

BNG BANK

2017 SUSTAINABILITY BOND

FRAMEWORK

SECOND OPINION BY SUSTAINALYTICS

31 October 2017



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1. PREFACE

N.V. Bank Nederlandse Gemeenten (BNG Bank), a Dutch bank for the public sector, intends to issue a sustainability bond to promote the bank's investment in 'best in class' sustainable municipalities in the Netherlands. The bank uses a methodology developed by the Tilburg Sustainability Center of Tilburg University (TSC-Telos) for ranking municipalities based on their sustainability performance: the TSC Sustainability Monitor Methodology. BNG Bank has engaged Sustainalytics to provide a second opinion on its 2017 Sustainability Bond Framework and on the framework's sustainability credentials. As a part of this engagement, Sustainalytics held conversations with members of BNG Bank's management team to clarify the planned use of proceeds, management of proceeds and reporting aspects of the 2017 Sustainability Bond Framework. Sustainalytics also reviewed relevant public documents, including the TSC-Telos Sustainability Monitor Methodology, which determined the eligibility criteria for the bond proceeds.

This document contains two sections:

- Framework Overview - a summary of the BNG Bank 2017 Sustainability Bond Framework, developed by Telos, the Sustainability Centre of Tilburg University;¹ and
- Sustainalytics' Opinion - an opinion on the framework.

2. INTRODUCTION

BNG Bank is the bank of and for local authorities and public-sector institutions in the Netherlands. Half of the bank's share capital is held by the Dutch State and the other half by Dutch municipalities, provinces and a district water board. BNG Bank's clients primarily comprise Dutch local authorities and public-sector institutions in housing, healthcare, education and public utilities. BNG Bank provides customized financial services, ranging from loans and advances, payment services to electronic banking. BNG Bank's specialized financial services help to minimize the cost of social provisions to the public. In this regard, the bank plays an essential role in the public sector.

The partnership between BNG Bank and TSC-Telos began in 2014 when the bank commissioned the institute to describe the sustainability criteria and selection process of 'best-in-class' Dutch municipalities eligible for a BNG Bank sustainability bond. In October 2014, BNG Bank launched its inaugural sustainability bond. Since then, TCS-Telos has provided a yearly update on eligible Dutch municipalities, using the methodology applied in its annual Dutch National Monitor of Sustainable Municipalities and it is expected to continue to provide this annual update for the foreseeable future. The 2017 sustainability bond is the fourth issuance of its kind by BNG Bank.

By issuing this bond BNG Bank aims to:

- (i) Highlight the importance of sustainable development to municipalities,
- (ii) Provide relevant information to investors who want to see their capital used for investments in municipalities that have experience in improving sustainability, and
- (iii) Increase awareness of successful strategies used in high scoring municipalities.

¹ Available at <https://www.bngbank.com/Documents/Investors/Sustainability%20Framework%202017.pdf>

3. FRAMEWORK OVERVIEW

For this sustainability bond, a framework has been developed that follows the Sustainability Bond Guidelines 2017.²

3.1 Use of Proceeds

3.1.1 Eligibility Criteria: The TSC-Telos Sustainability Monitor Methodology

The proceeds of the 2017 sustainability bond will be used by BNG Bank to lend to ‘best-in-class’ sustainable municipalities in the Netherlands, as identified by the 2017 TSC-Telos Sustainability Monitor Methodology. The proceeds of this bond are for the general-purpose use of the eligible municipalities.

The eligible municipalities will be defined as the 15 top-performing municipalities within each of the fourteen categories defined by TSC-Telos. These categories are used to group municipalities based on their size and social and geographical characteristics (‘municipality types’).³ Appendix 1 provides an overview of the 14 municipality categories.

Proceeds of the 2017 sustainability bond will be allocated to loans originated in 2017 (settlement dates from 1 January until 31 December 2017).

The TSC-Telos Sustainability Monitor Methodology

Since 2014, TSC-Telos has published a National Monitor for Sustainable Municipalities based on a wide range of sustainability criteria at the request of the Dutch Ministry of Infrastructure and Environment. This rating compares municipalities based on their sustainability performance and is aligned with an European initiative known as the European Reference Framework for Sustainable Cities (EU RFSC),⁴ which applies a “triple P” approach, based on three pillars: People, Planet and Profit/Prosperity. This National Monitor is updated annually and includes a framework and data that provide a useful source for the BNG Bank in defining the eligibility criteria for its sustainability bond.

The TSC-Telos methodology for calculating the sustainability performance of Dutch municipalities incorporates three “Capitals” that are aligned with the RFSC’s pillars: Ecological Capital, Socio-cultural Capital and Economic Capital. Each of these Capitals has corresponding themes and indicators used for quantitative monitoring. The table below provides an example of the Capitals and themes covered:

² “The Sustainability Bond Guidelines 2017”, dated 2 June 2017

<https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/SustainabilityBondGuidelines-JUNE2017.pdf>

³ The Dutch National Monitor of Sustainable Municipalities 2017 categorizes fourteen types of municipalities to reflect ‘quantitative’ city types, related to the number of inhabitants, and ‘qualitative’ city types related to specific clusters of social, historical and geographical characteristics.

⁴ The EU RFSC is a voluntary web tool that can help individual cities to organize their sustainability strategy and its implementation by applying the monitor tool. RFSC does not prescribe any specific indicators or sustainability goals. The disadvantage of this element is that cities cannot be compared to one another.

Table 1: Examples of themes analyzed in the three capitals

Capitals	Example of themes analyzed
Ecological Capital	Water, Energy and Climate, Resources and Waste
Socio-cultural Capital	Health, Safety, Education
Economic Capital	Labor, Competitiveness, Infrastructure and Mobility

The 2017 TSC-Telos methodology monitored and rated municipalities based on the three Capitals, covering 19 themes and 109 scientific indicators for which quantitative data are available from reliable public sources. Please refer to Appendix 2 for a description of the Capitals, Themes and Indicators used in 2017. The data for these indicators will be collected from the Dutch Central Bureau of Statistics, the Netherlands Environmental Assessment Agency and the Netherlands Institute for Social Research.

The scoring system

Each indicator is scored on a range from 0-100%, considering sustainability requirements that TSC-Telos formulated as goals for each indicator (i.e. the score represents the percentage of goal achievement). The sustainability goals are derived by TSC-Telos from EU and national regulations and experience with municipal practices. The achievement percentages are subsequently combined per theme resulting in a theme achievement percentage. The average theme scores are then added to calculate the average score for a sustainability Capital. Finally, the average score of the total of the three Capitals is calculated as the overall sustainability score of a municipality, with equal weight for all indicators, themes and Capitals.

In 2017, the overall sustainability scores for the municipalities varied from 40.9% to 59.9%.

2017 Methodology adjustments

TSC-Telos developed similar frameworks in 2014, 2015 and 2016 for BNG Bank, using the methodology applied in its annual Dutch National Monitor of Sustainable Municipalities. For the 2017 sustainability bond, TSC-Telos revised the framework to reflect recent changes to the methodology of the National Monitor, published 29 September 2017,⁵ and its outcome. Every year, the set of indicators is evaluated and refined to the latest data availability and scientific insights. In comparison to 2016, changes had to be made in (i) the number of indicators, and (ii) the number of Dutch municipalities. The number of indicators increased from 105 indicators in 2016 to 109 indicators in 2017. While five indicators were added,⁶ one was removed⁷ reflecting latest scientific data available and information that could be reliably collected. The number of municipalities decreased from 390 in 2016 to 388 in 2017, reflecting mergers between small municipalities. The number of 'municipality types' was not changed.

⁵ www.telos.nl; Zoeteman, et al, National Monitor Sustainable Municipalities 2017, Tilburg: Telos, Tilburg University, Document Nr 17.170, September 2017, <http://telos.nl/894868.aspx?t=Nationale+Monitor+Duurzame+Gemeenten+2017>

⁶ The following indicators were added: (i) Satisfaction with dwelling, in the stock Residential Environment; (ii) Soil sealing, in the stock Soil; (iii) Contaminated sites with high ecological risks, in the stock soil; (iv) Contaminated sites with high distribution risks, in the stock soil; (v) Total amount of household waste, in the stock Resources and Waste.

⁷ Mixed sewerage system, from the stock Water

3.2 Project Evaluation and Selection Process

The bond proceeds will be disbursed to the National Monitor 2017 ‘best-in-class’ municipalities, defined as the top 15 sustainable municipalities, ranked based on their overall sustainability score, within each of the 14 ‘municipality types’. TSC-Telos has identified eligible municipalities in a “List of Elected Sustainable Municipalities for the 2017 BNG Sustainability Bond.”

In 2017, the list includes 115 eligible municipalities out of a total of 388 municipalities. In principle, this list should include $14 \times 15 = 210$ municipalities. However, several municipalities qualify for more than one municipality type. When this is taken into account, a final list of 115 elected municipalities results. This selection represents 34% of the total number of Dutch municipalities. This is a slight increase in comparison to 2016. For the 2016 Sustainability Bond, 107 out of 390 municipalities (27.4%) were eligible.

With the exception of Amsterdam (49.3%) and Arnhem (49.9%), all 115 municipalities score 50% or higher on sustainability. The highest score, 59.9%, was achieved by the Midden-Delfland municipality.

3.3 Management of Proceeds

The loans to which the proceeds will be allocated are to be earmarked separately by tagging them with the ISIN code of the relevant BNG Bank sustainability bond. This ISIN code will facilitate easy identification of the loans that qualify based on the eligibility criteria. Any balance of proceeds unallocated will be held in accordance with BNG Bank liquidity management policy.

The loans to which the bond proceeds will be allocated will be subject to internal and external auditing, to confirm alignment with the eligibility criteria.

3.4 Reporting

Allocation Reporting

BNG Bank has committed to reporting on the allocation of proceeds to eligible municipalities on a portfolio basis, within one year after issuance. Information will be available on the website, in an annual Performance Report that will be made available to investors. As mentioned above, the use of the proceeds will be externally verified.

Impact Reporting

TSC-Telos will prepare annually for BNG Bank a Performance Report. This report will give an update on the sustainability scores of the 115 elected municipalities for the BNG Bank 2017 sustainability bond showing:

- performance of the group of elected municipalities compared to the previous year(s);
- a list of ‘Elected Municipalities’ showing the largest improvement or reduction in overall score and an indication of the main causes for these results;

- performance of the group of elected municipalities in comparison with the total group of Dutch municipalities;
- more detailed performance reporting on changes for the group of elected municipalities at a more detailed level of interest (e.g. CO₂ emissions in Kton for elected municipalities, changes in scores of capitals).

The Performance Reports of the BNG Sustainability Bond covering the years 2014-2016 were published in October 2017, September 2016 and October 2015 and are available on BNG Bank's website.⁸

⁸ <https://www.bngbank.com/funding/sustainability-bond>

4. SUSTAINALYTICS' OPINION

Section 1: Sustainalytics' Opinion on the BNG Bank Sustainability Bond

Overall, Sustainalytics is of the opinion that the BNG Bank 2017 Sustainability Bond Framework is transparent and robust and aligns with the four pillars of the Sustainability Bond Guidelines 2017. Some of the key considerations in Sustainalytics' assessment are listed below:

- *Inclusion of non-project-based lending*
Sustainalytics recognizes that the Sustainability Bond Guidelines recommend project-based lending and financing, while the proceeds of this sustainability bond are for general-purpose use by the eligible sustainable municipalities. This is a deviation from the Sustainability Bond Guidelines in that the eligibility criteria for the use of proceeds are based on the sustainability performance of the borrowing entity rather than funding sustainability projects. Nonetheless, Sustainalytics is of the opinion that BNG Bank's approach will encourage municipalities to become more sustainable and strive to become 'best-in-class' municipalities. Furthermore, by focusing on top-performing municipalities, the BNG Bank approach increases the likelihood that proceeds will be used to financing projects with good sustainability credentials. Hence, overall, Sustainalytics is of the opinion that the use of proceeds of this bond will contribute to support sustainable development in the Netherlands (for additional information on impact see Section 3).
- *Robust selection process*
The bond proceeds will be disbursed to the National Monitor 2017 'best-in-class' municipalities. Sustainalytics is of the opinion that the TSC-Telos Sustainability Monitor Methodology provides a robust approach to rating the sustainability performance of Dutch municipalities (additional details on the assessment of this methodology are provided in the section below). Furthermore, elected municipalities represent top-performing municipalities, a typical best-in-class approach. Sustainalytics considers that this is a robust and consistent selection process.
- *Management of proceeds*
BNG Bank's disclosure and processes with respect to the management of proceeds are in line with market practices.
- *Reporting considerations*
BNG Bank has committed to reporting on the allocation of proceeds to eligible municipalities on a portfolio basis. This information will be externally verified, which is in line with market best practices. TSC-Telos will prepare annually for BNG Bank a Performance Report. This report will give an update on the sustainability scores of the 115 elected municipalities for the 2017 BNG Bank sustainability bond. Investors and other stakeholders will be able to view aggregate impacts achieved by the municipalities by reviewing publicly disclosed impact information published by TSC-Telos. However, such reporting does not directly link the bond proceeds to the impact achieved by the municipalities, which is a limitation. Moreover, the methodology's three Capital domains use indicators that also correlate with factors like economic activity. Therefore, improved environmental or social outcomes by the municipalities cannot be regarded as a direct indication of the impact of environmental or social efforts.

Strengths and Limitations of TSC-Telos Sustainability Monitor Methodology

The methodology developed by TSC-Telos for ranking municipalities based on their sustainability performance has been improved since its first version in 2014. Sustainalytics has a positive view on the methodology changes implemented. Namely, a more refined municipality typology has been introduced, which allows for benchmarking municipalities against similar municipalities within a category, using both a quantitative and a qualitative approach. Additionally, indicators have been revised based on relevance and availability of reliable data.

Based on a detailed review of the Capitals, Themes and Indicators analysed in the Sustainability Monitor Methodology (see Appendix 2), Sustainalytics is of the opinion that the Telos National Monitor for Sustainable Municipalities is a useful and credible source for the requirements of BNG Bank in defining the eligibility criteria for the sustainability bond. The process is transparent, and data is collected from reliable public sources. Additionally, the annual public reporting of the Sustainability Monitor results provides detailed information per indicator for each municipality and an overview of leading and lagging themes.

However, Sustainalytics has also identified some limitations. For example, low-scoring municipalities with pre-existing disadvantages, such as a lack of economic resources and ecological infrastructures, might implement advanced sustainability approaches, yet the resulting improvement would still leave them in a low-scoring position. This makes it difficult to establish the potential positive impact of BNG Bank's approach in the case of economically disadvantaged municipalities. Despite limitations, Sustainalytics is of the opinion that the TSC-Telos Sustainability Monitor Methodology increases awareness of successful strategies used in high scoring municipalities that can be adopted also by disadvantaged municipalities to improve their scores, and provides an incentive for continuous improvement.

Overall, Sustainalytics is confident that the Sustainability Monitor Methodology is a robust approach to select best-performing Dutch municipalities.

'Best-in-class' approach considerations

Elected municipalities represent top-performing municipalities, a typical best-in-class approach. However, while the methodology is comprehensive and robust, the 'best-in-class approach' does not set a minimum sustainability score for eligible municipalities. Sustainalytics notes that two of the eligible municipalities in 2017 rank below 50 points, specifically Amsterdam and Arnhem. Sustainalytics raised this question with BNG Bank, which highlighted that these are two of the largest municipalities in the country, and therefore face greater sustainability challenges. Given the challenges of these municipalities, such as those relating to traffic, safety and green environment, the potential to achieve positive social and environmental impact is also the greatest, and therefore such municipalities should not be excluded. Given this context, Sustainalytics is confident that the potential impact of the use of proceeds from the bond is not reduced through the inclusion of these municipalities.

Alignment with Sustainability Bond Guidelines 2017

Sustainalytics has determined that the BNG Bank 2017 Sustainability Bond Framework is in line with the four pillars of the ICMA's Sustainability Bond Guidelines 2017. For further information please refer to Appendix 3: Green Bond External Review Form.

Section 2: Sustainability Performance of the Issuer

Sustainalytics is confident that the objectives of this bond (described in the Introduction) align with BNG Bank's Sustainability Vision and Sustainability Policy,⁹ in which the bank commits to provide financing to projects with a desirable positive impact on society, targeting long-term business activities that create value for the market, people and environment. Overall, BNG Bank has integrated sustainable business practices as a key starting point of its activities and formulated social and environmental targets for project financing and its own operations. Leaning on the TSC-Telos research institute and the 1987 Brundtland Report, the bank defines an activity as sustainable "if it contributes to a positive long-term total impact in the ecological, socio-cultural and economic domains."¹⁰

In line with this investment approach, BNG Bank has been financing sustainability-related initiatives in the Netherlands such as Social Housing and the Energy Transition Financing Facility, which funds projects that support the energy transition. Furthermore, BNG Bank is co-financing an Energy Service Company which provides solar panels and LED lighting to more than 8.500 social houses owned by the Amsterdam housing association Ymere. The Bank also co-financed the Westermeer wind farm in Flevoland (with an installed capacity of 144 MW), and finances the development of a geothermal heat source in Westland for use in vegetables, flowers and plant production.

In addition, BNG Bank signed the Climate Statement of the Dutch Banking Association¹¹ (NVB), committing to increasing transparency on the impact of its business activities on climate, to integrate climate change in its business activities and to promote sustainability among its clients.

Given BNG Bank's commitment to sustainability, and integration of sustainability into its business activities, the bond's use of proceeds will, in Sustainalytics' view, contribute to the bank's sustainability strategy.

Section 3: Impact of Use of Proceeds

The importance of improving the environmental performance of cities to achieve climate goals

The European Commission has recognized the importance of cities and their impact on the environment,¹² as well as the importance of local governments and authorities to address the many challenges of urban areas.¹³ Additionally, the Dutch government acknowledged that more than half of all CO₂ emissions originate in and around cities.¹⁴ The reduction of CO₂ emissions is one of the key commitments made by national governments in the framework of the UN Climate Change Convention and particularly since the

⁹ BNG Bank Sustainability Policy 2016, <https://www.bngbank.com/Documents/About%20BNG%20Bank/2016%20Sustainability%20Policy%20BNG%20Bank.pdf>

¹⁰ BNG Bank Sustainability Policy 2016

¹¹ https://www.nvb.nl/media/document/000718_climate-statement-banks.pdf

¹² <http://ec.europa.eu/environment/europeangreencapital/wp-content/uploads/2011/08/Making-our-cities-attractive-and-sustainable.pdf>

¹³ <http://ec.europa.eu/environment/europeangreencapital/about-the-award/policy-guidance/>

¹⁴ <https://www.government.nl/topics/climate-change/dutch-vision-on-global-climate-action>

2015 Paris Agreement. In addition, individual cities have made similar commitments, e.g. in the framework of the Covenant of Mayors to combat climate change. In the Netherlands, the Association of Dutch Municipalities (VNG) has signed an agreement in 2013¹⁵ with the national government and other parties to substantially reduce CO₂ emissions by 2020. Furthermore, the Dutch government included sustainability as an individual point in the priorities for the coming legislative period¹⁶ (regeerakkoord), highlighting its importance. Municipalities are mentioned in the context of improving sustainability of buildings, improved air quality, sustainable infrastructure, traffic security, new economic perspectives and well-being, stressing the importance of municipalities to achieve the national sustainability strategy and the Dutch commitment to reduce greenhouse gas emission by 20% in 2020 and 40% in 2030 (from 1990 levels).

Proved sustainability performance improvement

BNG Bank's approach to provide loans to 'best in class' sustainable municipalities in the Netherlands is an innovative method that provides incentives for municipalities to better understand and improve their performance. This is confirmed by the Performance Reports for previous similar bonds. According to the 2016 Report,¹⁷ in the period 2014-2016 Dutch cities have made a step forward on the road to sustainability. Also, the report on the performance of the eligible municipalities from 2016 compared to 2017 shows an increase in performance:

- (i) The socio-cultural capital improved for the group of elected municipalities by 0.11% from 2014 to 2016 and by 0.81% in 2016-2017. While the performance declined slightly for the total group between 2014 and 2016 (-0.09%), it increased by 0.89% from 2016 to 2017;
- (ii) The average ecological capital score of the group of elected municipalities improved 1.8% (from 2014 to 2016) and 0.28% (from 2016 to 2017) points while the total group of municipalities also improved from the past years by 1.9% and 0.32% points;
- (iii) The economic capital scores of elected municipalities improved 0.48% (from 2014 to 2016) and 1.54% (from 2016 to 2017) while the total group improved 0.83% and 1.59%, between 2014 and 2016 and between 2016 and 2017 respectively.

Furthermore, the analysis shows that 70% of elected municipalities realized a stable or improved total sustainability score between 2014 and 2016, and 89% between 2016 and 2017. Examples of municipalities that improved their sustainability in the last years include the Midden-Delfland municipality. Midden-Delfland signed the Covenant of Mayors as a commitment to the climate change targets of the EU, and published a Climate Policy, including a sustainable energy programme which plans for an increase in charging stations for electric cars, recycling programmes, and the use of solar and geothermal energy for 20% of the municipality's energy by 2020.¹⁸ Another example of a financed municipality, Bloemendaal, developed a Sustainability Vision 2030, which outlines the municipality's sustainability goals, including, among others, 15% of its energy to be derived from local sustainably produced energy. The Bloemendaal

¹⁵ Energy Agreement for Sustainable Growth [Energieakkoord voor duurzame groei] referenced earlier in the document

¹⁶ <https://www.kabinetformatie2017.nl/documenten/publicaties/2017/10/10/regeerakkoord-vertrouwen-in-de-toekomst>

¹⁷ https://www.bngbank.com/Documents/Investors/Second_Performance_Report_2014_Sustainability_bond_Telos.pdf

¹⁸ Midden-Delfland municipality website https://www.middendelfland.nl/voor-inwoners/klimaatadaptatie_43226/;
https://www.middendelfland.nl/over-midden-delfland/convenant-of-mayors_42864/

Sustainability Programme 2015-2018,¹⁹ further elaborates on detailed targets, including subsidies for sustainable housing, and knowledge sharing on sustainability. Finally, the municipality Utrecht developed a mobility plan²⁰ that aims at higher living quality for inhabitants, more space for pedestrians and cyclists, connection from car to public transport, and improved traffic safety. These examples demonstrate the ambitions of the eligible municipalities to become more sustainable and give an indication of which projects may be financed by the use of proceeds. Thus, Sustainalytics believes that the use of proceeds is likely to fund projects with good sustainability credentials and contribute to supporting sustainable development.

Identified limitations for risk management and impact measurement

While Sustainalytics is of the opinion that BNG Bank's approach provides positive environmental and social impacts (as noted above), Sustainalytics recognizes that the lending approach directed at general-purpose use²¹ has the following limitations:

- (i) Ability to manage social and environmental risks associated with the financed projects;
- (ii) Ability to report on impact (reporting does not directly link the bond proceeds to the impact achieved by the municipalities, and therefore the reporting cannot be regarded as an indicator of the impact of the use of the proceeds of the bond).

Investors and other stakeholders will be able to view aggregate impacts achieved by the municipalities by reviewing publicly disclosed impact information published by TSC-Telos.

Contribution to the Sustainable Development Goals

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. In Sustainalytics' view, given that the proceeds of this sustainability bond may be used for diverse purposes to improve sustainability in Dutch cities, potential contribution to the SDGs may be diverse. Below, Sustainalytics highlights two goals and respective targets which are considered to be more material given the local context:

SDG	SDG target
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all; 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

¹⁹ Bloemendaal sustainability programme 2015-2018, <http://docplayer.nl/42251928-Uitvoeringsprogramma-duurzaamheid.html>

²⁰ Utrecht mobility plan, "Utrecht Aantrekkelijk en Bereikbaar Slimme Routes, Slim Regelen, Slim Bestemmen", <https://www.utrecht.nl/fileadmin/uploads/documenten/wonen-en-leven/verkeer/verkeersbeleid/nota-slimme-routes-slim-regelen-slim-bestemmen.pdf>

²¹ In this case, funding provided by the sustainability bond will not be separated from other types funding sources such as the Dutch government, taxation and loans from other financial institutions.

11. Sustainable Cities and Communities	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services; 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons; 11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management; 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management; 11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities; 11.B By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.
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5. CONCLUSION

BNG Bank is the bank of and for local authorities and public-sector institutions in the Netherlands and its 2017 sustainability bond aims to promote sustainability practices in municipalities in the Netherlands by investing in ‘best in class’ sustainable municipalities based on a Sustainability Monitor Methodology developed by TSC-Telos. Given BNG Bank’s commitment to sustainability, and integration of sustainability into its business activities, the bond’s use of proceeds will, in Sustainalytics’ view, contribute to the bank’s sustainability strategy.

Sustainalytics is of the opinion that the TSC-Telos Sustainability Monitor Methodology provides a robust approach to rating the sustainability performance of Dutch municipalities. Furthermore, elected municipalities represent top-performing municipalities, a typical ‘best-in-class approach’. Sustainalytics considers that this is a robust and consistent approach.

Even though the use of proceeds will be for general-purpose use by ‘best-in-class’ sustainable municipalities, Sustainalytics is of the opinion that the assessment implemented ensures that bond proceeds will be directed towards municipalities with stronger ecological, social and economic performance and municipalities that are more likely to use those funds to financing projects with good sustainability credentials. Hence, overall Sustainalytics is of the opinion that the use proceeds of this bond will contribute to support sustainable development, particularly SDGs 9 and 11. However, Sustainalytics recognizes that this approach has some limitations regarding the ability to manage social and environmental risks and measure impact associated with the use of proceeds of this sustainability bond. Investors and other stakeholders will be able to view aggregate impacts achieved by the municipalities by reviewing publicly disclosed impact information published by TSC-Telos.

Based on the above, Sustainalytics is confident that BNG Bank is well positioned to issue sustainability bonds, and that the BNG Bank 2017 Sustainability Bond Framework is robust and transparent and in alignment with the four pillars of ICMA’s Sustainability Bond Principles 2017.

APPENDICES

Appendix 1: Telos Methodology - types of municipalities

The TSC-Telos methodology differentiates between 14 types of municipalities. These categories are used to group municipalities based on their size and social and geographical characteristics. The 14 types of municipalities are listed in the table below.

Criteria	Type of municipality	Definition
Size	Small	<50.000 inhabitants
	Mid-sized	between 50.000 and 100.000 inhabitants
	Large	>100.000 inhabitants
Development of population	Growing	Population growth between 2007-2017: >5%
	Shrinking	Decline of population between 2007-2017: <2%
Housing stock	New town	> 40% houses placed after 1985
	Historical municipality	Housing stock before 1905 >8% + one or several monumental cityscapes
Working opportunity	Residential municipality	Working opportunity function <60
	Work focused municipality	Working opportunity function >100 + number of jobs >14.000
Land use	Green municipality	Share of forest and nature land use >30%
	Agricultural municipality	Share of agricultural land use >75%
Different criteria	Centre municipality	Municipality includes >15% of inhabitants of one Corop ²² area + score of >50 in service provision of the region
	Former industrial municipality	> 53% of working population worked in the industrial jobs according to the 1960 census
	Touristic municipality	> 10% of businesses focusses on tourism or >14% of working population works in tourism

²² The Netherlands has 40 Corop areas, which are divided in a core and support area.
https://www.regioatlas.nl/indelingen/indelingen_indeling/t/corop_subregio_s

Appendix 2: Sustainability Monitor Methodology 2017

The three pillars (capitals), the 19 themes and the 109 indicators used for quantitative monitoring.

CAPITALS & STOCKS	INDICATORS
ECOLOGICAL CAPITAL	
Soil	Contaminated sites with unacceptable human risks, contaminated sites with high ecological risks, contaminated sites with high distribution risks, Manure- Nitrogen quantity produced, Manure- Phosphorous quantity produced, Soil sealing
Air	Emission of CO ₂ , Emission of NO _x , Emission of Particulate Matter (PM _{2.5}), Emission of Volatile Organic Substances, Concentration NO _x , Concentration of Ozone, Concentration of PM _{2.5}
Annoyance and Emergencies	Noise intensity, Noise annoyance, Light intensity during the night, Annoyance by odors, Risk of road transport of dangerous chemicals, Land surface with a 10-6 risk contour, Earthquakes, Floods
Water	Ecological quality of surface water, Chemical quality of surface water, Nitrogen emissions to surface water, Phosphorous emissions to surface water, Drinking-water quality
Nature and Landscape	Share of forest and natural area, Distance of public green, Distance to inland recreational water, Biodiversity total, Biodiversity red list species
Energy and Climate	Wind energy, Solar energy, Average natural gas consumption households, Average electricity consumption households, Energy label houses, Average natural gas consumption businesses, Average electricity consumption businesses
Resources and Waste	Household waste, residual waste, Organic waste, Paper and cardboard waste, Packaging glass, Plastics
SOCIAL-CULTURAL CAPITAL	
Social Participation	Cohesion, Volunteers, Turnout municipal elections, Turnout national elections, Informal care
Economic Participation	Financial assets household, Long lasting unemployment, Social assistance, Poor households
Arts and Culture	Distance to performing arts, National monuments, Municipal monuments, Distance to museum, Protected city/village views
Health	Insufficient exercise, Risky behavior, Distance to GP practice, Quality of hospitals, Distance to hospital, Life expectancy, Assessment of own health, Chronically sick people, Confused people
Safety	Violent crimes, Crimes against property, Youth crime, Vandalism, Road safety, Feeling of insecurity
Residential Environment	Housing deficit, Distance to daily goods and services, Satisfaction with living environment, Satisfaction with shops, Mutations in number of residents Satisfaction with dwelling
Education	Youth unemployment, Distance to elementary schools, Distance to secondary education schools, Early school leavers, Real-time to diploma, Final examination mark, Education level population

ECONOMIC CAPITAL	
Labor	Employment function, Human resources exploitation, Unemployment, Rejuvenation and ageing, Incapacity for work
Spatial Local Conditions for Businesses	Stock business parks, Net/gross area ratio business parks, Share out of date business parks, Vacant office space, Vacant retail space
Competitiveness	Share starters, Bankruptcies, Gross Regional Product per capita, Share nationally promoted (top) sectors, Fast growing businesses
Infrastructure and Mobility	Access to public railway transport, Access to main roads, Number of charging stations for electric cars, Share of clean cars
Knowledge	Share highly educated people, Capacity science education/ higher vocational education, High- and medium tech employment, Creative industry employment

Appendix 3: Green Bond External Review Form

Green Bond External Review Form

Section 1. Basic Information

Issuer name: N.V. Bank Nederlandse Gemeenten (BNG Bank)

Green Bond ISIN or Issuer Green Bond Framework Name: *BNG Bank 2017 Sustainability Bond*

Review provider's name: Sustainalytics

Completion date of this form: 31 October 2017

Publication date of review publication: 31 October 2017

Section 2. Review overview

SCOPE OF REVIEW

The review assessed the following elements and confirmed their alignment with the GBPs:

- | | |
|--|--|
| ☒ Use of Proceeds | ☒ Process for Project Evaluation and Selection |
| ☒ Management of Proceeds | ☒ Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| ☒ Consultancy (incl. 2 nd opinion) | ☐ Certification |
| ☐ Verification | ☐ Rating |
| ☐ Other (<i>please specify</i>): | |

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (*if applicable*)

Please refer to BNG Bank Sustainability Bond Framework Overview and Second Opinion Document above.
--

Section 3. Detailed review

1. USE OF PROCEEDS

Overall comment on section (if applicable):

Proceeds of the 2017 sustainability bond will be used by BNG Bank to lend to 'best-in-class' sustainable municipalities in the Netherlands, as identified by the 2017 TSC-Telos Sustainability Monitor Methodology. The eligible municipalities will be defined as the 15 top-performing municipalities within each of the 14 categories defined by TSC-Telos, including in total 115 municipalities. The proceeds of this bond are for the general-purpose use by the eligible municipalities. This is a deviation from the Sustainability Bond Guidelines in that the eligibility criteria for the use of proceeds are based on the sustainability performance of the borrowing entity rather than on the nature of the projects to be funded. Nonetheless, Sustainalytics is of the opinion that the bond will encourage municipalities to become more sustainable and strive to become best-in-class' municipalities. Furthermore, by focusing on these municipalities, BNG Bank approach increases the likelihood that proceeds will be used to financing projects with good sustainability credentials. Hence, overall Sustainalytics is of the opinion that the use proceeds of this bond will contribute to support sustainable development, particularly SDGs 9 and 11.

Use of proceeds categories as per GBP:

- | | |
|--|--|
| ☐ Renewable energy | ☐ Energy efficiency |
| ☐ Pollution prevention and control | ☐ Sustainable management of living natural resources |
| ☐ Terrestrial and aquatic biodiversity conservation | ☐ Clean transportation |
| ☐ Sustainable water management | ☐ Climate change adaptation |
| ☐ Eco-efficient products, production technologies and processes | ☒ Other (<i>please specify</i>): proceeds will provide loans to 'best-in-class' sustainable Dutch municipalities. This rating is based on 109 indicators that measure ecological, social and economic performance. |
| ☐ Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | |

If applicable please specify the environmental taxonomy, if other than GBPs:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

The eligible municipalities will be selected using the National Monitor 2017 'best-in-class' municipalities, which is based on a compilation of the top rated 15 sustainable municipalities from each of the 14 categories defined by TSC-Telos. These categories are used to group municipalities based on their size and social and geographical characteristics ('municipality types'). TSC-Telos has identified eligible municipalities in a "List of Elected Sustainable Municipalities for the 2017 BNG Bank Sustainability Bond". In 2017, the list includes 115 eligible municipalities out of a total of 388 municipalities. This selection represents 34% of the total number of Dutch municipalities. Sustainalytics considers that this is a robust and consistent process.

Evaluation and selection

- | | |
|--|---|
| ☒ Defined and transparent criteria for projects eligible for Green Bond proceeds | ☒ Documented process to determine that projects fit within defined categories |
| ☒ Summary criteria for project evaluation and selection publicly available | ☐ Other (please specify): |

Information on Responsibilities and Accountability

- | | |
|--|--|
| ☒ Evaluation / Selection criteria subject to external advice or verification | ☐ In-house assessment |
| ☐ Other (please specify): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

The loans to which the proceeds will be allocated will be earmarked separately by tagging them with the ISIN code of the relevant BNG Bank Sustainability Bond. This ISIN code will facilitate easy identification of the loans that qualify based on the eligibility criteria. BNG Bank has disclosed that the loans to which the bond proceeds will be allocated will be subject to internal and external auditing to confirm alignment with eligibility criteria. This is in line with market best practice.

BNG Bank will hold unallocated balance of proceeds in accordance with BNG Bank liquidity management policy.

Tracking of proceeds:

- | |
|---|
| ☒ Green Bond proceeds segregated or tracked by the issuer in a systematic manner |
| ☒ Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| ☐ Other (please specify): |

Additional disclosure:

- | | |
|--|--|
| ☐ Allocations to future investments only | ☐ Allocations to both existing and future investments |
| ☐ Allocation to individual disbursements | ☒ Allocation to a portfolio of disbursements |
| ☐ Disclosure of portfolio balance of unallocated proceeds | ☐ Other (please specify): |

4. REPORTING

Overall comment on section (if applicable):

BNG Bank will publish an annual Performance Report prepared by Telos. This report will give an update on the sustainability scores of the 115 elected municipalities for the 2017 BNG Bank sustainability bond. However, it should be noted that the nature of such reporting does not directly link the bond proceeds to the impact achieved by the municipalities and therefore the reporting cannot be regarded as an indicator of the impact of the use of the proceeds of the bond. The use of proceeds will be verified by an external auditor.

Use of proceeds reporting:

- | | |
|--|--|
| ☐ Project-by-project | ☒ On a project portfolio basis |
| ☐ Linkage to individual bond(s) | ☐ Other (please specify): |

Information reported:

- | | |
|---|--|
| ☒ Allocated amounts | ☐ GB financed share of total investment |
| ☐ Other (please specify): | |

Frequency:

- | | |
|--|--------------------------------------|
| ☒ Annual | ☐ Semi-annual |
| ☐ Other (please specify): | |

Impact reporting:

- | | |
|--|--|
| ☐ Project-by-project | ☒ On a project portfolio basis |
| ☐ Linkage to individual bond(s) | ☐ Other (please specify): |

Frequency:

- | | |
|--|--------------------------------------|
| ☒ Annual | ☐ Semi-annual |
| ☐ Other (please specify): | |

Information reported (expected or ex-post):

☐ GHG Emissions / Savings ☐ Energy Savings

☒ Other ESG indicators (please specify):

Detailed performance reporting on changes for the group of Elected Municipalities at the level of the three capitals, selected themes and selected impact indicators of interest (e.g. CO₂ emissions in Kton for elected municipalities).

Means of Disclosure

- ☐ Information published in financial report ☐ Information published in sustainability report
- ☐ Information published in ad hoc documents ☒ Other (please specify): Annual Performance Reports of the BNG Bank Sustainability Bond elaborated by Telos
- ☐ Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): Allocation Reporting

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

<https://www.bngbank.com/Documents/Investors/Sustainability%20Framework%202017.pdf>

<http://telos.nl/894868.aspx?t=Nationale+Monitor+Duurzame+Gemeenten+2017>

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- ☐ Consultancy (incl. 2nd opinion) ☐ Certification
- ☐ Verification / Audit ☐ Rating
- ☐ Other (please specify):

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP

- (i) Consultant Review: An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental sustainability or other aspects of the issuance of a Green Bond, such as the establishment/review of an issuer's Green Bond framework. "Second opinions" may fall into this category.
- (ii) Verification: An issuer can have its Green Bond, associated Green Bond framework, or underlying

assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may focus on alignment with internal standards or claims made by the issuer. Evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria.

- (iii) Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against an external green assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties / certifiers.
- (iv) Rating: An issuer can have its Green Bond or associated Green Bond framework rated by qualified third parties, such as specialized research providers or rating agencies. Green Bond ratings are separate from an issuer's ESG rating as they typically apply to individual securities or Green Bond frameworks / programmes.

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SUSTAINALYTICS

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