Supervisory Boards of the company are indemnified by the company against any personal liability, except in the case of deliberate intent or gross negligence. In addition, the company has taken out a directors’ liability insurance policy for members of the Executive and Supervisory Boards and employees acting on the company’s behalf as members of the Executive Board or Supervisory Board of one or more of the company’s associates.

Events after the balance sheet date

There are no events after the balance sheet date to report that require adjustments to the figures or disclosure in the financial statements.

Proposed profit appropriation

Amounts in millions of euros

	2022	2021
Net profit	**300**	**236**
Compensation on Additional Tier 1 capital	-21	-25
Profit attributable to shareholders	**279**	**211**
Appropriation of profit attributable to the bank's shareholders is as follows:		
Appropriation to the 'Retained earnings' pursuant to Article 23(3) of the BNG Bank Articles of Association	28	21
Dividend pursuant to Article 23(3) of the BNG Bank Articles of Association	7	7
	35	**28**
Appropriation to the 'Retained earnings' pursuant to Article 23(4) of the BNG Bank Articles of Association	112	84
Dividend pursuant to Article 23(4) of the BNG Bank Articles of Association	132	99
	244	**183**

The profit appropriation is based on the total net profit for 2022. The proposed dividends have no consequences for tax purposes. The compensation takes into account the EUR 21 million already paid on the Additional Tier 1 capital in May 2022 charged to the Retained Earnings.

Associates and joint ventures

	31-12-2022	31-12-2021
Associates Dataland BV, Rotterdam A municipal non-profit initiative that aims to make information on registered properties – as held by municipalities and/or other public entities – available to a wide audience.	30%	30%
Data B Mailservice Holding BV, Leek Provision of services to, among others, public sector organisations, ranging from printing and mail services to payment-related, direct marketing and messaging services.	-	45%

	31-12-2022	31-12-2021
Joint ventures entered into by BNG Gebiedsontwikkeling BV Joint development and allocation of land with public authorities, at own expense and risk. The parties involved in the joint ventures have an equal voting right, which means that no single party has control.		
CV Ontwikkelingsmaatschappij Zenkeldamshoek, Goor	80%	80%
Zenkeldamshoek Beheer BV, Goor	50%	50%
Development and allocation of land for industrial estates		
De Bulders Woningbouw CV	0%	50%
De Bulders Woningbouw BV	0%	50%
Development and allocation of land for industrial estates		
Ontwikkelingsmaatschappij Westergo BV, Harlingen	50%	50%
Development and allocation of land for industrial estates		
Ontwikkelingsmaatschappij 'Het Nieuwe Westland' CV, The Hague	50%	50%
Ontwikkelingsmaatschappij 'Het Nieuwe Westland' BV, The Hague	50%	50%
Development and allocation of land for residential construction		
Ontwikkelingsmaatschappij ROM-S CV (Schelluinen), The Hague	50%	50%
ROM-S Beheer BV (Schelluinen) te The Hague	50%	50%
Development and allocation of land for industrial estates and car parking facilities		
Project Suijssenwaerde CV, The Hague	80%	80%
Project Suijssenwaerde Beheer BV, The Hague	50%	50%
Development and allocation of land for residential construction and recreational housing		
CV Bedrijvenpark Oostflakkee, The Hague	80%	80%
Bedrijvenpark Oostflakkee Beheer BV, The Hague	50%	50%
Development and allocation of land for industrial estates		
SGN Bestaand Rijsenhout CV, The Hague	50%	50%
SGN Nieuw Rijsenhout CV, The Hague	50%	50%

Continuation of previous page	31-12-2022	31-12-2021
SGN Advies CV, The Hague	43%	43%
SGN Bestaand Rijsenhout Beheer BV, The Hague	50%	50%
SGN Nieuw Rijsenhout Beheer BV, The Hague	50%	50%
SGN Advies BV Beheer, The Hague	50%	50%
Stallingsbedrijf Glastuinbouw Nederland Groep BV, The Hague	50%	50%
Development and allocation of land for glasshouse horticulture locations		
Ontwikkelmaatschappij Meerburg CV, Zoeterwoude	50%	50%
Ontwikkelmaatschappij Meerburg Beheer BV, Zoeterwoude	50%	50%
Development and allocation of land for residential construction, sports fields and office buildings		
Ontwikkelcombinatie De Bongerd CV, Amsterdam	14%	14%
Ontwikkelcombinatie De Bongerd BV, Amsterdam	14%	14%
Real estate development for residential construction and parking facilities		
Regionaal bedrijvenpark Laarakker CV, Cuijk	0%	50%
Regionaal bedrijvenpark Laarakker BV, Cuijk	0%	50%
Development and allocation of land for industrial estates		
Wonen Werken Waterman BV, Rijsbergen	50%	50%
Wonen Werken Waterman CV, Rijsbergen	50%	50%
Development and allocation of land for residential construction and industrial estates		
De Jonge Voorn BV, Guisveld (Zaandam)	80%	80%
De Jonge Voorn CV, Guisveld (Zaandam)	80%	80%
Development and allocation of land for residential construction		

Summarised financial information

	2022	2021
Associates		
Balance sheet value of investment (note 10)	0	3
Value of the share in:		
Total assets	0	5
Total liabilities	0	1
Income	0	5
Result from continued operations	0	1
Equity	0	3
Comprehensive income	0	2

	2022	2021
Joint ventures entered into by BNG Gebiedsontwikkeling BV		
Balance sheet value of investment (note 10)	24	25
Value of the share in:		
Total assets	63	66
Total liabilities	33	36
Income	40	13
Result from continued operations	10	6
Equity	31	30
Comprehensive income	31	30

BNG Gebiedsontwikkeling (a wholly-owned BNG Bank subsidiary) invests in and develops land on its own account in collaboration with local authorities. This collaboration takes the form of a joint venture involving the use of limited partnerships. The risk incurred by BNG Bank is the total amount of capital invested in the participating interest, increased by further future payments obligations and retained profits. At year-end 2022, this risk amounted to EUR 24 million of joint ventures (2021: joint ventures of EUR 25 million, joint ventures held for sale of 8 million), none of this is related to future payment obligations (2021: EUR 0 million).

Involvement in non-consolidated structured entities

	2022	2021
Securitisations		
Scope	22,065	31,983
Involvement in entity (balance sheet value/size in %)	25%	22%
Balance sheet value of interest/investment:		
Interest-bearing securities at amortised cost (from note 7)	5,409	4,833
Total balance sheet value	**5,409**	**4,833**
Maximum exposure	5,409	4,833
Ratio of balance sheet value vs maximum exposures	1	1
Amount in revenue per type:		
Fund return	N/A	N/A
Management fee	N/A	N/A
Interest revenue	24	-3
Results from sales	0	0
Total revenue	**24**	**-3**

Involvement in non-consolidated securitisation and covered bond programmes via structured entities

BNG Bank has investments in securitised interest-bearing securities covered by additional security through non-consolidated structured entities. Mortgage portfolios serve as collateral for the securitisations and covered bonds. The funds funded by investors, including BNG Bank, serve to finance the underlying mortgages. The structured entities are independent entities that do not carry out any activities other than managing investments and the associated money flows. Apart from its interest as an investor in interest-bearing securities, BNG Bank has not financed these structured entities or supported them in any other way, nor does it have any intention to do so in the near future. The bank has not transferred any assets to these structured entities.

The Hague, 17 March 2023

Executive Board
Gita Salden (CEO), statutory director
Olivier Labe (CFO), statutory director
Cindy van Atteveldt - Machielsen (CRO), statutory director

Supervisory Board
Huub Arendse, Chair
Jan van Rutte, Vice-chair
Karin Bergstein
Johan Conijn
Marlies van Elst
Leonard Geluk
Femke de Vries

8.2 Company financial statements

Company balance sheet before profit appropriation

Amounts in millions of euros	NOTE	31-12-2022	31-12-2021
Assets			
Cash and balances held with central banks	1	6,821	9,264
Amounts due from banks	2	346	163
Cash collateral posted	3	4,144	12,993
Financial assets at fair value through the income statement	4	901	1,383
Derivatives	5	3,737	5,685
Financial assets at fair value through other comprehensive income	6	7,398	8,572
Interest-bearing securities at amortised cost	7	7,636	7,632
Loans and advances	8	89,626	89,710
Value adjustments on loans in portfolio hedge accounting	9	-8,679	13,555
Participating interests	10	34	58
Property & equipment	11	13	15
Other assets	12	109	20
Total assets		**112,086**	**149,050**
Liabilities			
Amounts due to banks	13	4,012	19,525
Cash collateral received	14	1,173	984
Financial liabilities at fair value through the income statement	15	185	310
Derivatives	16	6,129	16,935
Debt securities	18	90,774	101,355
Funds entrusted	19	4,797	4,521
Subordinated debts	20	38	36
Current tax liabilities	17	11	30
Deferred tax liabilities	17	14	77
Other liabilities	21	338	215
Total liabilities		**107,471**	**143,988**
Equity			
Share capital		139	139
Share premium reserve		6	6
Legal reserves			
- Revaluation reserve		4	83
- Cash flow hedge reserve		14	1
- Reserve for fair value increases		150	173
Retained earnings		3,674	3,563
Own credit adjustment		2	3
Cost of hedging reserve		17	125
Net profit		300	236
Equity attributable to shareholders	22	**4,306**	**4,329**
Additional Tier 1 capital	22	309	733
Total equity	22	**4,615**	**5,062**
Total liabilities and equity		**112,086**	**149,050**

Company income statement

Amounts in millions of euros	NOTE		2022		2021
- Interest revenue calculated using the effective interest method		3,767		4,195	
- Other interest revenue		403		216	
Total interest revenue		4,170		4,411	
- Interest expenses calculated using the effective interest method		3,607		3,919	
- Other interest expenses		74		85	
Total interest expenses		3,681		4,004	
Interest result	23		489		407
- Commission income		23		20	
- Commission expenses		4		3	
Commission result	24		19		17
Result on financial transactions	25		113		100
Results from participating interests	26		3		5
Other results			0		0
Total income			**624**		**529**
Staff costs	27		73		56
Other administrative expenses	28		38		47
Depreciation	29		2		3
Other operating expenses			0		0
Total operating expenses			**113**		**106**
Net impairment losses on financial assets	30		51		20
Net impairment losses on participating interests			0		-
Contribution to resolution fund	31		20		2
Bank Levy	31		32		53
Total other expenses			**103**		**75**
Profit before tax			**408**		**348**
Income tax expense			108		112
Net profit			**300**		**236**
- of which attributable to the holders of Additional Tier 1 capital			21		25
- of which attributable to shareholders			279		211

The references refer to the notes to the company financial statements. The notes to the company financial statements are an integral part of the company financial statements.

Company statement of comprehensive income

Amounts in millions of euros. All figures in the statement are after taxation.		2022		2021
Net profit		**300**		**236**
Recyclable results recognised directly in equity				
Changes in cash flow hedge reserve:				
- Unrealised value changes	13		-10	
- Realised value changes transferred to the income statement	0		-	
		13		(10)
Changes in cost of hedging reserve				
- Unrealised value changes	-109		(62)	
- Realised value changes transferred to the income statement	1		3	
		-108		(59)
Changes in the revaluation reserve for financial assets at fair value through other comprehensive income				
- Unrealised value changes	-36		45	
- Realised value changes transferred to the income statement	-43		(48)	
		-79		(3)
Total recyclable results		**-174**		**-72**
Non-recyclable results recognised directly in equity:				
- Change in fair value attributable to change in credit risk of financial liabilities designated at FVTPL	-1		-2	
- Movement in actuarial results				
Total non-recyclable results		**-1**		**-2**
Results recognised directly in equity		**-175**		**-74**
Total		**125**		**162**
- of which attributable to the holders of Additional Tier 1 capital		21		25
- of which attributable to shareholders		104		137

Company cash flow statement

Amounts in millions of euros	2022	2021
Cash flow from operating activities		
Profit before tax	408	348
Adjusted for:		
- Depreciation	2	3
- Impairments	51	20
- Unrealised results through the income statement	-62	-43
Changes in operating assets and liabilities:		
- Changes in Amounts due from and due to banks (not due on demand)	-830	-194
- Changes in Cash collateral posted and received	11,731	6,359
- Changes in Loans and advances	1,754	1,151
- Changes in Funds entrusted	279	-1,138
- Changes in Derivatives	1,782	574
- Corporate income tax paid	-127	-81
- Other changes from operating activities	-441	-393
Net cash flow from operating activities	**14,547**	**6,606**
Cash flow from investing activities		
Investments and acquisitions pertaining to:		
- Financial assets at fair value through the income statement	-108	-9
- Financial assets at fair value through other comprehensive income	-5,407	-8,322
- Interest-bearing securities at amortised cost	-1,544	-850
- Property and equipment	-	-1
Disposals and redemptions pertaining to:		
- Financial assets at fair value through the income statement	195	82
- Financial assets at fair value through other comprehensive income	5,192	9,215
- Interest-bearing securities at amortised cost	1,011	1,211
- Investments in subsidiaries, associates and joint ventures	26	-
Net cash flow from investing activities	**-635**	**1,326**
Cash flow from financing activities		
Amounts received on account of:		
- Central bank financing (TLTRO)	-	7,500
- Debt securities	474,163	285,071
Amounts paid on account of:		
- Central bank financing (TLTRO)	-14,787	-
- Financial liabilities at fair value through the income statement	-105	-354
- Debt securities	-475,071	-292,980
- Subordinated debt	-	-1
- Compensation on Additional Tier 1 capital	-23	-25
- Dividend distribution to shareholders	-127	-172
- Repayments on Additional Tier 1 capital	-424	
Net cash flow from financing activities	**-16,374**	**-961**
Net change in cash and cash equivalents	**-2,462**	**6,971**
Cash and cash equivalents as at 1 January	9,286	2,315
Cash and cash equivalents as at 31 december	**6,824**	**9,286**

Continuation of previous page

Company cash flow statement

Cash and cash equivalents as at 31 December:		
- Cash and balances held with central banks	6,821	9,264
- Cash equivalents in the Amount due from banks item	4	23
- Cash equivalents in the Amount due to banks item	-1	-1
	6,824	**9,286**
Notes to cash flow from operating activities		
Interest income received	4,291	4,363
Interest expenses paid	-3,745	-3,990
	546	**373**

Company statement of changes in equity

Amounts in millions of euros. All figures in the statement are after taxation.	Share capital	Share premium reserve	Revaluation reserve	Cashflow hedge reserve	Reserve for fair value increase	Own credit adjustment	Cost of hedging reserve	Retained earnings	Unappropriated profit	Equity attributable to shareholders	Additional Tier 1 capital	**Total**
Balance as at 01/01/2021	**139**	**6**	**86**	**11**	**186**	**5**	**184**	**3,747**	**0**	**4,364**	**733**	**5,097**
Total comprehensive income			**-3**	**-10**		**-2**	**-59**		**236**	**162**		**162**
Transfer to reserve for fair value increases					-13			13		0		**0**
Dividend distribution to the bank's shareholders								-172		-172		**-172**
Compensation to holders of Additional Tier 1 capital								-25		-25		**-25**
Balance as at 31/12/2021	**139**	**6**	**83**	**1**	**173**	**3**	**125**	**3,563**	**236**	**4,329**	**733**	**5,062**
Total comprehensive income			**-79**	**13**		**-1**	**-108**		**300**	**125**		**125**
Redemption of Additional Tier 1 capital											-424	**-424**
Transfer to reserve for fair value increases					-23			23				
Dividend distribution to the bank's shareholders								-127		**-127**		**-127**
Compensation to holders of Additional Tier 1 capital								-21		**-21**		**-21**
Appropriation from previous year's profit								236	-236			
Balance as at 31/12/2022	**139**	**6**	**4**	**14**	**150**	**2**	**17**	**3,674**	**300**	**4,306**	**309**	**4,615**

BNG Bank has not recognised any results from minority interests in the equity which is attributable to third parties. With the exception of Additional Tier 1 capital, the entire equity is attributable to the shareholders.

Accounting principles for the company financial statements

The company financial statements are prepared in accordance with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standard Board (IASB) and adopted throughout the European Union (EU), and with Part 9, Book 2 of the Dutch Civil Code. The company financial statements are prepared in (millions of) euros, unless stated otherwise. The euro is used as the functional and reporting currency of BNG Bank. As far as the financial accounting principles are concerned, reference is made, with the exception of the accounting principles mentioned below, to the notes to the accounting principles for the consolidated financial statements.

Participating interests

The balance sheet item Participating interests is stated according to the equity method.

Statutory reserve for fair value increases

Pursuant to Section 2:390 sub 1 of the Dutch Civil Code, for capital protection purposes a statutory reserve must be maintained at the expense of the freely distributable reserves (other reserves) or freely distributable profit (unappropriated profit) in relation to fair value increases of financial instruments stated as assets in the balance sheet for which there is no regular market quotation.

Notes to the company financial statements

Amounts in millions of euros.

Notes 30 and 33 provide an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2022.

Note 34 to the consolidated financial statements includes a breakdown of balance sheet values by remaining contractual maturity (due on demand and not due on demand).

For the related party disclosures, please refer to the consolidated financial statements.

1 Cash and balances held with central banks

	31-12-2022	31-12-2021
Cash on hand	0	0
Current account balances with the central bank (due on demand)	6,821	9,264
Total	**6,821**	**9,264**

2 Amounts due from banks

The Amounts due from banks item includes all receivables from banks measured at amortised cost.

	31-12-2022	31-12-2021
Short-term loans and current account balances	4	23
Long-term lending	342	140
Total	**346**	**163**

3 Cash collateral posted

The cash collateral is posted with third parties under netting agreements and as such is not freely available to BNG Bank.

4 Financial assets at fair value through the income statement

This item includes:
- Financial assets mandatorily measured at fair value through profit or loss. This concerns financial assets that have failed to pass the SPPI test; and
- Financial assets designated as measured at fair value through profit or loss.

	31-12-2022	31-12-2021
Mandatorily measured at FVTPL		
Loans and advances	33	69
Designated as measured at FVTPL		
Loans and advances	238	464
Interest-bearing securities	630	850
Total	**901**	**1,383**

The total redemption value of these loans and advances and interest bearing securities at year-end 2022 is EUR 877 million (2021: EUR 979 million). Note 25 explains the changes in fair value recognised through the income statement.

5 Derivatives

This balance sheet item includes the positive fair value of derivatives not settled-to-market. Note 25 explains the changes in fair value recognised through the income statement.

	31-12-2022	31-12-2021
Derivatives not involved in a hedge accounting relationship	77	267
Derivatives involved in a portfolio hedge accounting relationship	1,763	2,248
Derivatives involved in a micro hedge accounting relationship	1,721	3,156
Receivables related to STM derivative contracts	176	14
Total	**3,737**	**5,685**

6 Financial assets at fair value through other comprehensive income

This includes purchased interest-bearing securities that are held within the Hold to Collect and Sell business model and for which the bank has not used the fair value option.

	31-12-2022	31-12-2021
Governments	3,852	5,267
Supranational organisations	1,405	1,405
Credit institutions	2,131	1,900
Other institutions	10	-
Total	**7,398**	**8,572**

Transfers without derecognition
At year-end 2022, BNG Bank had transferred EUR 332 million (2021: 218 million) of financial assets at fair value through other comprehensive income without derecognition in repurchase transactions.

7 Interest-bearing securities at amortised cost

This includes purchased interest-bearing securities that are held within the Hold-to-Collect business model and for which the bank has not used the fair value option.

	31-12-2022	31-12-2021
Governments	1,314	1,318
Other financial corporations	5,615	5,295
Non-financial corporations	709	1,021
Allowance for credit losses	-2	-2
Total	**7,636**	**7,632**

At year-end 2022, BNG Bank had transferred EUR 333 million (2021: 520 million) of interest-bearing securities at amortised cost without derecognition in repurchase transactions.

8 Loans and advances

The Loans and advances item includes short-term and long-term loans to clients insofar as they pass the SPPI test, as well as current account debit balances held by clients. All positions are held within the Hold-to-Collect business model.

	31-12-2022	31-12-2021
Short-term loans and current account balances	1,481	2,603
Long-term lending	88,293	87,335
	89,774	**89,938**
Allowance for credit losses	-148	-228
Total	**89,626**	**89,710**

9 Value adjustments on loans in portfolio hedge accounting

This refers to the value adjustments of the effective portion of the hedged interest rate risk of loans and advances involved in a portfolio hedge accounting relationship.

	2022	2021
Movements of value adjustments on loans in portfolio hedge accounting		
Opening balance	13,555	20,816
Movements in the unrealised portion in the financial year	-22,154	-6,021
Amortisation in the financial year	-61	-1,164
Realisation from sales in the financial year	-19	-76
Closing balance	**-8,679**	**13,555**

10 Participating interests

	31-12-2022	31-12-2021	31-12-2022	31-12-2021
	Participating share		Balance sheet value	
Subsidiaries				
BNG Gebiedsontwikkeling BV, The Hague	100%	100%	35	49
Hypotheekfonds voor Overheidspersoneel BV, The Hague	100%	100%	-1	6
Subtotal			**34**	**55**
Associates				
Dataland BV, Rotterdam	30%	30%	0	0
Data B Mailservice BV, Leek	0%	45%	-	3
Subtotal			**0**	**3**
Total			**34**	**58**

For a description of the bank’s subsidiaries and associates, please refer to section 'Other information' of this document and to section 'Associates and joint ventures', respectively, of the consolidated financial statements. For summarised financial information on associates, refer to section ‘Summarised financial information’.

11 Property and equipment

	2022	2021	2022	2021	2022	2021	2022	2021
	Property		Equipment		Right-of-use-asset		Total	
Historical cost								
Opening balance	**49**	**49**	**27**	**26**	**2**	**2**	**78**	**77**
Investments	0	-	0	1	0	0	0	1
Disposals		-		-	0	-	0	-
Value as at 31 December	**49**	**49**	**27**	**27**	**2**	**2**	**78**	**78**
Depreciation								
Accumulated depreciation as at 1 January	39	38	24	22	0	0	63	60
Depreciation during the year	0	1	2	2	0	0	2	3
Accumulated depreciation as at 31 December	**39**	**39**	**26**	**24**	**0**	**0**	**65**	**63**
Total	**10**	**10**	**1**	**3**	**2**	**2**	**13**	**15**

Estimated useful life	
Buildings	33 ⅓ years
Technical installations	15 years
Machinery and inventory	5 years
Right-of-use asset	5 years
Hardware and software	3 years

No property or equipment is pledged as security of liabilities.

12 Other assets

The other assets at year-end 2022 of EUR 109 million (2021: EUR 20 million) primarily comprise amounts receivable from lending to clients.

13 Amounts due to banks

	31-12-2022	31-12-2021
Current account balances	1	1
Central bank funding (TLTRO)	3,471	18,350
Deposits	140	666
Private loans	400	508
Total	**4,012**	**19,525**

14 Cash collateral received

The cash collateral at year-end 2022 of EUR 338 million (2021: EUR 216 million) is received from third parties under netting agreements and as such is not freely available to BNG Bank.

15 Financial liabilities at fair value through the income statement

This item includes debt securities designated as measured at fair value with changes in fair value recognised through the income statement.

	31-12-2022	31-12-2021
Publicly placed debt securities	169	292
Privately placed debt securities	16	18
Total	**185**	**310**

The total redemption value of the debt securities at year-end 2022 is EUR 168 million (2021: EUR 265 million). The difference between the financial liability's carrying amount and the redemption value at year-end 2022 is EUR 17 million (2021: EUR 44 million). Financial liabilities are measured at fair value through the income statement on the relevant funding curve including a mark-up for 'own credit risk'. The total change in value (before tax) was EUR 3 million negative (2021: EUR 4 million positive). Changes in fair value due to own credit risk are recognised through other comprehensive income. These changes are determined by comparing the valuation using the relevant funding curve including a mark-up for 'own credit risk' and the valuation using the relevant funding curve without this mark-up. Note 25 explains the changes in value recognised through the income statement.

16 Derivatives

This balance sheet item includes the negative fair value of derivatives not settled-to-market. Note 25 explains the changes in fair value recognised through the income statement.

	31-12-2022	31-12-2021
Derivatives not involved in a hedge accounting relationship	390	724
Derivatives involved in a portfolio hedge accounting relationship	3,341	14,879
Derivatives involved in a micro hedge accounting relationship	2,398	1,332
Payables related to STM derivatives contracts	-	1
Total	**6,129**	**16,936**

17 Taxes

The bank has registered deferred tax liabilities for the actuarial results for the employee benefits provision, the revaluation reserve, the own credit adjustment, the compensation on Additional Tier 1 capital and for the cash flow hedge reserve, which all directly change into equity.

	31-12-2022	31-12-2021
Current tax assets	0	0
Current tax liability	-11	-30
Deferred tax liabilities	-14	-77
Total	**-25**	**-107**

BNG Bank and the Dutch tax authorities have concluded a bilateral agreement (‘vaststellingsovereenkomst’) in 2021 in accordance with IFRS 9, for the period 2021-2023. The bilateral agreement applies to the BNG Bank fiscal unit. Pursuant to the agreement, all financial instruments are stated – for both reporting and tax purposes – in accordance with the IFRS principles of valuation, with the exception of transactions classified as Financial assets at fair value through the income statement. All transactions within this category are valued for tax purposes at the lower of either the cost price or the market value. The result for tax purposes differs from the result for reporting purposes if, on balance, unrealised losses have arisen. If the revaluation reserve increases, the positive amount is added to the annual profit for tax purposes up to the level at which the cost price is reached.

The reconciliation between the effective tax rate and the nominal tax rate is as follows:

	2022	2021
Profit before tax	408	348
Tax levied at the nominal tax rate	-105	-87
Tax adjustment from previous years	0	0
Participation exemption	1	1
Deductible interest on Additional Tier 1 capital	4	6
Non-deductible costs (bank levy and thin cap)	-8	-32
Effective tax	**-108**	**-112**
Nominal tax rate	25.8%	25.0%
Effective tax rate	26.5%	32.2%

2022

	Opening balance	Changes through equity	Changes through the income statement	Closing balance
Changes in deferred taxes				
Financial assets at fair value through other comprehensive income	-28	27	-	-1
Cash flow hedge reserve	-45	33	-	-12
Own Credit Adjustment	-1	1	-	0
Additional Tier 1 capital	-4	2	-	-2
Employee benefits provision	1	0	-	1
Total	**-77**	**63**	**-**	**-14**

2021

	Opening balance	Changes through equity	Changes through the income statement	Closing balance
Changes in deferred taxes				
Financial assets at fair value through other comprehensive income	-29	1	-	-28
Cash flow hedge reserve	-65	20	-	-45
Own Credit Adjustment	-1	-	-	-1
Additional Tier 1 capital	-4	0	-	-4
Employee benefits provision	1	-	-	1
Total	**-98**	**21**	**-**	**-77**

18 Debt securities

This includes bonds and other issued debt securities with either fixed or variable interest rates. Any sold portion of an issue is deducted from the relevant bond.

	31-12-2022	31-12-2021
Bond loans	81,970	90,482
Commercial Paper	3,729	7,398
Privately placed debt securities	5,075	3,475
Total	**90,774**	**101,355**

19 Funds entrusted

	31-12-2022	31-12-2021
Current account balances	3,484	2,800
Short-term deposits	51	320
Long-term deposits	1,262	1,401
Total	**4,797**	**4,521**

20 Subordinated debt

	31-12-2022	31-12-2021
Subordinated debt	38	36
Total	**38**	**36**

21 Other liabilities

	31-12-2022	31-12-2021
Employee benefits provision	2	2
Other provisions	21	-
Other liabilities	315	213
Total	**338**	**215**

The employee benefits provision is made up of two parts, a provision for the interest rate discount on mortgage loans to both active and retired employees of EUR 1 million (2021: EUR 1 million) and a provision for vitality leave of EUR 1 million (2021: EUR 1 million). Both provisions have a long-term character.

The other provision are the result of a claim on collateral received by BNG Bank.

The movements in the present value of the net liability in relation to the defined benefits relating to the mortgage interest rate discount and the provision for vitality leave are as follows:

	2022	2021
Employee benefits provision		
Net liability as at 1 January	2	2
Movements in the provision	0	0
Net liability as at 31 december	**2**	**2**

The other liabilities are mainly composed of amounts payable related to derivatives and lending to clients.

22 Equity

Since BNG Bank has no minority interests after consolidation, the entire consolidated equity, excluding Addtional Tier 1 capital, is attributable to shareholders. The items included in equity are explained below.

	31-12-2022	31-12-2021
Share capital	139	139
Share premium reserve	6	6
Revaluation reserve	4	83
Cash flow hedge reserve	14	1
Own credit adjustment	2	3
Cost of hedging	17	125
Reserve for fair value increases	150	173
Retained Earnings	3,674	3,563
Unappropriated profit	300	236
Equity attributable to shareholders	**4,306**	**4,329**
Additional Tier 1 capital	309	733
Total	**4,615**	**5,062**

	2022	2021
Number of paid-up shares outstanding	55,690,720	55,690,720
Proposed dividend per share in euros	2.50	1.93
Proposed dividend		
- Primary dividend pursuant to the Articles of Association	7	7
- Proposed dividend above the primary dividend	132	100
Total	**139**	**107**

The proposed dividend distribution for 2022 takes into account the EUR 23 million compensation (before tax) that has already been paid on the Additional Tier 1 capital in 2022. This payment was charged to the Retained earnings.

For the financial year 2021 a dividend of EUR 127 million was proposed to the General Meeting of Shareholders held in the first half of 2022 and is distributed to the bank's shareholders in April 2022.

Share capital

The authorised capital is divided into 100 million shares with a nominal value of EUR 2.50 each, of which 55,690,720 shares have been issued and fully paid up. The number of shares in circulation remained unchanged during the financial year. BNG Bank and its subsidiaries hold no company shares.

None of the shares carry preferential rights, nor are they subject to restrictions. There are no options that can be exercised to obtain entitlement to the issue of shares.

Share premium reserve

There were no movements in 2022 and 2021.

Revaluation reserve
At year-end 2022 the revaluation reserve of EUR 4 million includes EUR 883 million (2021: 338 million) in unrealised value changes, excluding the value of the hedged part of the interest-rate risk of interest-bearing securities involved in hedge accounting, which are recognised in the Financial assets at fair value through other comprehensive income. The revaluation reserve has been adjusted for taxes. Upon the sale of these assets, the associated cumulative result recognised in equity is transferred to the income statement.

Cash flow hedge reserve
The effective portion of the unrealised changes in the value of derivatives involved in a cash flow hedge relationship, resulting from changes in the foreign exchange rates, are recognised in the cash flow hedge reserve. The cash flow hedge reserve is adjusted for taxes.

Own credit adjustment
The Own Credit Adjustment amounts to EUR 2 million net of taxes (2021: EUR 3 million). This adjustment relates to changes in credit risk of financial liabilities measured at fair value through the income statement.

Cost of hedging reserve
The cost of hedging reserve records movements in foreign currency basis spreads in cross currency swaps involved in hedge accounting and is amortised over the life of the hedge. The cumulative movements will reduce to nil by maturity of the hedging instrument.

Retained earnings
After determination of the appropriations of the distributable profit pursuant to the Articles of Association, the General Meeting of Shareholders decides which portion of the remaining profit is added to the Retained earnings. In 2022, the payment of a dividend of EUR 127 million (2021: EUR 101 million) was scheduled. EUR 23 million (before tax) was distributed to the holders of the Additional Tier 1 capital in 2022 (2021: EUR 25 million), charged to the Retained earnings.

Unappropriated profit
The balance sheet is prepared prior to profit appropriation. This item represents the total result achieved after deduction of corporate income tax.

Additional Tier 1 capital
The tranches issued in 2015 (a nominal amount of EUR 424 million) are redeemed at par on 16 May 2022. As per 31 December 2022 the bank's Additional Tier 1 capital amounts to EUR 309 million. The instruments are structured in line with CRR requirements and the EBA guidelines and qualifies as additional Tier 1 capital. Addtional Tier 1 capital concerns perpetual loans involving an annual non-cumulative discretionary payment on the outstanding principal amount, subject to temporary write-down in the event that the CET1 ratio falls below 5.125%. In case of write-down, this amount will be transferred to the Retained earnings. Write-down from the Retained earnings can be reversed (write-up) under certain conditions at the moment that the trigger ratio is back above 5.125% again. BNG Bank is entitled to distribute the interest payment on a discretionary basis in the form of a compensation charged to the Other reserves. The compensation is determined on the basis of the prevailing principal amount. The distributed compensation is deductible for corporate income tax. BNG Bank has the unilateral contractual option to call the Addtional Tier 1 capital issued. The tranches issued in 2016 (a nominal amount of EUR 309 million) can be redeemed every year from May 2022. The bank chose not to redeem the tranche, but redemption can be done in May of every year.

23 Interest result

Interest revenue calculated by using the effective interest method includes all positive interest results from both traditional financial instruments and derivatives involved in hedge accounting, including negative interest expenses on financial liabilities. In addition, other credit-related income received is included in this item. Interest revenues on assets that were subject to impairment are recognised on the original effective interest percentage, as long as the expected interest cash flows are received.

Interest expenses calculated by using the effective interest method include all negative interest results from both traditional financial instruments and derivatives involved in hedge accounting, including negative interest revenue on financial assets. The costs of borrowing as well as other interest-related charges are also recognised.

Other interest revenue and expenses consist mainly of interest results of derivatives not involved in hedge accounting and interest results of financial assets and liabilities measured at fair value.

		2022		2021
Interest revenue				
Interest revenue calculated by using the effective interest method:				
- Financial assets at amortised cost	1,950		1,861	
- Financial assets at fair value through other comprehensive income	65		70	
- Derivatives involved in hedge accounting	1,611		2,102	
- Negative interest expenses on financial liabilities	141		162	
		3,767		4,195
Other interest revenue:				
- Financial assets designated at fair value through the income statement	61		54	
- Financial assets mandatory at fair value through the income statement	2		2	
- Derivatives not involved in hedge accounting	327		160	
- Other	13		-	
		403		216
Total interest revenue		**4,170**		**4,411**
Interest expenses				
Interest expenses calculated by using the effective interest method:				
- Financial liabilities at amortised cost	1,628		1,285	
- Derivatives involved in hedge accounting	1,832		2,352	
- Negative interest expenses on financial assets	147		282	
		3,607		3,919
Other interest expenses				
- Financial liabilities designated at fair value through the income statement	8		25	
- Derivatives not involved in hedge accounting	59		57	
- Other	7		3	
		74		85
Total interest expenses		**3,681**		**4,004**
Total interest result		**489**		**407**

The interest revenue in 2022 includes EUR 22 million (2021: EUR 11 million) in interest revenue for financial assets, relating to Financial assets at amortised cost (notes 7 and 8) and Financial assets at fair value through other comprehensive income (note 6), which were subject to impairment.

24 Commission result

Commission income

This item includes income from services provided to third parties.

	2022	2021
Income from loans and credit facilities	13	11
Income from payment services	10	9
Total	**23**	**20**

Commission expenses

This item comprises expenses totalling EUR 4 million (2021: EUR 3 million) relating to services rendered by third parties in relation to loans, credit facilities and payment services.

25 Result on financial transactions

This item includes the result on financial transactions broken down into realised and unrealised market value adjustments.

		2022		2021
Market value changes in financial assets at fair value through the income statement resulting from changes in credit and liquidity spreads, consisting of:				
- Interest-bearing securities	-25		-13	
- Structured loans	-5		4	
		-30		-9
Result on hedge accounting				
- Portfolio fair value hedge accounting	-32		65	
- Micro fair value hedge accounting	62		-9	
- Micro cash flow hedge accounting	0		0	
		30		56
Change in counterparty credit risk of derivatives (CVA/DVA)		16		16
Realised sales and buy-out results		47		59
Other market value changes		50		-22
Total		**113**		**100**

In 2022, the result on financial transactions was positively affected by high other market value changes. The realised results of EUR 47 million (2021: 59 million) are mainly due to on balance positive results on the sales of interest-bearing securities from the liquidity portfolio of the bank.

The unrealised results amounted to EUR 66 million positive (2021: 41 million negative), mainly due to the increase of long-term interest rates. On the other hand the higher credit and liquidity risk spreads of most interest-bearing securities recorded under Financial assets at fair value through the income statement led to a higher negative result of market value changes compared to 2021. In 2022 the result amounted to EUR 25 million negative (2021: 13 million negative).

26 Results from participating interests

	2022	2021
Associates	6	5
Subsidiaries	-3	0
Total	**3**	**5**

For a description of the bank's associates and joint ventures, please refer to section 'Associates and joint ventures' in the consolidated financial statements.

27 Staff costs

	2022	2021
Wages and salaries	34	32
Pension costs	6	5
Social security costs	3	3
Additions to the employee benefits provision	0	0
External employees	27	11
Other staff costs	3	5
Total	**73**	**56**

There was no variable remuneration of individual staff members in 2022 and 2021.

The increase in staff costs are mainly due to the increase of costs of external employees.

28 Other administrative expenses

These expenses include, among other things, outsourcing costs, maintenance costs of property and equipment, consultancy costs, training expenses and IT expenses. The total other administrative expenses for 2022 amounted to EUR 38 million (2021: EUR 47 million).

29 Depreciation

A breakdown of this item is included in the note on Property and equipment (note 11). In total, the depreciation charges amounted to EUR 2 million in 2022 (2021: EUR 3 million).

30 Impairments

The impairments in 2022 amounted to a loss of EUR 51 million in the income statement (2021: EUR 20 million loss).

2022

	Stage 1	Stage 2	Stage 3	Total
Impairment results due to movements in allowances:				
- Increases in allowances due to origination and acquisition	2	2	3	7
- Decreases in allowances due to derecognition	-2	-3	0	-5
- Changes in allowances due to changes in credit risk (net)	3	13	34	50
	3	**12**	**37**	**52**
Impairment results not due to movements in allowances:				
- Reversal of impairment due to cash flows received from past write-offs	-	-	-1	-1
- Impairments due to write-offs	-	-	-	-
	-	**-**	**-1**	**-1**
Net impairment result on financial assets	**3**	**12**	**36**	**51**

2021

	Stage 1	Stage 2	Stage 3	Total
Impairment results due to movements in allowances:				
- Increases in allowances due to origination and acquisition	3	1	5	9
- Decreases in allowances due to derecognition	-4	-1	-12	-17
- Changes in allowances due to changes in credit risk (net)	-5	-23	49	21
	-6	**-23**	**42**	**13**
Impairment results not due to movements in allowances:				
- Freefall in allowance due to write-off	-	-	8	8
- Reversal of impairment due to cash flows received from past write-offs	-	-	-1	-1
- Impairments due to write-offs	-	-	-	0
	0	**0**	**7**	**7**
Net impairment result on financial assets	**-6**	**-23**	**49**	**20**

Movement in allowances for expected credit losses

2022

	Stage 1	Stage 2	Stage 3	Total
Movements in allowances taken through the income statement:				
- Increases in allowances due to origination and acquisition	2	2	3	7
- Decreases in allowances due to derecognition	-2	-3	0	-5
- Changes in allowances due to changes in credit risk (net)	3	13	34	50
	3	**12**	**37**	**52**
Movements in allowances not taken through the income statement:				
- Decreases in allowance due to write-offs	-	-	-131	-131
	-	**-**	**-131**	**-131**
Total movements in allowances	**3**	**12**	**-94**	**-79**

2021

	Stage 1	Stage 2	Stage 3	Total
Movements in allowances taken through the income statement:				
- Increases in allowances due to origination and acquisition	3	1	5	9
- Decreases in allowances due to derecognition	-4	-1	-12	-17
- Changes in allowances due to changes in credit risk (net)	-5	-23	49	21
	-6	**-23**	**42**	**13**
Movements in allowances not taken through the income statement:				
- Decreases in allowance due to write-offs	-	-	-	-
	-	**-**	**-**	**-**
Total movements in allowances	**-6**	**-23**	**42**	**13**

Note 33 provides an overview of the breakdown of financial assets subject to impairment into impairment stages, as well as details on the movement in the allowance for expected credit losses in 2022.

The changes in the incurred loss provision are included in the Loans and advances item (Note 8).

31 Contribution to resolution fund and bank levy

The European resolution regime arising from the Bank Recovery and Resolution Directive entered into force on 1 January 2015. The expenses for the resolution fund are deductible for corporate income tax purposes. The EUR 20 million payable for 2022 (2021: EUR 2 million) was paid in June 2022 and charged to the income statement.

The expenses concerning the bank levy are not deductible for corporate income tax purposes. As a consequence, the effective tax burden exceeds the nominal tax burden. BNG Bank is due to pay the bank levy in October of every year, which for 2022 amounted to EUR 32 million (2021: EUR 53 million).

	2022	2021
The bank levy is calculated as follows:	basis 2021	basis 2020

Continuation of previous page	2022	2021
Balance sheet total	149,057	160,361
Less: Tier 1 capital	4,922	4,904
Less: Deposits covered by the deposit-guarantee scheme	36	46
Taxable base	**144,099**	**155,411**
Less: Efficiency exemption	20,900	20,900
Taxable base	**123,199**	**134,511**
Total sum of debts with a maturity of less than one year	24,139	29,738
Total sum of all debts, according to the balance sheet	143,994	155,262
Bank levy on short-term debt	9	17
Bank levy on long-term debt	23	36
Total calculated/due	**32**	**53**

32 Fees of independent auditors

The following audit fees were reported in the income statement:

	2022	2021
Audit of the financial statements	486	391
Other audit services	165	298
Tax services	-	-
Other non-audit services	107	10
Total	**758**	**699**

The fees listed above relate to the procedures applied to the Company and its consolidated group entities by accounting firms and external independent auditors as referred to in Section 1, subsection 1 of the Audit Firms Supervision Act ('Wet toezicht accountantsorganisaties – Wta'). In the case of BNG Bank this is only applicable to Dutch based accounting firms (PwC the Netherlands accountants ('PwC NL'), including its tax services and advisory groups) as BNG Bank does not make use of foreign based accounting firms. The audit fees relate to the audit of the 2022 financial statements, regardless of whether the work was performed during the financial year.

Summary of services rendered by the independent auditor, in addition to the audit of the financial statements

Our independent auditor, PwC NL, has rendered, for the period to which our statutory audit relates, in addition to the audit of the statutory financial statements the following services to the company and its controlled entities:

Other audit services required by law or regulatory requirements

- Statutory audits of controlled entities;
- Review of interim financial statements;
- Audit of the regulatory returns for the Dutch Central Bank;
- Assurance engagement credit claims for the Dutch Central Bank.

Other audit services

- Assurance engagement on the sustainability report;
- Comfort letters on annual update of debt issuance prospectus and drawdowns under the debt issuance programme;
- Assurance engagement on the TLTRO-report;
- Assurance engagement on the Deposito Garantee Scheme requirements.

Other non-audit services

- Agreed-upon procedure on the financial information for the Single Resolution Board.

33 Impairment of financial assets and off-balance sheet commitments

Breakdown of financial assets and off-balance sheet commitments into impairment stages

The following tables provide a breakdown of the financial assets subject to impairment and off-balance sheet commitments into the 3 impairment stages:

Stage 1: performing exposures without significant increase in credit risk (SICR) since initial recognition.
Stage 2: performing exposures with significant increase in credit risk since initial recognition.
Stage 3: non-performing exposures.

31-12-2022

		Gross carrying amount			Allowance for credit loss		
	Carrying amount	**Performing**		**Non-performing**	**Performing**		**Non-performing**
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Cash and balances held with central banks	6,821	6,821	-	-	-	-	-
Amounts due from banks	346	346	-	-	0	-	-
Cash collateral posted	4,144	4,144	-	-	-	-	-
Financial assets at fair value through OCI[1]	7,398	7,398	-	-	0	-	0
Interest-bearing securities at amortised cost	7,636	7,552	86	-	0	-2	0
Loans and advances	89,626	86,887	2,049	838	-8	-21	-119
Total	**115,971**	**113,148**	**2,135**	**838**	**-8**	**-23**	**-119**

1 The allowance for credit loss for financial assets at FVOCI is included in OCI and not in the (net) carrying amount.

31-12-2021

		Gross carrying amount			Allowance for credit loss		
	Carrying amount	**Performing**		**Non-performing**	**Performing**		**Non-performing**
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Cash and balances held with central banks	9,264	9,264	-	-	-	-	-
Amounts due from banks	163	163	0	-	0	-	-
Cash collateral posted	12,993	12,993	-	-	-	-	-
Financial assets at fair value through OCI[1]	8,572	8,572	0	0	0	-	-
Interest-bearing securities at amortised cost	7,632	7,566	68	0	0	-2	-
Loans and advances	89,710	88,987	412	539	-6	-8	-214

Continuation of previous page

31-12-2021							
Total	**128,334**	**127,545**	**480**	**539**	**-6**	**-10**	**-214**

1 The allowance for credit loss for financial assets at FVOCI is included in OCI and not in the (net) carrying amount.

31-12-2022

	Nominal amount			Provision		
	Performing		**Non-performing**	**Performing**		**Non-performing**
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Off-balance sheet commitments						
Contingent liabilities	485	3	1	0	0	-1
Revocable facilities	5,781	228	239	0	0	0
Irrevocable facilities	4,341	43	42	0	-1	-1
Total	**10,607**	**274**	**282**	**0**	**-1**	**-2**

31-12-2021

	Nominal amount			Provision		
	Performing		**Non-performing**	**Performing**		**Non-performing**
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
Off-balance sheet commitments						
Contingent liabilities	499	1	1	0	0	-1
Revocable facilities	5,736	69	66	-	-	-
Irrevocable facilities	4,486	1	0	0	0	-
Total	**10,721**	**71**	**67**	**0**	**0**	**-1**

Movements in allowances and provisions for expected credit losses

The following table shows the movements in allowances for expected credit losses for financial assets and the provision for expected credit losses for off-balance sheet commitments.

2022

	Opening balance	Increases due to origination and acquisition	Decrease due to derecognition repayments and disposals	Changes due to change in credit risk (net)	Decrease in allowance account due to write-offs	Closing balance
Allowances						
Cash and balances held with central banks	-	-	-	-	-	-
Amounts due from banks	0	-	-	0	-	0
Financial assets at fair value through OCI	0	0	0	0	-	0
Interest-bearing securities at amortised cost	2	0	0	0	-	2
Loans and advances	228	7	-4	49	-132	148
	230	**7**	**-4**	**49**	**-**	**150**
Provision						
Off-balance sheet commitments	1	0	0	2	-	3

2021

	Opening balance	Increases due to origination and acquisition	Decrease due to derecognition repayments and disposals	Changes due to change in credit risk (net)	Decrease in allowance account due to write-offs	Closing balance
Allowances						
Cash and balances held with central banks	-	-	-	-	-	-
Amounts due from banks	0	0	0	0	-	0
Financial assets at fair value through OCI	1	0	0	-1	-	0
Interest-bearing securities at amortised cost	5	0	0	-3	-	2
Loans and advances	208	8	-16	28	-	228
	214	**8**	**-16**	**24**	**0**	**230**
Provision						
Off-balance sheet commitments	4	0	-1	-2	-	1

Other notes

For the details on other items, please refer to the notes to the consolidated financial statements.

The Hague, 17 March 2023

Executive Board
Gita Salden (CEO), statutory director
Olivier Labe (CFO), statutory director
Cindy van Atteveldt - Machielsen (CRO), statutory director

Supervisory Board
Huub Arendse, Chair
Jan van Rutte, Vice-chair
Karin Bergstein
Johan Conijn
Marlies van Elst
Leonard Geluk
Femke de Vries

8.3 Other information

Independent auditor's report

To: the general meeting and supervisory board of BNG Bank N.V.

Report on the financial statements 2022

Our opinion
In our opinion, the financial statements of BNG Bank N.V. ('the Company') give a true and fair view of the financial position of the Company and the Group (the company together with its subsidiaries) as at 31 December 2022, and of its result and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union ('EU-IFRS') and with Part 9 of Book 2 of the Dutch Civil Code.

What we have audited
We have audited the accompanying financial statements 2022 of BNG Bank N.V., Den Haag. The financial statements comprise the consolidated financial statements of the Group and the company financial statements.

The financial statements comprise:
- the consolidated and company balance sheet as at 31 December 2022;
- the following statements for 2022: the consolidated and company income statement, the consolidated and company statements of comprehensive income, changes in equity and cash flows; and
- the notes, comprising the significant accounting policies and other explanatory information.

The financial reporting framework applied in the preparation of the financial statements is EU-IFRS and the relevant provisions of Part 9 of Book 2 of the Dutch Civil Code.

The basis for our opinion
We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. We have further described our responsibilities under those standards in the section 'Our responsibilities for the audit of the financial statements' of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence
We are independent of BNG Bank N.V. in accordance with the European Union Regulation on specific requirements regarding statutory audit of public-interest entities, the 'Wet toezicht accountantsorganisaties' (Wta, Audit firms supervision act), the 'Verordening inzake de onafhankelijkheid van accountants bij assuranceopdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

Our audit approach

We designed our audit procedures with respect to the key audit matters, fraud and going concern, and the matters resulting from that, in the context of our audit of the financial statements as a whole and in forming our opinion thereon. The information in support of our opinion, like our findings and observations related to individual key audit matters, the audit approach fraud risk and the audit approach going concern was addressed in this context, and we do not provide a separate opinion or conclusion on these matters.

Overview and context

BNG Bank N.V. is a credit institution licensed in the Netherlands. Its main activity is providing financing to the Dutch public sector and the semi-public domain. The Group is comprised of several components and therefore we considered our group audit scope and approach as set out in the section 'The scope of our group audit'. We paid specific attention to the areas of focus driven by the operations of the Group, as set out below.

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we considered where the Executive Committee made important judgements, for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. In paragraph 'Accounting estimates and judgements' of the financial statements, the Group describes the areas of judgement in applying accounting policies and the key sources of estimation uncertainty. Given the significant estimation uncertainty and the related higher inherent risks of material misstatement in the impairment of loans and receivables and the valuation of financial instruments, we considered these matters as key audit matters as set out in the section 'Key audit matters' of this report.

Other areas of focus, that were not considered to be key audit matters, were revenue recognition, management override of controls, hedge accounting, investments in associates, effectiveness of IT general controls, and taxation. Though these are areas of focus in our audit, they were not the matters of most significance in the audit of the financial statements of the current period.

The engagement team considered the impact of risks resulting from climate change on the audit. These risks impact the financial statements mostly as one of the potential drivers of credit risk exposures of the Bank. Consequently, we did not identify climate-related risks as a separate key audit matter but took this into account as part of the key audit matter on impairment of loans and receivables.

We ensured that the audit team included the appropriate skills and competences which are needed for the audit of a banking institution. We therefore included specialists in the areas of IT, tax, valuation of financial instruments and real estate valuation in our team.

The outline of our audit approach was as follows:

Materiality
- Overall materiality: EUR 20.3 million (2021: EUR 17.5 million).

Audit scope
- We conducted audit work on the Company and its subsidiaries BNG Gebiedsontwikkeling B.V. and Hypotheekfonds voor Overheidspersoneel.
- In our assessment of the IT landscape, we made use of the ISAE 3402 type 2 report of Centric FSS for the IT activities outsourced to that organisation.

Key audit matters

- Impairment of loans and receivables
- Valuation of financial instruments.

Materiality

The scope of our audit was influenced by the application of materiality, which is further explained in the section 'Our responsibilities for the audit of the financial statements'.

Based on our professional judgement we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and to evaluate the effect of identified misstatements, both individually and in aggregate, on the financial statements as a whole and on our opinion.

Overall group materiality
EUR 20.3 million (2021: EUR 17.5 million).
Basis for determing materiality
We used our professional judgement to determine overall materiality. As a basis for our judgement we used 5% of profit before tax.
Rationale for benchmark applied
We used profit before tax as the primary benchmark, a generally accepted auditing practice, based on our analysis of the common information needs of users of the financial statements. On this basis, we believe that profit before tax is an important metric for the financial performance of the Group.
We also take misstatements and/or possible misstatements into account that, in our judgement, are material for qualitative reasons.
We agreed with the supervisory board that we would report to them misstatements identified during our audit above EUR 1.0 million (2021: EUR 0.9 million) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

The scope of our group audit

BNG Bank N.V. is the parent company of a group with BNG Gebiedsontwikkeling B.V. and Hypotheekfonds voor Overheidspersoneel B.V. as its 100% subsidiaries. The financial information of these subsidiaries is included in the consolidated financial statements of BNG Bank N.V. All consolidated positions and transactions in the financial statements were in scope of our audit.

We tailored the scope of our audit to ensure that we performed sufficient work to be able to give an opinion on the financial statements as a whole, taking into account the management structure of the Group, the nature of operations of its components, the accounting processes and controls, and the markets in which the Group operates.

The Company has outsourced the largest part of its IT activities and payment services to Centric FSS. In our assessment of the IT landscape, we made use of the ISAE 3402 Type 2 report of Centric FSS. We held a planning meeting with the ISAE 3402 service-provider's auditor of Centric FSS, discussed progress and interim findings of the audit and, finally, evaluated the ISAE 3402 assurance report once it was finalised. Based on these procedures performed, we conclude that in the context of our audit of the financial statements of BNG Bank N.V., we could rely on the ISAE 3402 Type 2 assurance report of Centric FSS.

By performing the procedures above at components, combined with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence on the Group's financial information, as a whole, to provide a basis for our opinion on the group financial statements.

Audit approach fraud risks

We identified and assessed the risks of material misstatements of the financial statements due to fraud. During our audit we obtained an understanding of the entity and its environment and the components of the internal control system. This included Executive Committee's risk assessment process, Executive Committee's process for responding to the risks of fraud and monitoring the internal control system and how the Supervisory Board exercised oversight, as well as the outcomes. We refer chapter 2 'International Business Operations', section 2.3 'Compliance' for management's fraud risk assessment and chapter 6 'Report of the Supervisory Board' section 6.4 'Activities of the Supervisory Board committees' in which the Supervisory Board reflects on this fraud risk assessment.

We evaluated the design and relevant aspects of the internal control system and in particular the fraud risk assessment, as well as the code of conduct, whistle blower procedures and incident registration. We evaluated the design and the implementation and, where considered appropriate, tested the operating effectiveness of internal controls designed to mitigate fraud risks.

We asked members of the Executive Committee as well as the internal audit department, legal and compliance department, and the Supervisory Board whether they are aware of any actual or suspected fraud. This did not result in actual or suspected fraud that may lead to a material misstatement.

As part of our process of identifying fraud risks, we, evaluated fraud risk factors with respect to financial reporting fraud, misappropriation of assets and bribery and corruption. We evaluated whether these factors indicate that a risk of material misstatement due to fraud is present.

The audit procedures to respond to the assessed risks include, amongst others, evaluation of the design and the implementation of internal controls that intend to mitigate fraud risks (such as processing and review of journal entries), back testing of prior year's estimates, and procedures on unexpected journal entries with the support of data analytics. Furthermore, we paid attention to significant transactions outside the normal course of business. With regards to the risk of fraud in revenue recognition, based on our risk assessment procedures, we concluded that this risk is related to revenue recognition in areas that are more complex, non-systematic or manual in nature such as Results from associates and joint ventures and Market value changes of financial instruments. We perform procedures to address this risk, including evaluation of the design and implementation of relevant internal controls, and procedures over revenue recognition such as testing material investments in Results from associates and joint ventures to ensure that the income recorded had occurred and is valued correctly, and the appropriateness of the valuation methodologies, inputs and assumptions applied in the valuation of financial instruments. We also considered the outcome of our other audit procedures and evaluated whether any findings were indicative of fraud or non-compliance.

As disclosed in chapter 2 'International Business Operations', section 2.4 'Risk Management' in the annual report the threat of cyber attacks have been identified as a specific risk for the company. The engagement team has evaluated this risk for BNG, taking into consideration the IT activities outsourced to a third party. Weaknesses identified in certain IT general controls elevate the fraud risk related to cyberattacks.

In response we performed procedures with respect to access management, security event monitoring, segregation of duties in systems relevant to the audit and monitoring procedures and controls over outsourced activities. We performed additional procedures evaluating financial statement closing procedures, complaints registration and loggings of incidents and complaints. Our procedures did not identify indications of security breaches or intrusion.

Finally, we incorporated an element of unpredictability in our audit. We also send, obtained and read internal lawyers' letter and external firm lawyers' letters and correspondence with regulators. During the audit we remained alert to indications of fraud. We also considered the outcome of our other audit procedures and evaluated whether any findings were indicative of fraud or non-compliance of laws and regulations. Whenever we identify any indications of fraud, we re-evaluate our fraud risk assessment and its impact on our audit procedures.

This did not lead to indications of fraud potentially resulting in material misstatements.

Audit approach to non-compliance with Laws and regulations

The objectives of our audit, in respect to non-compliance with laws and regulations are:
- to identify and assess the risk of material misstatement of the financial statements due to non-compliance with laws and regulations; and
- to obtain reasonable assurance that the financial statements, taken as a whole, are free from material misstatement, whether due to fraud or error when considering the applicable legal and regulatory framework.

In line with Standard 250 in our audit approach we made a distinction between those laws and regulations which:
- have a direct effect on the determination of material amounts and disclosures in the financial statements. For this category we have obtained audit evidence regarding compliance with the provision of those laws and regulations; and
- Does not have a direct effect on the determination of material amounts and disclosures in the financial statement, but where compliance may be fundamental to the operating aspects of the business, to the Company's ability to continue its business or to avoid material penalties. For this category, we performed audit procedures to identify non-compliance with those laws and regulations that may have a material effect on the financial statements. We identified that the risk of non-compliance with laws and regulates relates mainly to the laws and regulations which have an indirect impact on the financial statements, such as the Anti-Money Laundering and Anti-Terrorist Financing Act (Wwft) (including regulations on Anti-Money Laundering (AML) Client Due Diligence (CDD)), Markets in Financial Instruments Directive II (MiFID II), transaction reporting and General Data Protection Regulation (GDPR).

The primary responsibility for the prevention and detection non-compliance with laws and regulations lies with the Executive Committee with the oversight of the Supervisory Board.

Audit approach on going concern

As disclosed in notes 'Critical accounting principles applied for valuation and the determination of the result', 'Liquidity and funding risk' and 'Capital and solvency' in the financial statements, the Executive Committee performed their assessment of the Group's ability to continue as a going concern for the foreseeable future and has not identified events or conditions that may cast significant doubt on the Group's ability to continue as a going concern (hereafter: going concern risks). Our procedures to evaluate Executive Committee's going concern assessment included, amongst others:
- Considering whether management's going concern assessment includes all relevant information of which we are aware as a result of our audit.
- Understanding the Bank's medium-term plan including the group's funding plan, specifically for the next 12 months.
- Understanding and evaluating the Group's stress testing of liquidity and regulatory capital requirements, including severity of the stress scenarios that were applied.
- Considering the results of our (other) risk assessment procedures and related activities performed to identify events or conditions that may cast significant doubt on the Group's ability to continue as a going concern.

- Reading and evaluating the adequacy of the disclosures made in the financial statements in relation to going concern; and
- Performing inquiries of the Executive Committee as to their knowledge of going concern risks beyond the period of their assessment.

Our procedures did not result in outcomes contrary to management's assumptions and judgments used in the application of the going concern assumption.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the financial statements. We have communicated the key audit matters to the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters identified by our audit and that we discussed. In this section, we described the key audit matters and included a summary of the audit procedures we performed on those matters.

Key audit matter	Our audit work and observations
Impairment of loans and receivables *Refer to the accounting principle 'Impairment of financial assets', note 31 'Net impairment losses on financial assets' and note 37 'Impairment of financial assets and off-balance sheet commitments' in the consolidated financial statements.* The lending to clients classified as loans and advances measured at amortized cost amounts to €90 billion as at 31 December 2022. Most of the loan portfolio relates to loans that are guaranteed by a (central) government body or by Waarborgfonds Sociale Woningbouw (WSW) or Waarborgfonds voor de zorgsector (Wfz). The credit risk inherent in this category is limited as explained in the risk section in the financial statements. Therefore, the expected credit loss on these loans is considered low. However, the Company also has an unguaranteed loan portfolio amounting to €8,4 billion that has a higher risk of impairments. The impairment provision for loans and advances as per 31 December 2022 is €158 million and the net impairment charge for loans and advances recognized in 2022 in the income statement amounts to €52 million. Areas of estimation uncertainty and management judgment: In determining the expected credit losses for loans and advances, management has to apply judgment in a number of areas. Amongst others this applies to the choices and judgement made in the impairment methodology such as determining what is considered a significant increase in credit risk (SICR), what forward looking macro-economic information is relevant to measure expected credit losses for loans and receivables and managements estimates of probabilities of default and loss given default. Models and assumptions: To calculate expected credit losses for stage 1 and 2, the Executive Committee estimated the probability of default (PD) and the loss given default (LGD) and the exposure at default (EAD). The Company's loan portfolio has a low default character and as a result, there is limited internal historical data to support and back-test the applied PDs and LGDs. Management used its internally developed credit rating models to estimate the PD for exposures for which no external rating is available. Given the low default character of the Company's loan portfolio, the rating models were considered expert models and required a high degree of judgement to stratify clients in rating classes.	**Evaluating accounting policy choices:** We evaluated how management applied IFRS 9 to determine whether it has been set up in accordance with the requirements included in the standard. We challenged management on their judgement in key accounting policy choices in the areas of what is considered to be a SICR, application of the low credit risk exemption and default definitions. We considered the policy choices in the application of IFRS 9 to be reasonable. **Assessing individual exposures:** For a sample of loans including loans for which management concluded that no SICR occurred, and loans where an SICR is observed we assessed management's assessment of the level of credit risk, for example by determining that there are no significant arrears in payments, take notice of the latest internal annual creditworthiness assessment, evaluation of latest financial information of counterparties and analysis of public available adverse news, if any. Our procedures did not return any different outcomes with respect to the staging compared to management. For credit-impaired loans, we evaluated the feasibility of the forecasted cash flows for each scenario and assessed management's analysis of the probability allocation of each individual scenario for each credit-impaired loan. In evaluating the forecasted cash flows we evaluated the values that management attributed to expected cash flows and available collateral to assess that this represents a best estimate. **Evaluating internal credit rating models:** With respect to the internal credit rating models used we evaluated the model governance procedures, credit modelling monitoring performed by risk management, reasonableness of the methodology applied in determining the credit ratings. In prior years management engaged with external experts to validate their internal credit rating models. As part of our audit procedures in these years, amongst others, we evaluated the competence, capability and objectivity of these external experts. In 2022 we assessed that management did not make any change to the models. We did not identify any indicators of possible management bias in determining internal credit ratings and corresponding PD's. With respect to the forward looking macro-economic information, we challenged on how the inputs for the various models were determined and to the extent possible compared this to external market data. In response to the impact of high volatility, low unemployment and high inflation BNG Bank introduced a 'management overlay / top level adjustment' in addition to the forward looking macroeconomic information specific to risks identified in the most vulnerable sector in the

Continuation of previous page

Key audit matter	Our audit work and observations
Also, with respect to the LGD used in the calculation of expected credit losses, the Executive Committee has applied significant judgement. The Company applies a basic flat LGD percentage based on the limited available historic default information. For credit-impaired loans, the impairment allowance is based on the weighted average of the net present value of expected future cash flows (including forward looking information and the valuation of underlying collateral) in three different scenarios. Given the complexity and judgement required to calculate the impairments of loans and advances and the impact it might have on results, this area is subject to a higher risk of material misstatement. Therefore, we have identified the impairment of loans and advances as a key audit matter in our audit.	portfolio, the healthcare sector. We evaluated the 'management overlay / top level adjustment' by obtaining supporting evidence that these adjustments were necessary to balance the risks in the underlying model. Furthermore, management reassessed the weightings given to different macroeconomic scenarios. We evaluated the changes and considerations made by management and reviewed the notes to the financial statements on sufficiently clear disclosures on the applied changes. On the LGD used in the calculation of expected credit losses, we challenged management's evaluation of the limited available historic information and the assumptions applied therein. In our audit approach we considered the potential impact of physical and transition climate-related risks on the allowance for expected credit losses. In this context we assessed stress tests and self-assessments performed by management including management's evaluation of the risk for the short and longer term. Finally, we assessed whether the disclosures in the consolidated financial statements on loan allowances and impairments of loans and receivables are adequate and in accordance with IFRS-EU. We found the disclosures to be appropriate in this context.
Valuation of financial instruments *Refer to the accounting policy 'fair value of financial instruments' and the disclosure note 'fair value of financial instruments' in the consolidated financial statements* The Company has financial instruments on its balance sheet that are measured at fair value through the income statement. The portfolio consists of €5,054 million of financial assets classified as level 2 and €9 million as level 3. Financial liabilities measured at fair value through the income statement classified as level 2 are in total €6,314 million as per 31 December 2022. The derivative portfolio with a fair value of €4,144 million recorded as assets and €6,129 million recorded as liabilities contains only level 2 instruments. **Level 3 financial instruments:** For level 3 financial instruments, management needs to estimate unobservable inputs that are significant to the measurement of the instrument in the valuation models to determine fair value. The balance for BNG Bank however relates to only one instrument with a limited value.	**Testing observable inputs:** For both level 2 and level 3 financial instruments we compared the observable inputs such as forward curves, discounting curves and volatility cubes to independent sources and external market available data and we assessed whether these inputs are in line with market and industry practise. For the own funding curve used to determine the own credit adjustment for financial liabilities measured at fair value we evaluated the reasonableness of the curve construction by comparing the input to market information available over the full term of the curve. Our procedures demonstrated that management's inputs fall within our range of reasonable outcomes. **Challenging unobservable inputs:** For the level 3 instrument, we challenged management on assumptions and methodology applied and validated the internal process performed to determine the inputs. As part of this, we also evaluated to what extent we identified any indicators of possible management bias in estimating fair value. Based upon our procedures we consider the unobservable inputs and judgements made in determining the fair value of level 3 instrument to be reasonable and in-line with market practices. **Independent revaluation:** For level 2 instruments, we performed an

Continuation of previous page

Key audit matter	Our audit work and observations
Level 2 financial instruments: For financial instruments classified as level 2 management estimates the fair value by using discounted cash flow models, option pricing models, modelling of double default effects and other valuation techniques. Judgement is required in determining the valuation model and policy. For level 2 instruments, management uses observable inputs to determine forward curves, discounting curves, volatility cubes, inflation curve and spread curves. For derivatives for which the Company has no strong credit support annex in place, a Credit Valuation Adjustment (CVA) is estimated in the calculation of the fair value. Given the complexity in certain valuation models and inputs, the size and diversity of the portfolio, and the impact that the portfolio has on the results, this area is subject to higher risk of material misstatement due to error. Therefore, we consider the fair value measurement of level 2 and 3 financial instruments a key audit matter.	independent valuation of a sample of positions, taking into consideration different categories of financial instruments divided in, amongst others, maturity, currency classes, curves and various valuation models applied. We performed these procedures to determine if management's valuation outcomes fell within a reasonable range of possible outcomes and to validate the design and operating effectiveness of the evaluated models and curves.

Report on the other information included in the annual report

The annual report contains other information. This includes all information in the annual report in addition to the financial statements and our auditor's report thereon.

Based on the procedures performed as set out below, we conclude that the other information:
- is consistent with the financial statements and does not contain material misstatements;
- contains all the information regarding the directors' report and the other information that is required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and the understanding obtained in our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing our procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of such procedures was substantially less than the scope of those procedures performed in our audit of the financial statements.

Executive Committee is responsible for the preparation of the other information, including the directors' report and the other information in accordance with Part 9 of Book 2 of the Dutch Civil Code.

Report on other legal and regulatory requirements

Our appointment

We were appointed as auditors of BNG Bank N.V. on 28 November 2014 by the Supervisory Board. This followed the passing of a resolution by the shareholders at the annual general meeting held on 23 April 2015. Our appointment has been renewed annually by shareholders and now represents a total period of uninterrupted engagement of 7 years.

European Single Electronic Format (ESEF)

BNG Bank N.V. has prepared the annual report in ESEF. The requirements for this are set out in the Delegated Regulation (EU) 2019/815 with regard to regulatory technical standards on the specification of a single electronic reporting format (hereinafter: the RTS on ESEF).

In our opinion, the annual report prepared in XHTML format, including the (partially) marked-up consolidated financial statements, as included in the reporting package by BNG Bank N.V., complies in all material respects with the RTS on ESEF.

The Executive Committee is responsible for preparing the annual report, including the financial statements in accordance with the RTS on ESEF, whereby the Executive Committee combines the various components into a single reporting package.

Our responsibility is to obtain reasonable assurance for our opinion whether the annual report in this reporting package complies with the RTS on ESEF.

We performed our examination in accordance with Dutch law, including Dutch Standard 3950N 'Assuranceopdrachten inzake het voldoen aan de criteria voor het opstellen van een digitaal verantwoordingsdocument' (assurance engagements relating to compliance with criteria for digital reporting).

Our examination included amongst others:
- Obtaining an understanding of the entity's financial reporting process, including the preparation of the reporting package.
- Identifying and assessing the risks that the annual report does not comply in all material respects with the RTS on ESEF and designing and performing further assurance procedures responsive to those risks to provide a basis for our opinion, including:
  - obtaining the reporting package and performing validations to determine whether the reporting package containing the Inline XBRL instance document and the XBRL extension taxonomy files have been prepared in accordance with the technical specifications as included in the RTS on ESEF;
  - examining the information related to the consolidated financial statements in the reporting package to determine whether all required mark-ups have been applied and whether these are in accordance with the RTS on ESEF.

No prohibited non-audit services

To the best of our knowledge and belief, we have not provided prohibited non-audit services as referred to in article 5(1) of the European Regulation on specific requirements regarding statutory audit of public-interest entities.

Services rendered

The services, in addition to the audit, that we have provided to the Company and its controlled entities, for the period to which our statutory audit relates, are disclosed in note 32 to the company financial statements.

Responsibilities for the financial statements and the audit

Responsibilities of the Executive Committee and the Supervisory Board for the financial statements

Executive Committee is responsible for:
- the preparation and fair presentation of the financial statements in accordance with EU-IFRS and with Part 9 of Book 2 of the Dutch Civil Code; and for
- such internal control as Executive Committee determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, Executive Committee is responsible for assessing the Company's ability to continue as a going-concern. Based on the financial reporting frameworks mentioned, Executive Committee should prepare the financial statements using the going-concern basis of accounting unless Executive Committee either intends to liquidate the Company or to cease operations or has no realistic alternative but to do so. Executive Committee should disclose in the financial statements any event and circumstances that may cast significant doubt on the Company's ability to continue as a going concern.

The Supervisory Board is responsible for overseeing the Company's financial reporting process.

Our responsibilities for the audit of the financial statements

Our responsibility is to plan and perform an audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence to provide a basis for our opinion. Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error and to issue an auditor's report that includes our opinion. Reasonable assurance is a high but not absolute level of assurance, which makes it possible that we may not detect all material misstatements. Misstatements may arise due to fraud or error. They are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A more detailed description of our responsibilities is set out in the appendix to our report.

Amsterdam, 17 March 2023
PricewaterhouseCoopers Accountants N.V.

Original has been signed by: J.M. de Jonge RA

Appendix to our auditor's report on the financial statements 2022 of BNG Bank N.V.

In addition to what is included in our auditor's report, we have further set out in this appendix our responsibilities for the audit of the financial statements and explained what an audit involves.

The auditor's responsibilities for the audit of the financial statements

We have exercised professional judgement and have maintained professional scepticism throughout the audit in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit consisted, among other things of the following:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the intentional override of internal control.
- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Executive Committee.
- Concluding on the appropriateness of Executive Committee's use of the going-concern basis of accounting, and based on the audit evidence obtained, concluding whether a material uncertainty exists related to events and/or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report and are made in the context of our opinion on the financial statements as a whole. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures, and evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Considering our ultimate responsibility for the opinion on the consolidated financial statements, we are responsible for the direction, supervision and performance of the group audit. In this context, we have determined the nature and extent of the audit procedures for components of the Group to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole. Determining factors are the geographic structure of the Group, the significance and/or risk profile of group entities or activities, the accounting processes and controls, and the industry in which the Group operates. On this basis, we selected group entities for which an audit or review of financial information or specific balances was considered necessary.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. In this respect, we also issue an additional report to the audit committee in accordance with article 11 of the EU Regulation on specific requirements regarding statutory audit of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Supervisory Board, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Assurance report of the independent auditor

To: the General Meeting and Supervisory Board of BNG Bank N.V.

Assurance report on the sustainability information 2022

Our opinion
In our opinion the sustainability information included in the annual report 2022 of BNG Bank N.V. presents, in all material respects, a reliable and adequate view of:
- the policy and business operations with regard to corporate social responsibility; and
- the thereto related events and achievements for the year ended 31 December, 2022 in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) and the applied supplemental reporting criteria as included in the section 7.2 'Reporting principles'.

What we have audited
We have audited the sustainability information included in the following sections of the annual report for the year ended 31 December 2022, (hereafter: "the sustainability information"):
- Paragraph 1.1 'Our Road to Impact'
- Paragraph 1.3 'Partnership in client sectors'
- Paragraph 1.4 'Strong position in money and capital markets maintained'
- Paragraph 2.1 'Employees'
- Paragraph 2.2 'CO_2 emissions of business operations'
- Paragraph 7.1 'Value creation and materiality'
- Paragraph 7.2 'Reporting principles'

This audit is aimed at obtaining a reasonable level of assurance.

The basis for our opinion
We conducted our audit in accordance with Dutch law, including Dutch Standard 3810N 'Assuranceopdrachten inzake maatschappelijke verslagen' ('Assurance engagements relating to sustainability reports'), which is a specific Dutch Standard that is based on the International Standard on Assurance Engagements (ISAE) 3000 'Assurance Engagements other than Audits or Reviews of Historical Financial Information']. Our responsibilities under this standard are further described in the section 'Our responsibilities for the audit of the sustainability information' of our report.

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence and quality control
We are independent of BNG Bank N.V. in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assuranceopdrachten' (ViO – Code of Ethics for Professional Accountants, a regulation with respect to independence). Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA – Dutch Code of Ethics).

PwC applies the 'Nadere voorschriften kwaliteitssystemen' (NVKS – Regulations for quality systems) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and other relevant legal and regulatory requirements.

Reporting criteria

The reporting criteria used for the preparation of the sustainability information are the Sustainability Reporting Standards of the Global Reporting Initiative (GRI), and the applied supplemental reporting criteria as included in section 7.2. ‘Reporting principles’ of the annual report. The Sustainability Reporting Standards of the Global Reporting Initiative (GRI) used are listed in the GRI Content Index as published on the company’s website.

The absence of an established practice on which to draw, to evaluate and measure sustainability information allows for different, but acceptable, measurement techniques and can affect comparability between entities, and over time.

Consequently, the sustainability information needs to be read and understood together with the reporting criteria used.

Limitations to the scope of our audit

The sustainability information includes prospective information such as expectations on ambitions, strategy, plans and estimates and risk assessments. Inherent to this prospective information, the actual future results are uncertain, and are likely to differ from these expectations. These differences may be material. We do not provide any assurance on the assumptions and achievability of prospective information.

In the sustainability information references are made to external sources or websites. The information on these external sources or websites is not part of the sustainability information audited by us. We therefore do not provide assurance on this information.

Our opinion is not modified in respect to these matters.

Responsibilities for the sustainability information and the audit

Responsibilities of the Executive Committee and the Supervisory Board for the sustainability information

The Executive Committee of BNG Bank N.V. is responsible for the preparation of reliable and adequate sustainability information in accordance with the reporting criteria as included in section 7.2 ‘reporting criteria’, including selecting the reporting criteria, the identification of stakeholders and the definition of material matters. The Executive Committee is also responsible for selecting and applying the reporting criteria and for determining that these reporting criteria are suitable for the legitimate information needs of stakeholders, taking into account applicable law and regulations related to reporting. The choices made by the Executive Committee regarding the scope of the sustainability information and the reporting policy are summarized in sections 7.1 ‘Value creation and materiality’ and 7.2 ‘Reporting principles’ of the annual report.

Furthermore, the Executive Committee is responsible for such internal control as the Executive Committee determines necessary to enable the preparation of the sustainability information that is free from material misstatement, whether due to fraud or error.

The Supervisory Board is responsible for overseeing the company’s reporting process on the sustainability information.

Our responsibilities for the audit of the sustainability information

Our responsibility is to plan and perform the audit in a manner that allows us to obtain sufficient and appropriate assurance evidence to provide a basis for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material errors and fraud.

Procedures performed

We have exercised professional judgement and have maintained professional scepticism throughout the audit, in accordance with the Dutch Standard 3810N, ethical requirements and independence requirements. Our procedures included, amongst other things, the following:

- Performing an analysis of the external environment and obtaining an understanding of relevant sustainability themes and issues and the characteristics of the company.
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the *sustainability information*. This includes the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made by the Executive Committee.
- Obtaining an understanding of the systems and reporting processes for the sustainability information, including obtaining an understanding of internal control relevant to our audit, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Identifying and assessing the risks if the sustainability information is misleading or unbalanced, or contains material misstatements, whether due to errors or fraud. Designing and performing further audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk that the sustainability information is misleading or unbalanced, or the risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from errors. Fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Our other audit procedures consisted amongst others of:
  - Interviewing management (and/or relevant staff) at corporate (and business/division/cluster/local) level responsible for the sustainability strategy, policy and results.
  - Interviewing relevant staff responsible for providing the information for, carrying out internal control procedures on, and consolidating the data in the sustainability information.
  - Obtaining assurance evidence that the sustainability information reconciles with underlying records of the company.
  - Evaluating relevant internal and external documentation, on a test basis, to determine the reliability of the information in the sustainability information.
- With regard to the calculated CO2 emissions related to BNG Bank's loan portfolio per 31-12-2021 based on the PCAF methodology we have performed audit procedures on the application of the methodology, not on the actual emissions itself. Audit procedures performed include:
  - Assessed the reasonableness of the scope of the measurement and the suitability of the methodology chosen;
  - Interviewed the management expert of BNG Bank N.V. for a key understanding of the calculated CO2 emissions of the loan portfolio;
  - Reviewed the final report of the measurement containing a description of the calculation models, assumptions used and the outcome(s) of the calculated CO2 emissions;
  - Obtaining a key understanding of the calculation model;
  - Tested the relevant assumptions on suitability, reasonableness, completeness and relevance;
  - Reconciling the loan portfolio balance per 31 December 2021 to the underlying financial administration;
  - Performed recalculation and reperformance of the calculations made and inspected underlying documents;
  - Obtaining underlying support for most significant assumptions/estimates.

- Evaluating the consistency of the sustainability information with the information in the annual report, which is not included in the scope of our audit.
- Evaluating the overall presentation, and content of the sustainability information.
- Considering whether the sustainability information as a whole, including the disclosures, reflects the purpose of the reporting criteria used.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit, including any significant findings that we identify during our audit.

Amsterdam, 17 March 2023
PricewaterhouseCoopers Accountants N.V.

Original has been signed by: J.M. de Jonge RA

Stipulations of the articles of association concerning profit appropriation

Article 20

20.1 Profits shall be distributed after adoption by the general meeting of shareholders of the annual accounts showing that this is permissible.

20.2 The company may make payments to the shareholders from the profits available for distribution only in so far as its equity capital exceeds the amounts of the paid-up part of the capital plus the reserves which have to be kept by law.

20.3 First of all, if possible, the profits available for distribution shall be used to add an amount of ten per cent (10%) of the profit of the financial year as evidenced by the annual accounts to the general reserve; out of any surplus remaining thereafter, the shareholders shall, if possible, be paid five per cent (5%) of the nominal amount of their shareholding.

20.4 The remainder shall be paid to the shareholders in proportion to the nominal amount of their shareholdings, in so far as the general meeting of shareholders does not allocate this to reserves.

20.5 The company shall be empowered to make interim distributions, subject to the provisions of Article 105, paragraph 4, of Book 2 of the Civil Code, in the following manner:

a. the general meeting of shareholders requests the Executive Board in writing to submit a proposal for an interim distribution;
b. if the Executive Board has not, within six months after receipt of such a request, submitted a proposal approved by the Supervisory Board to the general meeting of shareholders, the general meeting of shareholders shall be free to resolve to make an interim distribution;
c. if the general meeting of shareholders has rejected the proposal of the Executive Board approved by the Supervisory Board, the general meeting of shareholders shall again request the Executive Board in writing to submit a proposal within eight weeks after receipt of such a request. This proposal by the Executive Board again requires the approval of the Supervisory Board;
d. if the general meeting of shareholders again rejects the proposal as referred to at c of this article 20 paragraph 5, the general meeting of shareholders shall be free to resolve to make an interim distribution.

Objectives as defined in the Articles of Association

Object
Article 2

2.1 The object of the company shall be to conduct the business of banker on behalf of public authorities.

2.2 In the context of its object as referred to in paragraph 1 the company shall engage, inter alia, in taking in and lending moneys, granting credits in other ways, providing guarantees, arranging the flow of payments, conducting foreign exchange transactions, acting as adviser and broker in the issue of and trade in securities, and keeping, managing and administering securities and other assets for third parties, as well as to incorporate and to participate in other enterprises and/or legal persons, whose object is connected with or conducive to any of the foregoing. The company shall be empowered to perform all acts which may be directly or indirectly conducive to its object.

2.3 The term public authorities as referred to in paragraph 1 means:

a. municipalities and other legal persons in the Netherlands under public law as referred to in Article 1, paragraphs 1 and 2, of Book 2 of the Civil Code;

b. the European Communities and other bodies possessing legal personality to which part of the function of the European Communities has been entrusted pursuant to the treaties establishing the European Communities;

c. Member States of the European Communities and other bodies possessing legal personality to which part of the administrative function of such a Member State has been entrusted pursuant to the law of that Member State;

d. legal persons under private law;

- half or more of whose managing directors are appointed directly or indirectly by one or more of the bodies referred to in a, b and c of this paragraph; and/or
- half or more of whose share capital is provided directly or indirectly by one or more of the bodies referred to in a, b and c; and/or
- half or more of the income side of whose operating budget is provided or secured directly or indirectly by one or more of the bodies referred to in a, b and c on the basis of a scheme, bye-law or law adopted by one or more of such bodies; and/or
- whose operating budget is adopted or approved directly or indirectly by one or more of the bodies referred to in a, b and c on the basis of a scheme, bye-law or law adopted by one or more of such bodies; and/or
- whose obligations towards the company are guaranteed directly or indirectly by one or more of the bodies referred to in a, b and c or will be guaranteed pursuant to a scheme, bye-law or law adopted by one or more of such bodies, for which purpose obligations include non-guaranteed obligations resulting from prefinancing or other financing which, after novation, will create obligations that will be guaranteed by one or more of such bodies pursuant to a scheme, bye-law or law adopted by one or more of such bodies; and/or
- who execute a part of the governmental function pursuant to a scheme, bye-law or law adapted by one or more of the bodies referred to in a, b and c.

BANK

Driven by social impact

Colophon

Editorial: BNG Bank
Design- and publication software: Tangelo Software B.V.
Design: Public Cinema
Photography: Carla Kogelman, Kasper Veenstra

March 2023

BNG Bank

BNG Bank N.V.
Koninginnegracht 2
P.O. Box 30305
2500 GH The Hague
The Netherlands
T +31 70 3750 750
communicatie@bngbank.nl
bngbank.com