



Methodology for measuring BNG Bank's impact

Abstract: Description of the methodology
for determining % impact in 2023

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Driven by social impact

Contents

Introduction	3
Impact framework	4
Introduction	4
Steps taken	4
Outcomes: the client's social impact	6
Determining relevant indicators	7
Introduction	7
Data availability is an important enabling condition	7
Align operations to indicators via central KPI	7
SDG 3: Good health and well-being – Ensure healthy lives and promote well-being for all at all ages	7
SDG 4: Quality education – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	8
SDG 7: Affordable and clean energy – Ensure access to affordable, reliable, sustainable and modern energy for all	8
SDG 11: Sustainable cities and communities – Make cities and human settlements inclusive, safe, resilient and sustainable	9
SDG 13: Climate action – Take urgent action to combat climate change and its impacts	10
Principles applied in the calculation	12
Principle 1: We can measure whether we are on track with our ambition	12
Principle 2: The methodology reflects areas that can be influenced	12
Principle 3: We want to be able to start measuring quickly	13
Principle 4: We strive for consistency	13
Principle 5: In due course, we can revise and expand the methodology	13
Climate commitment	14
Appendix 1: Comprehensive overview of indicators for 2022	15
Appendix 2: Matrix – client groups plotted by indicators	16
Appendix 3: Validation of methodology	18
List of references	19

Introduction

In 2020, BNG Bank stated an ambition to have 10% more social impact in 2023 compared to 2021. This was laid down in the 2020 strategy memorandum. To determine whether BNG Bank is on track to achieve that ambition, it is important to properly define and be able to measure impact. In addition, methods for determining and calculating the impact need to be selected. The relevant methodology is described in this document.

Besides this document, a *Reporting Manual* will be produced and an *Engagement Strategy* will be formulated.

What	Who	Why
<i>Methodology for measuring impact</i>	Anne Dijkstra & Anita de Horde, independent advisers	Describes how indicators were selected and how the impact percentage is calculated.
<i>Reporting manual</i>	Sanne Paenen and Floris de Jongh, Het PON & Telos	Describes in detail how indicator data are produced, where the data come from and how reliability and consistency are safeguarded.
<i>Engagement Strategy</i>	Michiel Ellens, Business Development BNG Bank	Describes how BNG Bank aims to influence its clients so as to produce faster or more social impact.

Figure 1: Overview of background documents relating to Measuring BNG Bank's Impact

Impact framework

Introduction

BNG Bank decided to target 10% impact via 5 of 17 Sustainable Development Goals (SDGs) that were determined by the United Nations in 2015 as the global 2030 agenda for sustainable development. BNG Bank selected the following SDGs, which are closely aligned with its principal client groups:

- SDG 3: *Good health and well-being*
- SDG 4: *Quality education*
- SDG 7: *Affordable and clean energy*
- SDG 11: *Sustainable cities and communities*
- SDG 13: *Climate action*

The targets underlying these SDGs are defined and they underpinned the design and implementation of the impact framework for BNG Bank.

Steps taken

To implement the impact framework, we took the following three steps to achieve measurable social impacts: 1) a check against the 169 SDG targets 2) a check against relevant frameworks such as the Monitor of Well-being (Monitor Brede Welvaart) and the SDG Impact report by the Sustainable Finance Platform chaired by the Dutch Central Bank DNB (see 1 and 2 in list of references in the appendix 3) a check for alignment with BNG Bank's clients. See Figure 2 below for an overview of the steps taken.



Figure 2: Action plan to produce measurable social impacts

We verified the reference against SDG targets by assessing the extent to which the targets underlying the 5 selected SDGs match the outcome targets developed by BNG Bank. Only a limited number were suitable for this. This is shown in Figure 3.

Outcome targets have been matched with SDG targets and translated into social impacts






	BNG contributes to	Description of SDG target	Measurable social impacts
	Health protection and accessible healthcare	3.9 Reduce number of deaths and illnesses from air contamination	IMPROVE AIR QUALITY
		3.8 Access to quality essential healthcare services	REDUCE WAITING LISTS
	Good education facilities	4a. Build and upgrade education facilities	UPGRADE OR RENEW EDUCATIONAL BUILDINGS
	Increase energy efficiency	7.3 By 2030, double the global rate of improvement in energy efficiency	DECREASE IN ELECTRICITY CONSUMPTION X KWH OF RENTAL HOUSING, EDUCATIONAL AND HEALTHCARE BUILDINGS
	Increased share of renewable energy in the energy mix	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	INCREASE IN NUMBER OF HOUSEHOLDS THAT USE RENEWABLE ENERGY
	Available and affordable rental housing	11.1 By 2030, ensure access for all to affordable housing	INCREASE IN AVAILABLE OWNER-OCCUPIED AND RENTAL HOUSING
			INCREASE IN AFFORDABLE RENTAL HOUSING
	Liveable neighbourhoods	11.1 By 2030, ensure access for all to affordable housing 11.2 By 2030, provide access to sustainable transport systems 11.6 By 2030, manage adverse environmental impact of waste	INCREASE IN NUMBER OF NEWBUILD HOMES INCREASE OF SUSTAINABLE PUBLIC TRANSPORT DECREASE IN MUNICIPAL WASTE
	Climate mitigation	13.2 Integrate climate change measures into national policies, strategies and planning	DECREASE IN OUR CLIENTS' GREENHOUSE GAS EMISSIONS
		13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	INCREASE NUMBER OF GREEN ROOFS AND REDUCE FLOODING RISKS



Figure 3: Match Outcome targets of BNG Bank with SDG target and the translation into social impacts

Also, the four principal client groups of BNG Bank were identified for the purpose of calculating social impact: municipalities, housing associations, educational institutions and healthcare institutions. As the share of municipalities and housing associations within BNG Bank's (2020) balance sheet is 81%, extensive consideration was given to the associations' plans (see list of references) of and/or discussions were held with the Association of Netherlands Municipalities (VNG) and Aedes, the association of housing corporations.

Outcomes: the client's social impact

In order to ascertain clearly whether impact can be produced on the 5 SDGs, the 5 SDGs were translated into formulated 'outcome targets'. Outcome targets are used to clarify how social impact is produced via the clients financed by BNG Bank. See Figure 3 in the preceding section for an overview of the outcome targets.

BNG Bank will align operations to these different outcome targets. BNG Bank mainly provides balance sheet financing, and with this type of financing, it is ultimately the client that produces the social impact. The bank mainly aims to deploy the tool of engagement with clients to influence their social impact. Engagement refers to the way in which BNG Bank engages in dialogue with its clients on social themes. Those themes are described in the next chapter. The engagement strategy has been elaborated in a separate document for each client group. No direct link is made in this methodology between the social impact that clients produce and the engagement activities carried out by BNG Bank.

The demarcation of the methodology described in this document is focused on determining progress on the outcomes, i.e. progress on social impact of BNG Bank's clients. To measure progress on this, indicators have been defined which have been used for a first baseline measurement in 2021, and a second measurement in 2022. The next chapter explains what those indicators are, by which client group these can be influenced and how progress on those indicators will be measured.

Determining relevant indicators

Introduction

This chapter describes, for each SDG, which steps were taken to select relevant indicators on which BNG Bank will report annually as from 2021. This starts with the formulated outcome targets (see previous chapter), the SDG targets and BNG Bank's material client groups.

Data availability is an important enabling condition

An important enabling condition for the indicators is that the underlying data for an indicator must be available in public sources (i.e.: CBS microdata). The underlying reason for this is to safeguard continuity and independence as well as to ensure that the data are recognisable for clients.

Besides this document that describes the methodology for calculating impact, a Reporting Manual will also be drawn up by Het Pon Telos, the data provider for the baseline measurement and for the first measurement. This will describe in detail how the indicator is produced, where the data come from and what safeguards/process controls are applied to safeguard reliability, consistency, etc.

Align operations to indicators via central KPI

The selected indicators are not treated as Key Performance Indicators, or KPIs. BNG Bank has one central KPI, which is: 10% impact in 2023 compared to 2021. This is an aggregated KPI (see Principles chapter).

SDG 3: Good health and well-being – Ensure healthy lives and promote well-being for all at all ages

Outcome target: With its clients, BNG Bank aims to contribute to health protection via

> Good air quality

This outcome target and these themes and indicators refer to SDG target 3.9: *'By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and **air**, water and soil **pollution and contamination**'¹.*

Improving air and water quality are key themes for the following three types of client groups of BNG Bank: municipalities, water supply companies and healthcare institutions. Clean air, clean drinking water and surface water are key general necessities of life. High fine particle concentrations in the air or poor water quality can lead to serious health issues. Measures to improve

these areas remain important. The general air quality in the Netherlands has improved and is moving slightly more towards the SDG target (see page 169 of *Monitor Brede Welvaart 2021*) but discussions concerning nitrogen continue unabated. Clean water remains a matter of concern that requires improvement in the Netherlands (see pages 171 and 206 in *Monitor Brede Welvaart*). A top priority in the *Green Deal for Healthcare*, which banks and other organisations agreed with healthcare institutions in 2018, is to reduce the level of drug residues and fluid contrast agents in our drinking water. We will add this indicator as soon as it is available.

Indicators 2021 – 2024 for air quality to be measured:

- Nitrogen dioxide emissions in kg
- Fine particle emissions (PM2.5) in kg
- Fine particle emissions (PM10) in kg
- NMVOC emissions in kg

Outcome target: With its clients, BNG Bank aims to contribute to accessible healthcare via:

> Minimum waiting times in healthcare

This outcome target refers to the following SDG target 3.8: *'Achieve universal health coverage, including financial risk protection, **access to quality essential healthcare services** and access to safe, effective, quality and affordable essential medicines and vaccines for all.'*

Due to the outbreak of COVID-19, 2020 and 2021 were very challenging years for the healthcare institutions that are clients of BNG Bank. The number of hospitalisations of coronavirus patients is high and regular healthcare is scaled back out of necessity. Substantial pressure was also seen in nursing and care homes. It is clear from the Monitor Brede Welvaart however that waiting times (particularly in outpatient care) in 2018 (i.e. before the pandemic) in the Netherlands are longer on average than in the rest of the EU and therefore the trend towards the SDG target has already been below par for some time. In 2018, the waiting time between the first appointment and the commencement of treatment exceeded the 'Treek-norms' in almost 29 percent of all cases. It is likely that waiting times have become even longer as a result of healthcare postponed owing to the coronavirus.

Unfortunately, data were not available for all of BNG Bank's clients in healthcare and therefore the following client groups are measured: mental healthcare, curative care and care homes.

¹ Reliable public data on hazardous chemicals, water and soil quality are not yet available at present. We will add these as soon as they are available.

Indicators 2021 – 2024 for waiting times of clients in mental healthcare, hospitals and care homes to be measured are:

- Average waiting times in accordance with the Treek-norms for: mental healthcare (total waiting time maximum 14 weeks)
- Average waiting times in accordance with the Treek-norms for: hospitals and outpatient care (outpatient care 6 weeks or hospitalisations 7 weeks)
- Waiting times for care homes in accordance with Treek-norms (13 weeks)

SDG 4: Quality education – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Outcome target: With its clients, BNG Bank aims to contribute to:

- > **Good education facilities via upgrading or renewing educational buildings**

This outcome target refers to the SDG target 4.a: *'Build and upgrade² education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.'*

Upgrading and renewing educational buildings is a major challenge for both municipalities and the educational institutions that BNG Bank finances. Municipalities are responsible for the accommodation of schools in primary education, secondary education and special education. Each year, they receive a contribution from the Municipal Fund to finance this. Universities and institutions in (higher) vocational education and adult education are themselves responsible for their accommodation. They do receive funds from the government to maintain their accommodation.

The report, prepared by McKinsey (2020) reveals that an under-investment in accommodation for education has arisen in the Netherlands. Following the financial crisis in 2009, the funding for education was not adjusted. Municipalities' expenditure on accommodation for education is still comparable to that in 2009, but owing to higher quality requirements (enforcement and implementation of the Buildings Decree (bouwbesluit)), sustainability improvement efforts in connection with the Dutch Climate Agreement and the increased construction costs, that amount equates to fewer new buildings built. In addition, the expenditure of PE (primary education) boards on accommodation has also increased; this is a direct consequence

of the fact that responsibility for exterior maintenance of school buildings has been shifted from municipalities to school boards.

Schools therefore face a huge challenge in maintaining or renewing their buildings. As partner of its clients in education, BNG Bank wants to provide support on this social challenge. The engagement strategy elaborates how.

Indicator 2021 – 2024 for upgrading of educational buildings to be measured:

- Amount of investment in buildings and grounds

SDG 7: Affordable and clean energy – Ensure access to affordable, reliable, sustainable and modern energy for all

Outcome target: Via its clients, BNG Bank aims to increase energy efficiency via:

- > **Decrease in energy consumption of housing association dwellings**
- > **Decrease in energy consumption of educational and healthcare buildings**

The outcome target refers to the SDG target 7.3: *'By 2030, double the global rate of improvement in **energy efficiency**'*

These SDGs are relevant for all of BNG Bank's client groups, and particularly for housing associations, healthcare and educational institutions. The current energy supply in the Netherlands is still largely based on fossil fuel combustion. There is a trend reversal within total energy consumption from green to grey. The Netherlands occupies a place in the rearguard compared to other EU countries, according to the 2020 Monitor Brede Welvaart (page 173).

Housing associations have been assigned an important role in implementing the Dutch Climate Agreement, one of the major challenges of which lies in improving the sustainability of housing stock and, in particular, making it gas-free and ensuring that residents reduce their energy consumption.

It was agreed in the Covenant on Energy Savings in the Rented Housing Sector (Covenant Energiebesparing Huursector) of 28 June 2012 that the housing association sector would aim to improve the sustainability of rented accommodation to, on average, energy label B by 2020 at a sector level.

² Unfortunately, reliable public data on upgrading of educational buildings are not available, but hugely material for BNG Bank. We will add an indicator as soon as the data are available.

Also, the Dutch Climate Agreement includes the ambition to make public real estate low in CO₂ by 2050. That entails an important role for municipalities, healthcare and educational institutions in reducing the electricity consumption of their buildings.

In order to demonstrate impact, it is important to report on the changes occurring in sourcing electricity: green electricity from various sources. However, because no public data are available on this at present, we have decided to include electricity consumption anyway, even if this may rise as homes and buildings are taken off the gas grid. That enables us to separately monitor developments in natural gas consumption and electricity consumption.

Indicators 2021 – 2024 to be measured:

Housing association dwellings

- Decrease in kWh electricity consumption of let housing association dwellings
- Decrease in m³ gas consumption of let housing association dwellings

Educational and healthcare institutions

- Decrease in kWh electricity consumption of educational institutions and healthcare buildings
- Decrease in m³ gas consumption of educational institutions and healthcare buildings

Outcome target: Via its clients, BNG Bank aims to contribute to a larger share of renewable energy in the energy mix

- > **Increase in number of households that use sustainable energy**

The outcome target refers to SDG target 7.2: *'By 2030, increase substantially the share of **renewable energy** in the global energy mix.'*

The current energy supply in the Netherlands is still largely based on fossil fuel combustion. Unfortunately, there is a trend reversal within total energy consumption from green to grey. The Netherlands occupies a place in the rearguard compared to other EU countries, according to the Monitor Brede Welvaart (page 172).

This SDG target is relevant mainly for our largest client groups: municipalities and housing associations. Municipalities have no direct influence on their inhabitants' use of sustainable energy, but they can devise incentives, such as setting up collective purchasing initiatives, offering energy loans or assisting businesses, institutions and owners' associations in getting started on solar energy. Housing associations can help maintain their tenants' energy bills at affordable levels by providing sustainable energy alternatives.

Indicator 2021 – 2024 to be measured:

- Total renewable energy (TJ)
- renewable energy generated per municipality (kWh)
- renewable heat per municipality (TJ)
- Capacity of solar panels per inhabitant
- Presence of solar panels per housing association dwelling

SDG 11: Sustainable cities and communities – Make cities and human settlements inclusive, safe, resilient and sustainable

Outcome target: Via its clients, BNG Bank aims to increase the number of available and affordable rental housing properties via:

- > **Increase in available rental housing**
- > **Increase in affordability of rental housing**

This outcome target refers to SDG target 11.1: *'By 2030, ensure **access for all to adequate, safe and affordable housing**'*

These topics are relevant for the housing associations that BNG Bank finances.

According to the Monitor Brede Welvaart (page 194), the affordability of homes in the Netherlands is under pressure, the price development of rental housing has increased and is therefore trending upwards. The number of available rental housing properties has edged up in the past few years.

Nonetheless, the report by Aedes has revealed that housing stock is decreasing. That is because the number of houses that is demolished or sold exceeds, on an aggregated basis over several years, the number that is added (new construction and purchases). In addition, part of the housing stock is being sold off by housing associations.

Indicators 2021 – 2024 of all housing associations in BNG Bank's portfolio to be measured:

- Skewed rent
- Average waiting times for access to rented social housing per municipality
- Increase in number of dwellings owned by housing association
- Increase in % of accessible rental housing: share of affordable rental housing
- Number of allocations within income limits
- Match stock (DaEB) and target group for housing benefit [%]

Outcome target: With its municipality clients, BNG Bank aims to create liveable neighbourhoods by:

- > **Decrease in municipal waste**
- > **Increase in the number of (owner-occupied/rented) dwellings**
- > **Increase in sustainable public transport**

This outcome target refers to the following SDG targets:

- SDG target 11.7 'By 2030, provide universal access to safe, inclusive and **accessible, green and public spaces**'
- SDG target 11.6 'By 2030, reduce the **adverse per capita environmental impact of cities**, including by paying special attention to **air quality**³ and **municipal and other waste management**'.
- SDG target 11.2 'By 2030, provide access to safe, affordable, accessible and **sustainable transport systems**'
- SDG target 11.1 'By 2030, ensure **access for all to adequate, safe and affordable housing**'

SDG 11 does not just concern housing (see outcome target and SDG target 11.1), but also the surroundings in which people reside and live. The SDG is aimed at making the local living environment safe, affordable, accessible and sustainable. There is substantial pressure on the living environment and available space. That is precisely the challenge for our largest client group: municipalities. As BNG Bank, we want to be an ally in the challenges facing municipalities.

Reducing waste is an important topic that we want to highlight here. Compared to other EU countries, the Netherlands largely occupies a mid-ranking position or a place towards the bottom of the list, according to the Monitor Brede welvaart (page 196). A positive development is that waste volumes that municipalities had to collect have declined over the years, and the trend is accordingly green. At a national policy level however, what lies ahead is the very considerable challenge to realise, by 2050, a fully circular economy, and municipalities have an important role to fulfil in stimulating a reduction of households' waste. Unfortunately, no data sources are available for the waste volumes of businesses and the industry.

Sustainable public transport is an important theme within SDG 11. This is also relevant for municipalities, given that they can exert direct influence in this area and given the policy goal to have all

new buses operating on 100% renewable energy or fuel by 2025. This is stated in the Administrative Agreement on Zero Emissions Bus Transport (Bestuursakkoord Zero Emissie Busvervoer). From 2030, all buses are required to have zero emissions.

Nature and public green spaces are another aspect of the living environment. Good access to public green spaces is not only nice but also has health benefits, as shown by studies conducted by VU Vrije Universiteit Amsterdam and KPMG. In the Netherlands, the rules set a distance of no more than 370 m to public green spaces, whereas globally this is 300 m⁴.

In addition, there are major concerns about the quantity of nature present in the Netherlands. The WWF's Living Planet Report in 2020 reveals a significant decrease in animal populations. This is largely attributable to the shortage of nature and the increase in nitrogen in the Netherlands. The BNG Bank aims to discuss nature as a topic with municipality clients, partly in view of the upcoming Convention on Biological Diversity COP15 and the creation of a Global Biodiversity Framework in 2022.

Indicators 2021 – 2024 of all municipalities in BNG Bank portfolio to be measured:

- Amount of residual household waste
- Amount of sorted household waste
- Increase in number of dwellings
- Distance to public transport
- % zero-emission buses
- % green electricity for metro, tram and ferry
- Public green spaces

SDG 13: Climate action – Take urgent action to combat climate change and its impacts

Outcome target: With all its clients, BNG Bank aims to contribute to climate mitigation via:

- > **Reducing greenhouse gases (CO₂ emissions)**

This outcome target refers to the following SDG target: "13.2 Integrate **climate change measures** into national policies, strategies and planning".

Climate action is an important topic for BNG Bank, and a few years ago it therefore started reporting on CO₂ emissions of the loan portfolio on the basis of the PCAF methodology⁵.

³ We already cover air quality under SDG 3, see section 1 in this chapter

⁴ 300 m distance to public green spaces has been set by the World Health Organization, page 11 in 'Urban Green Spaces, a Plan for Action: https://www.euro.who.int/_data/assets/pdf_file/0010/342289/Urban-Green-Spaces_EN_WHO_web3.pdf

⁵ PCAF is short for Partnerships Carbon Accounting Financials, a methodology for calculating CO₂ emissions for financial institutions, also see <https://carbonaccountingfinancials.com/>

The CO₂ emissions of the total portfolio are covered in the indicators 2021 – 2024 to be measured:

- CO₂ emissions of municipalities portfolio
- CO₂ emissions of housing associations
- CO₂ emissions of healthcare institutions
- CO₂ emissions of educational institutions

A comprehensive overview of all indicators referred to in this chapter is provided in Appendix 1.

Outcome target: With its clients, BNG Bank aims to contribute to climate adaptation via:

- > **Increase in number of green roofs**
- > **Reducing flooding risks**

This outcome target refers to the following SDG target:

*“13.1 **Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries**”.*

Indicators 2021 – 2024 to be measured:

- Number of m² of green roofs as percentage of roof surface area
- Number of inhabitants affected by flooding per acre

Principles applied in the calculation

We apply a number of principles as a starting point for determining the methodology and calculating whether our clients are achieving progress. Applying these principles entails consequences in the methodology. We discuss this for each principle in the following paragraph.

Principle 1: We can measure whether we are on track with our ambition

BNG Bank's ambition is described as 10% impact by 2023. What this means for the methodology is that the difference is apportioned across the years to a percentage of change, for 2023 compared to 2021. We have selected 2021 as the base year because that is the year of the baseline measurement. Converting this into a percentage enables us to depict the trend per indicator. This trend is therefore based on and calculated using different types of indicators.

Impact in the ambition refers to the impact that BNG Bank makes on the SDGs. As described earlier, these SDGs have been translated into outcomes. We track progress on the outcomes via indicators as described in the preceding chapter. The indicators depict a change percentage for 2023 compared to 2021. We are not aiming for an individual impact per SDG of 10%, but for impact on all 5 SDGs in the aggregate.

Principle 2: The methodology reflects areas that can be influenced

The methodology is aligned with areas that BNG Bank's clients can influence. This is reflected in two elements:

- 1) The areas that the client can influence with regard to an indicator
- 2) The relevance of that client at BNG Bank

The relationship between indicators and client groups

Some indicators cannot be influenced exclusively by any one client group. An intermediate step is therefore required, a matrix, to state which client groups can influence which indicators. That matrix is provided in Appendix 2. It shows the indicators on the left and the client groups (municipalities, housing associations, healthcare institutions and educational institutions) on the right. It depicts which indicator is applicable to which BNG Bank client group.

The relevance of the client at BNG Bank

The second element is the relevance of the client for BNG Bank. We translate this into the relative size of the loans. The client groups covered are: municipalities, housing associations, healthcare institutions and educational institutions. These are the parties that are in scope for us and in 2022 they represent 90% of lending in the balance sheet. We are therefore provisionally placing the remaining 10% out of the scope of this first version of the methodology. This relates mainly to smaller client groups where we will not conduct any engagement yet. In addition, these largely concern project financing. As direct impact is created through project financing, a different approach is required to determine impact.

The size of a client group is reflected in the weighting methodology. Impact areas where BNG Bank has more clients that, in their turn, can exert greater influence on achieving outcomes will be featured more strongly in the methodology than areas where this applies to a lesser extent to the bank.

This is a simplification of the reality, and may be an aspect that can be fine-tuned as the methodology continues to be developed.

The data reflect the bank's portfolio. For example, the indicator 'number of allocations within the income limits' relating to rental housing can be influenced by housing associations.

For this indicator, only the allocations of the housing associations that are clients of BNG Bank will be taken into account.

Example of detailed implementation of Principle 2

We will then apply a weighting methodology in which the weighting is determined by the type of client that influences the indicator. The greater the amount of lending to this client type (represented in the balance sheet), the greater the weighting will be. Table 1 below shows how we determine the weighting per indicator.

	Housing associations	Municipalities	Healthcare institutions	Educational institutions	Total
Number of indicators influenced by client group	8	22	3	4	37
Total lending (2021 balance sheet)	50%	31%	8%	1%	90%
Weighting per indicator	6.3%	1.4%	2.7%	0.3%	

If the indicator % affordable rental housing in the portfolio of housing associations then rises from 60% in 2021 to 65% in 2023, the impact is $65-60 / 60 = 8.3\%$. This indicator is influenced by housing associations, and therefore the weighting is 6.3%. The impact contributed by this indicator to the final impact percentage is: $6.3\% \times 8.3\% = 0.52\%$

The final impact percentage, against which we compare the 10% impact ambition, is the sum of all weighted impact indicators in the aggregate:

Indicator 1	0.52%
Indicator 2	x%
Indicator n	y%
Totaal	som (0.52% + x% + y%)

Principle 3: We want to be able to start measuring quickly

We carried out a baseline measurement in 2021 because the stated ambition of 10% impact by 2023 has an explicit timeline. The Reporting Manual provides further details on the availability of the data underlying the indicators, the data source for each indicator and the time period in which the measurement was carried out.

The methodology is only applied after two data points are available: Baseline measurement in 2021 and measurement carried out in 2022.

Principle 4: We strive for consistency

We strive for the greatest possible consistency in the methodology for 2021-2023. That allows us as well as our stakeholders to properly understand what the impact percentage reflects. We only depart from the consistency principle in the methodology if there is a clear cause and compelling rationale for doing so.

Principle 5: In due course, we can revise and expand the methodology

Striving for consistency in the methodology for 2021-2023 does not mean excluding improvements and fine-tuning prompted by evolving insights.

We currently see the following as options for this: **1.** Net positive impact and **2.** Benchmark option: what would the impact have been if we had not conducted engagement? These can provide suitable cues or reasons for modifying this methodology.

Climate commitment

In 2019, the Financial sector's climate commitment (Klimaatcommitment financiële sector) was signed by BNG Bank. The Dutch Climate Agreement targets a 49% reduction in CO₂ emissions by 2030 compared to 1990. BNG Bank must be able to demonstrate that it operates in line with agreements reached in the Dutch Climate Agreement.

This target in the Dutch Climate Agreement overlaps primarily with the outcome targets for SDG 13. It is therefore important to examine to what extent the 10% ambition is sufficient to meet the 49% reduction target in the Dutch Climate Agreement. An initial answer to this is yes, these are in line. This analysis is set out below.

Step 1

A total of 116 megatonnes is allowed to be emitted in 2030. The calculation and input for arriving at this are set out below.

	Megatonnes
1990	228
49%	112
2030 Target in megatonnes	116

Step 2

In 2020, emissions totalled 164 megatonnes. On a linear pathway, reaching 116 megatonnes by 2030 requires a 5 megatonne reduction per year. In a first external validation, Guidehouse, consultants with extensive knowledge in the area of Science Based Targets, concurred with this linear pathway.

	Megatonnes
2030	116
2020	164
2030 compared to 2020	-48
per year	-5

Step 3

Comparing the target in the Dutch Climate Agreement with our 10% target for 2023 versus 2021, (159-150)/159, yields a result of 6%. This is within the ambition of 10%.

Impact 2030			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
SDG 13	49%	CO₂e reduction compared to 1990	Start of year	164	159	154	150	145	140	135	130	126	121
				5	5	5	5	5	5	5	5	5	5
			End of year	164	159	154	150	145	140	135	130	126	121
			2023 percentage compared to 2021				6%						

External validation of the analysis above was also carried out under the programme in January 2022.

For SDG 13, a stand-alone percentage will also be shown in the monitoring to determine whether this target in the Dutch Climate Agreement is met.

Appendix 1: Comprehensive overview of indicators for 2022

IMPACT		OUTCOME		
SDG	SDG	OUTCOME TARGETS	BNG CONTRIBUTES TO:	INDICATORS
3	3.8	Accessible healthcare	Reducing waiting lists	<ul style="list-style-type: none"> > Number of people outside Treek-norm on waiting list: nursing homes > Average waiting times outside Treek-norm: Mental healthcare institutions > Average waiting times outside Treek-norm: hospitals and outpatient care
	3.9	Health protection	Improving air quality	<ul style="list-style-type: none"> > Fine particle emissions PM10 > Fine particle emissions PM2.5 > NMVOC emissions > Nitrogen dioxide emissions
4	4a	Good education facilities	Upgrade or renew educational buildings	<ul style="list-style-type: none"> > Investment in buildings and grounds
7	7.2	Increased share of renewable energy in the energy mix	Increase in number of households that use renewable energy	<ul style="list-style-type: none"> > Renewable electricity generated in municipalities portfolio > Renewable energy generated in municipalities portfolio > Renewable heat generated in municipalities portfolio > Solar power capacity per inhabitant in municipalities portfolio > Housing association dwellings with solar panels in our portfolio
	7.3	Increase energy efficiency	Decrease in energy consumption of rental housing, educational and healthcare buildings	<ul style="list-style-type: none"> > Electricity consumption of housing association dwellings > Electricity consumption of healthcare institutions > Electricity consumption of educational institutions > Gas consumption of housing association dwellings > Gas consumption of educational institutions > Gas consumption of healthcare institutions
11	11.1	Access to affordable housing	Increase in affordable rented social housing	<ul style="list-style-type: none"> > # Match stock (DaEB) and target group for housing benefit > Affordable rental housing in portfolio of housing associations > Allocations within income limits
			Increase in available owner-occupied and rental housing	<ul style="list-style-type: none"> > Average waiting time for rented social housing > Increase in housing stock in municipalities > Increase in housing stock in portfolio of housing associations > Skewed rent
	11.2	Liveable neighbourhoods	Increase in sustainable public transport	<ul style="list-style-type: none"> > Zero-emission buses > Access to public transport
	11.5		Increase in public green spaces	<ul style="list-style-type: none"> > Public green spaces as percentage of surface area
	11.6		Decrease in municipal waste	<ul style="list-style-type: none"> > Amount of sorted household waste > Amount of residual household waste
13	13.1	Climate mitigation	Climate adaptation	<ul style="list-style-type: none"> > Green roofs > Flooding risks
	13.2		Decrease in greenhouse gases	<ul style="list-style-type: none"> > CO₂ eq. emissions of municipalities portfolio > CO₂ eq. emissions of educational institutions > CO₂ eq. emissions of housing associations > CO₂ eq. emissions of healthcare institutions

Appendix 2: Matrix – client groups plotted by indicators

INDICATORS	MUNICIPALITY	EDUCATIONAL INSTITUTION	HOUSING ASSOCIATION	HEALTHCARE INSTITUTION
Number of people outside Treek-norm on waiting list: nursing homes	●			
Fine particle emissions PM10	●			
Fine particle emissions PM2.5	●			
NMVOC emissions	●			
Nitrogen dioxide emissions	●			
Average waiting times outside Treek-norm: Mental healthcare institutions	●			
Average waiting times outside Treek-norm: hospitals and outpatient care	●			
Investment in buildings and grounds		●		
Electricity consumption of housing association dwellings			●	
Electricity consumption of healthcare institutions				●
Electricity consumption of educational institutions		●		
Gas consumption of housing association dwellings			●	
Gas consumption of educational institutions		●		
Gas consumption of healthcare institutions				●
Renewable electricity generated in municipalities portfolio	●			
Renewable energy generated in municipalities portfolio	●			
Renewable heat generated in municipalities portfolio	●			
Solar power capacity per inhabitant in our municipalities portfolio	●			
Housing association dwellings with solar panels in our portfolio			●	
# Match stock (DaEB) and target group for housing benefit			●	
Affordable rental housing in portfolio of housing associations			●	
Zero-emission buses	●			
Average waiting time for rented social housing	●			

INDICATORS	MUNICIPALITY	EDUCATIONAL INSTITUTION	HOUSING ASSOCIATION	HEALTHCARE INSTITUTION
Amount of sorted household waste	●			
Amount of residual household waste	●			
Increase in housing stock in municipalities portfolio	●			
Increase in housing stock in housing associations portfolio			●	
Public green spaces as percentage of surface area	●			
Skewed rent	●			
Access to public transport	●			
Allocations within income limits			●	
CO ₂ eq. emissions of municipalities portfolio	●			
CO ₂ eq. emissions of educational institutions		●		
CO ₂ eq. emissions of housing associations			●	
CO ₂ eq. emissions of healthcare institutions				●
Green roofs	●			
Flooding risks	●			

Appendix 3: Validation of methodology

Internal / External	Present	Discussed
External	Albert Jan Knol (PWC), Anne Dijkstra, Freya van der Kroef	Careful documentation of talks with clients, use of a fixed format and drawing up client strategy is important. Consistency in methodology is valued, but can be departed from if justifiable. Selection of indicators and resulting approach applied so far considered to be diligent and sound by PWC.
External	Albert Jan Knol (PWC), Anne Dijkstra, Anita de Horde, Mylene Goei (PWC), Freya van der Kroef	Excel reviewed Subsequently received mark-up by PWC of Methodology report
External	Het PON & Telos	Full methodology discussed
Internal	CFO	Full methodology discussed
Internal	Advisory Committee on Sustainability	Full methodology presented
Internal	Mattijs Moerenhout	Full methodology discussed
Internal	ExCo	Full methodology presented
Internal	Supervisory Board	Full methodology presented
External	Guidehouse, Anne Dijkstra, Arjan Otter	Validation of climate commitment

List of references

- > [Betaalbare woningen – beleidsagenda 2020-2023](#) (Affordable housing – 2020-2023 policy agenda), Aedes
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- > [Duurzame huurwoningen – beleidsagenda 2020-2023](#) (Sustainable rental housing – 2020-2023 policy agenda), Aedes
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- > [Een versterkt fundament voor iedereen](#) (A reinforced foundation for all), McKinsey, 2020
- > [het Klimaatakkoord](#) (The Dutch Climate Agreement), 2017
- > [Convenant Energiebesparing Huursector](#) (Covenant on Energy Savings in Rental Sector), 2012
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- > [Bestuursakkoord Zero Emissie Busvervoer](#) (Administrative Agreement on Zero-Emission Bus Transport)
- > [Urban Green spaces and health](#), WHO
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- > [Klimaatcommitment financiële sector](#) (Financial sector's climate commitment)



Driven by social impact

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