

Second-Party Opinion

BNG Bank Sustainability Bond for Dutch Municipalities



Evaluation Summary

Sustainalytics is of the opinion that the BNG Bank Sustainability Bond for Dutch Municipalities is credible and impactful, and aligns with the Sustainability Bond Guidelines 2018. This assessment is based on the following:



USE OF PROCEEDS BNG Bank intends to use the proceeds to finance general purpose loans to best-in-class sustainable municipalities, generated during the respective year of the Framework. While the eligibility criterion, best-in-class sustainable municipalities, is not directly aligned with the recognized use of proceeds in the Green Bond Principles and Social Bond Principles, the methodology to rate the municipalities uses indicators that align with recognized use of proceeds categories. Sustainalytics considers BNG Bank's approach as innovative and impactful to increase sustainable practices of municipalities in the Netherlands.



PROJECT EVALUATION / SELECTION The best-in-class sustainable municipalities are chosen according to the TSC-Telos Rating Methodology, developed by the Tilburg Sustainability Center of the University of Tilburg (TSC-Telos). Sustainalytics considers the methodology robust to rate the sustainability of municipalities based on ecological, socio-cultural and economic indicators.



MANAGEMENT OF PROCEEDS BNG Bank's process to manage the bond's proceeds are aligned with market practice. BNG Bank has a system to track and monitor the use of proceeds, which will be audited and reported on. In addition, unallocated proceeds will be held in accordance with BNG Bank's liquidity management policy, aligned with the bank's sustainability policy, which is aligned with market practice.



REPORTING While BNG Bank will not provide annual allocation reporting, it intends to report to investors when the proceeds are fully allocated, which is expected to be shortly after issuance. In addition, BNG Bank is committed to disclosing the selection of the municipalities, their sustainability score and contribution to the SDGs as well as changes in sustainability scores compared to previous years via its Performance Reports on an annual basis. Given that the loans financed are general -purpose loans, Sustainalytics recognizes that the sustainability performance of municipalities cannot directly be linked to bonds proceeds.

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Introduction

BNG Bank N.V. (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, including from loans and advances, payment services, 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.

BNG Bank has developed the BNG Bank Sustainability Bond for Dutch Municipalities (the "framework") under which it is planning to issue sustainability bonds and use the proceeds to finance or refinance, in whole or in part, expenditures to best-in-class sustainable municipalities to highlight the importance of sustainable development to municipalities, provide relevant information to investors who want to see their capital used for investments in sustainable municipalities, and increase awareness of successful strategies used in high scoring municipalities. The framework defines eligibility criteria as:

- 'Best-in-class' sustainable municipalities in the Netherlands, as identified by the 2019 TSC-Telos Sustainability Monitor Methodology

BNG Bank engaged Sustainalytics to review the BNG Bank Sustainability Bond Framework for Dutch Municipalities and provide a second-party opinion on the alignment of the Sustainability Bond¹ with the Sustainability Bond Guidelines 2018 (the "SBG"), as administered by the International Capital Market Association (the "ICMA"),² and the framework's environmental and social credentials. This framework has been published in a separate document.³

As part of this engagement, Sustainalytics held conversations with various members of BNG Bank's management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of BNG Bank's Sustainability Bond. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics' opinion of the BNG Bank Sustainability Bond for Dutch Municipalities and should be read in conjunction with that framework.

¹ Sustainability Bonds are aligned with the four core components of both the Green Bond Principles and Social Bond Principles, with the former being especially relevant to underlying Green Projects and the latter to underlying Social Projects.

² ICMA's Sustainability Bond Guidelines 2018 <https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/>

³ The Sustainability Bond for Dutch Municipalities Framework is available at: <https://www.bngbank.com/funding/sustainability-bond>

Sustainalytics' Opinion

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

Summary

Sustainalytics is of the opinion that the BNG Bank Sustainability Bond for Dutch Municipalities is credible and impactful and aligns with the four core components of the Green Bond Principles 2018 and Social Bond Principles 2018. Sustainalytics highlights the following elements of BNG Bank's Sustainability Bond framework:

- Use of Proceeds:
 - BNG Bank intends to use the proceeds to finance general purpose loans to best-in-class sustainable municipalities. While the use of proceeds category is as such not included in the Sustainability Bond Guidelines, the indicators used to assess the sustainability of Dutch municipalities include social and green indicators that clearly link to the use of proceeds categories recognized as impactful by the Social Bond Principles and Green Bond Principles. For example, the methodology takes into consideration the types of energy sources used, waste, biodiversity and public green areas, water, soil and air quality, unemployment rates, share of start-ups, affordable housing, social welfare benefits and distance to schools.
 - Sustainalytics considers BNG Bank's approach as innovative and impactful to increase sustainable practices of municipalities in the Netherlands (for more information see Section 3).
 - Aligned with market best practice, proceeds of the 2019 Sustainability Bond will be allocated to loans originated in 2019.
- Project Evaluation and Selection:
 - The bond proceeds will be disbursed to the municipalities assessed as best-in-class for their sustainability performance. Sustainalytics is of the opinion that the TSC-Telos Rating Methodology provides a robust approach to rating the sustainability of municipalities based on ecological, socio-cultural and economic indicators (additional details on the assessment of this methodology are provided in the section below).
- Management of Proceeds:
 - BNG Bank's process to manage the bond's proceeds are aligned with market practice. BNG Bank earmarks the eligible bonds by tagging them with the ISIN code of the relevant BNG Bank Sustainability Bond to track and monitor the use of proceeds.
 - Aligned with market practice, any balance of proceeds unallocated will be held in accordance with BNG Bank's liquidity management policy, which is subject to BNG Bank's sustainability policy which covers responsible investment principles and exclusion criteria.
- Reporting:
 - While BNG Bank will not provide annual allocation reporting, it intends to report to investors when the proceeds are fully allocated, which is expected to be shortly after issuance. The allocation will be verified as part of BNG Bank's annual internal audit.
 - For the 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 114 elected municipalities for the BNG Bank 2019 Sustainability Bond for Dutch Municipalities. Given that the loans financed are general -purpose loans, Sustainalytics recognizes that the sustainability performance of municipalities cannot directly be linked to bonds proceeds.

Identified limitations for risk management and impact measurement through non-project-based lending

Sustainalytics recognizes that the Sustainability Bond Guidelines recommend project-based lending and financing, whereas 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

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criteria for the use of proceeds are based on the sustainability performance of the borrowing entity rather than funding sustainability projects.

Sustainalytics recognizes that the lending approach directed at general-purpose use has the following limitations:

- (i) Ability to manage social and environmental risks associated with the financed projects;
- (ii) Ability to report on impact (loans are not linked to specific projects and thus the expenditures cannot directly be linked to any impact achieved)

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.

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 finance 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).

Alignment with Sustainability Bond Guidelines 2018

Sustainalytics has determined that the BNG Bank Sustainability Bond for Dutch Municipalities aligns to the four core components of the Green Bond Principles 2018 and Social Bond Principles 2018. For detailed information please refer to Appendix 4: Sustainability Bond/Sustainability Bond Programme External Review Form.

Section 2: Sustainability Strategy of BNG Bank

Contribution of framework to BNG Bank's sustainability strategy and targets

Sustainalytics is confident that the objectives of this bond (described in the Introduction) align with BNG Bank's Sustainability Vision and Sustainability Policy,⁴ 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."⁴

In line with this investment approach, BNG Bank has been financing sustainability-related initiatives in the Netherlands such as social housing, schools, wind and solar energy projects.⁵ In addition, BNG Bank signed the Climate Statement of the Dutch Banking Association (NVB),⁶ 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.

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. A more detailed explanation of the methodology is provided in Appendix 1. Changes conducted in the 2019 methodology compared to 2018 methodology are detailed in

⁴ BNG Bank, "Sustainability Policy", (2019), at: <https://www.bngbank.com/Documents/About%20BNG%20Bank/Sustainability-policy.pdf>

⁵ BNG Bank, "Sustainability", at: <https://www.bngbank.com/sustainability>

⁶ Dutch Banking Association (NVB), "Climate Statement Banks", (2017), at: <https://www.nvb.nl/media/1390/climate-statement-banks-2017.pdf>

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Appendix 2. Sustainalytics has a positive view on the methodology changes implemented. Namely, indicators have been revised based on relevance, availability of reliable data and updated scientific insights.

Based on a detailed review of the Capitals, Themes and Indicators analysed in the Sustainability Monitor Methodology (see Appendix 1), 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 such 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 five of the eligible municipalities in 2019 rank below 50 points, compared to 20 in 2018, highlighting an overall progression of the selection. The 2019 methodology adjustment (see Appendix 2) included adding 10 indicators speaking to socio-cultural, environmental and economic topics. As such, the Gini-index, an internationally recognised statistical measure of income inequalities indicator, was added to the health stock. Sustainalytics positively notes its incorporation, underlining the importance of considering inequalities in the sustainability performance of municipalities.

In addition, all the municipalities with scores below 50 belong to the category of shrink municipalities, i.e. municipalities with a decrease in population of more than 2% between 2009 and 2019. Reasons for the high number of shrinking municipalities with lower scores could be the lack of incentive for investments in sustainability, but the shrinking nature could also be a result of a lack of investments in sustainability. It remains to be seen whether the bond can provide an incentive for the relevant municipalities to improve their sustainability performance.

Section 3: Impact of Use of Proceeds

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

The UN dedicated one of their 17 Sustainable Development Goals to the sustainable development of cities (SDG 11), stressing the importance of this area in developing a sustainable world. The European Commission has recognized the importance of cities and their impact on the environment,⁷ as well as the importance of local governments and authorities to address the many challenges of urban areas.⁸ Additionally, the Dutch government acknowledged that more than half of all CO₂ emissions originate in and around cities.⁹ 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 2015 Paris Agreement. In addition, individual

⁷ European Commission, "Making our cities attractive and sustainable", (2010), at: <http://ec.europa.eu/environment/europeangreencapital/wp-content/uploads/2011/08/Making-our-cities-attractive-and-sustainable.pdf>

⁸ European Commission, "Green Cities Fit for Life", at: <http://ec.europa.eu/environment/europeangreencapital/about-the-award/policy-guidance/>

⁹ Government of the Netherlands, "Dutch vision on global climate action", at: <https://www.government.nl/topics/climate-change/dutch-vision-on-global-climate-action>

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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 2013¹⁰ 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 period¹¹ (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 GHG emissions by 49% in 2030, compared to 1990 levels.

Proven 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 2019 Report,¹² there was an overall improvement of sustainability scores of 0.62% point in the 2018 elected municipalities. In addition, the following improvements were made in the elected municipalities from the 2014, 2015, 2016, 2017 and 2018 sustainability bond for Dutch municipalities.

- (i) The overall scores of elected municipalities from 2014 improved by 3.69% points between 2014 and 2019, 3.33% points for 2015 municipalities between 2015 and 2019, 2.07% points for 2016 municipalities between 2016 and 2019, 1.38% points for 2017 municipalities between 2017 and 2019 and by 0.62% points for 2018 municipalities between 2018 and 2019, indicating a continuous improvement of sustainability performance.
- (ii) For the socio-cultural indicator set, the following improvements were made until 2019 for the 2014, 2015, 2016, 2017 and 2018 selected municipalities. The scores increased by 4.21% points, 3.79% points, 2.34% points, 1.72% points and 0.36% points, respectively.
- (iii) For the ecological indicator set, the following improvements were made until 2018 for the 2014, 2015, 2016, 2017 and 2018 selected municipalities. The scores increased by 3.29% points, 2.14% points, 0.93% points, 0.55% points and 0.28% points, respectively.
- (iv) For the economic indicator set, the following improvements were made until 2018 for the 2014, 2015, 2016, 2017 and 2018 selected municipalities. The scores increased by 3.56% points, 3.8% points, 2.96% points, 1.86% points and 1.22% points, respectively.

Furthermore, the analysis shows 97.9% of 2014 elected municipalities reduced or stabilized their CO₂-emissions and all elected municipalities improved total sustainability score in reporting years 2014-2019.

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 2020.¹³

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 Sustainability Programme 2015-2018,¹⁴ further elaborates on detailed targets, including subsidies for sustainable housing, and knowledge sharing on sustainability. Finally, the municipality of Utrecht developed a mobility plan¹⁵ that aims at higher living quality for inhabitants, more space for pedestrians and cyclists, connection from car to public transport, and

¹⁰ SER, "Energieakkoord voor duurzame groei", (2013), at: <https://www.ser.nl/nl/thema/energie-en-duurzaamheid/energieakkoord/-/media/5A6DE312EAB948BEADF43DECF2DF5669.ashx>

¹¹ "Vertrouwen in de toekomst - Regeerakkoord 2017-2021", (2017), at:

<https://www.kabinetsformatie2017.nl/documenten/publicaties/2017/10/10/regeerakkoord-vertrouwen-in-de-toekomst>

¹² BNG Bank, "1st Performance Report of Elected Dutch Municipalities of BNG Bank Sustainability Bond of November 2017", (2018), at:

<https://www.bngbank.com/Documents/Investors/1st-performance-report-sustainability-bond-2017.pdf>

¹³ Gemeente Midden-Delfland, "Covenant of Mayors", at: https://www.middendelfland.nl/over-midden-delfland/convenant-of-mayors_42864/

¹⁴ Gemeente Bloemendaal, "Uitvoeringsprogramma Duurzaamheid 2015-2018", (2015), at: <http://docplayer.nl/42251928-Uitvoeringsprogramma-duurzaamheid.html>

¹⁵ Gemeente Utrecht, "Utrecht Aantrekkelijk en Bereikbaar - Slimme Routes, Slim Regelen, Slim Bestemmen", (2016), at:

<https://omgevingsvisie.utrecht.nl/fileadmin/uploads/documenten/zz-omgevingsvisie/thematisch-beleid/verkeer-mobiliteit/2016-05-mobiliteitsplan-utrecht-2025-slimme-routes-slim-regelen-slim-bestemmen.pdf>

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improved traffic safety. Utrecht is currently working on extending the mobility plan to 2040, confirming its commitment to sustainable and inclusive mobility.¹⁶ 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.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. The Telos 2019 methodology provided a framework to match the sustainability assessment to the SDGs. The mapping is provided in Appendix 3. This sustainability bond advances the following SDG goals and targets:

Use of Proceeds Category	SDG	SDG target
Sustainable Municipalities	9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	<p>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;</p> <p>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.</p>
	11. Sustainable Cities and Communities	<p>11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services;</p> <p>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;</p> <p>11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management;</p> <p>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;</p> <p>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;</p> <p>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.</p>

¹⁶ Gemeente Utrecht, "Mobiliteitsplan 2040", at: <https://omgevingsvisie.utrecht.nl/thematisch-beleid/mobiliteitsplan-2040>

Conclusion

BNG Bank is the bank of and for local authorities and public-sector institutions in the Netherlands and its 2019 Sustainability Bond for Dutch Municipalities 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 the Tilburg Sustainability Center of the Tilburg University (TSC-Telos). Given BNG Bank's commitment to sustainability, and the 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.

Sustainalytics has a positive view of the 2018 methodology changes, which provide a more refined assessment including income inequalities. In addition, Sustainalytics views BNG Bank's approach as an innovative method that provides incentives for municipalities to better understand and improve their performance, which is confirmed by the performance improvements of previously elected municipalities from previous similar bonds.

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 finance projects with good sustainability credentials. 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 2019 Sustainability Bond for Dutch Municipalities Framework is robust and transparent and in alignment with the four core components of ICMA's Sustainability Bond Principles 2018.

Appendices

Appendix 1: The Telos methodology

The proceeds of the 2019 Sustainability Bond for Dutch Municipalities will be used by BNG Bank to lend to 'best-in-class' sustainable municipalities in the Netherlands, as identified by the 2019 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').¹⁷ The 14 types of municipalities are listed in the table below.

Table 1: Characteristics and definitions for the 2019 typologies

Criteria	Type of municipality	Definition	Count
Size	Small	<50.000 inhabitants	270
	Mid-sized	Between 50.000 and 100.000 inhabitants	54
	Large	>100.000 inhabitants	31
Demographic development	Growing	Population growth between 2009-2019: >5%	102
	Shrinking	Decline of population between 2009-2019: <2%	40
Housing stock	New towns	> 35% of the housing stock built after 1990	38
	Historical municipality	> 8% of the housing stock built before 1905, and at least one protected historical area	40
Employment opportunities	Residential municipality	Working opportunity function <60	43
	Work focused municipality	Working opportunity function >100 and number of jobs >14.000	67
Soil use	Green municipality	Share of forest or natural area > 30%	52
	Agricultural municipality	Share of agricultural land use > 75%	101
Different criteria	Centre municipality	Municipality includes > 15% of inhabitants of one Corop ¹⁸ area and has above average level of facilities and services	50
	Former industrial municipality	> 55% of working population worked in the industrial jobs according to the 1960 census	66
	Touristic municipality	> 10% of businesses focusses on tourism, or > 14% of working population works in tourism	65

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

¹⁷ 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.

¹⁸ 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

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known as the European Reference Framework for Sustainable Cities (EU RFSC),¹⁹ 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 2019 TSC-Telos methodology monitors and rated municipalities based on the three Capitals, covering 20 themes and 126 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 2019. The data for these indicators will be collected from 25 official public sources, such as the Dutch Central Bureau of Statistics, the Netherlands Environmental Assessment Agency and the Netherlands Institute for Social Research. The table below provides an example of the Capitals and themes covered:

Table 2: Examples of themes analysed in the three capitals

Capitals & Stocks	Indicator
Socio-cultural Capital	
Social participation	Social cohesion, Social contacts, Loneliness, General trust, Volunteers, Informal care giving, Being active in society, Donor registrations
Political participation	Political engagement, Turnout local elections, Turnout national elections, Political trust
Economic participation	Gini-index, Long-term unemployment, Poor households, Social welfare benefits, Financial assets households
Arts and culture	Performing Arts & Cinema’s, Distance to Museum, National monuments, Municipal monuments, Protected sights, Cultural employment
Health	Mental health costs, Life expectancy, Assessment of own health, Chronic illness, Confused people, Insufficient movement, Risky behaviour, Distance to general practitioner, Distance to public hospital, Medicine use
Education	Distance to primary school, Distance to secondary school, Final examination mark, Real-time to diploma, School dropouts, Youth unemployment, Education level population
Safety	Violent crimes, Property crimes, Confused people, Vandalism, Youth crimes, Police response time, Road safety, Child abuse, Feelings of insecurity
Residential environment	Satisfaction with dwelling, Satisfaction with living environment, Satisfaction with local shops and services, Distance to daily services, Migration, Affordable housing, Vacancy houses, Affordable rental housing
Ecological Capital	
Soil	Contaminated sites with health risks, Contaminated sites with spreading risks, Contaminated sites with ecological risks, Soil sealing, Nitrogen deposition
Water	Water quality: Fish population, Water quality: Macro-fauna, Water quality: Flora, Physical-chemical water quality, Water quality: other substances, Water quality: Priority substances, Nitrogen emissions to surface water, Phosphorous emissions to surface water
Air	Emission of carbon-dioxide (CO ₂), Emission of Nitrogen (NO _x), Emission of Particulate matter (PM _{2.5}), Emission of volatile organic substances (NMVOS), Concentration nitrogen-dioxide (NO ₂), Concentration of ozone (O ₃), Concentration of particulate matter (PM _{2.5})
Annoyance and emergencies	Noise annoyance by neighbors, Noise annoyance by traffic, Noise intensity, Light intensity, Risk contour, Floods, Flooding, Earthquakes, Urban heat islands
Nature and landscape	Natural landscapes, Biodiversity, Red list species
Energy	Wind energy, Solar energy, Natural gas use households, Electricity use households, Energy label houses, Natural gas use companies, Energy use companies

¹⁹ 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.

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Resources and waste	Total household waste, Household general waste, Organic waste, Paper and cardboard waste, Packaging glass, Plastics
Economic Capital	
Competitiveness	Gross regional product per capita, Share of startups, Share of bankruptcies, Share of fast-growing enterprises, Share of employment in economic top sectors
Labour	Employment function, Human resources exploitation, Unemployment, Incapacity for work, Ageing labour force, Rejuvenation labour force
Knowledge	Share of highly educated people, Share of knowledge workers, Capacity (applied) scientific education, High- and medium-tech employment, Employment in the creative industry
Spatial conditions for businesses	Stock business parks, Net/gross area ration of business parks, Share of outdated business parks, Accessibility of business parks, Vacant office spaces, Vacant retail spaces
Infrastructure and mobility	Access to train station, Access to main roads and highways, Share of electric personal vehicles, Share of electric commercial vehicles, Glass-fibre internet connectivity, Recharging stations for electric vehicles, Access to public busses

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 2019, the overall sustainability scores for the 114 elected best-in-class municipalities varied from 48.8% to 56.4%.

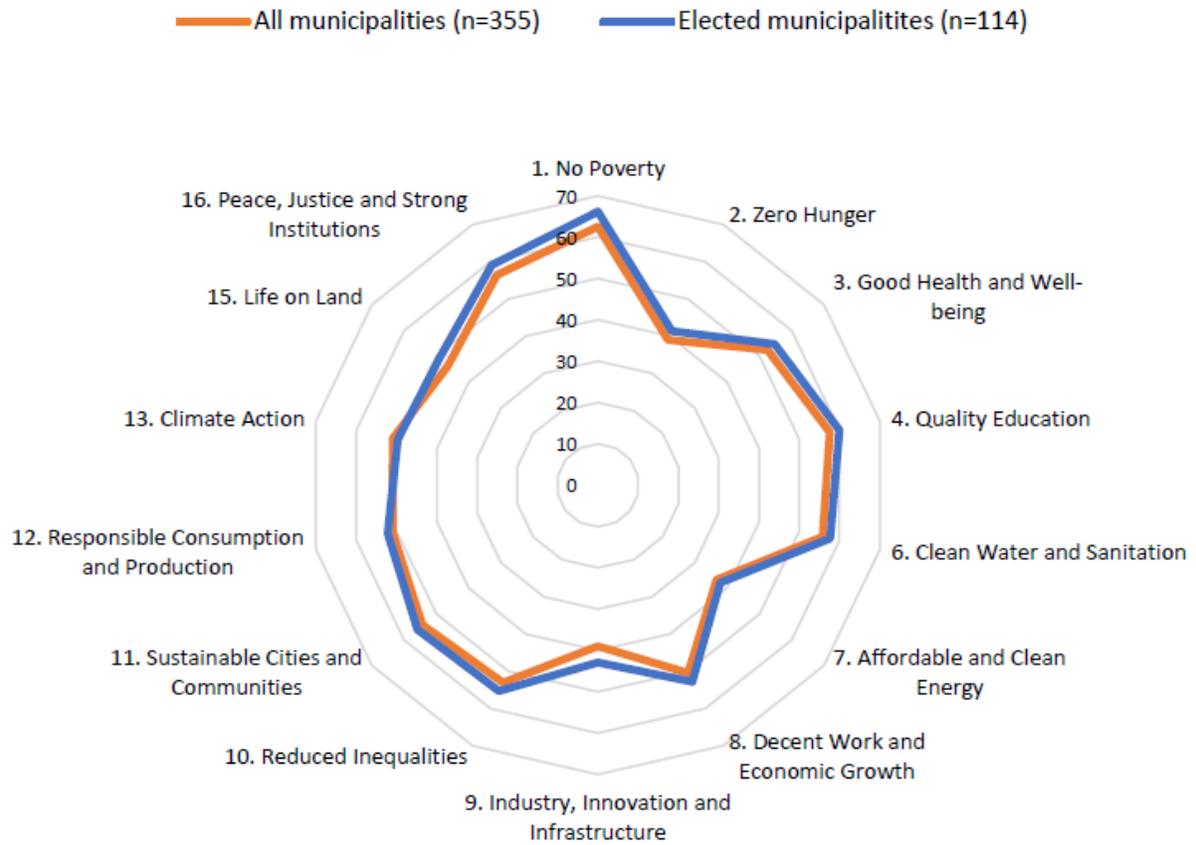
Appendix 2: 2019 Methodology adjustments

TSC-Telos developed similar frameworks in 2014, 2015, 2016, 2017 and 2018 for BNG Bank, using the methodology applied in its annual Dutch National Monitor of Sustainable Municipalities. Every year, the set of indicators is evaluated and refined to the latest data availability and scientific insights. In comparison to 2018, changes had to be made in (i) the number of indicators, and (ii) the number of Dutch municipalities. The number of indicators increased from 126 indicators in 2018 to 132 indicators in 2019. While 10 indicators were added,²⁰ four were removed²¹ and four changed reflecting latest scientific data available and information that could be reliably collected. The number of municipalities decreased from 380 in 2018 to 355 in 2019, reflecting mergers between small municipalities. The number of 'municipality types' was not changed.

²⁰ The following indicators were added: (i) Donor registrations in the social participation stock; (ii) The Gini-index (income inequality) in the economic participation stock; (iii) Mental health costs per inhabitant in the health stock; (iv) Response time of the police in the safety stock; (v) Affordable houses in the living environment stock; (vi) Accessibility of business parks in the spatial conditions for businesses stock; (vii) Rejuvenation of the labour force in the labour stock; (viii) Glassfiber internet connections in the infrastructure and mobility stock; (ix) Congestion in the infrastructure and mobility stock.

²¹ The following indicators were removed: (i) New developed houses; (ii) Odour and dust annoyances; (iii) Investments of non-financial companies; (iv) Work-locations.

Appendix 3: SDG mapping by 2019 Telos – methodology



Appendix 4: Sustainability Bond / Sustainability Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	BNG Bank N.V.
Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable: <i>[specify as appropriate]</i>	2019 BNG Bank Sustainability Bond for Dutch Municipalities
Review provider's name:	Sustainalytics
Completion date of this form:	November 2019
Publication date of review publication: <i>[where appropriate, specify if it is an update and add reference to earlier relevant review]</i>	This is an update of the BNG Sustainability Bond 2018. Overall this is the fifth update of a series of bonds issued on a yearly basis since 2014.

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

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

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

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

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (*if applicable*):

BNG Bank intends to use the proceeds to finance general purpose loans to best-in-class sustainable municipalities. It seeks to do so within the same year as the annual Framework, limiting the look back period to that specific calendar year only. While the use of proceeds category is as such not included in the Sustainability Bond Guidelines, the indicators used to assess the sustainability of Dutch municipalities includes social and green indicators that clearly link to the use of proceeds categories recognized as impactful by the Social Bond Principles and Green Bond Principles. For example, the methodology takes into consideration the types of energy sources used, waste, biodiversity and public green areas, water, soil and air quality, unemployment rates, share of start-ups, affordable housing, social welfare benefits and distance to schools. Sustainalytics considers BNG Bank's approach as innovative and impactful to increase sustainable practices of municipalities in the Netherlands. (for more information see section 3)
Aligned with market practice, proceeds of the 2019 Sustainability Bond will be allocated to loans originated in 2019.

Use of proceeds categories as per GBP:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input checked="" type="checkbox"/> Pollution prevention and control | <input checked="" type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input checked="" type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input checked="" type="checkbox"/> Clean transportation |
| <input checked="" type="checkbox"/> Sustainable water and wastewater management | <input type="checkbox"/> Climate change adaptation |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input checked="" type="checkbox"/> Other (<i>please specify</i>): |

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

Use of proceeds categories as per SBP:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Affordable basic infrastructure | <input checked="" type="checkbox"/> Access to essential services |
| <input checked="" type="checkbox"/> Affordable housing | <input checked="" type="checkbox"/> Employment generation (through SME financing and microfinance) |

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- | | |
|--|---|
| <input type="checkbox"/> Food security | <input checked="" type="checkbox"/> Socioeconomic advancement and empowerment |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBPs | <input checked="" type="checkbox"/> Other (please specify): |

If applicable please specify the social taxonomy, if other than SBPs:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

The bond proceeds will be disbursed to the municipalities assessed as best-in-class for their sustainability performance. Sustainalytics is of the opinion that the TSC-Telos Rating Methodology provides a robust approach to rating the sustainability of municipalities based on ecological, socio-cultural and economic indicators.

Evaluation and selection

- | | |
|---|--|
| <input checked="" type="checkbox"/> Credentials on the issuer's social and green objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Sustainability Bond proceeds | <input type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input checked="" type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (please specify): |

Information on Responsibilities and Accountability

- | | |
|--|---|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input checked="" type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (please specify): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

BNG Bank's process to manage the bond's proceeds are aligned with market practice. BNG Bank earmarks the eligible bonds by tagging them with the ISIN code of the relevant BNG Bank sustainability bond to track and monitor the use of proceeds. Aligned with market practice, any balance of proceeds unallocated will be held in accordance with BNG Bank liquidity management policy, which is subject to BNG Bank's sustainability policy which covers investment principles and exclusion criteria

Tracking of proceeds:

- Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner

- Disclosure of intended types of temporary investment instruments for unallocated proceeds
- Other (*please specify*):

Additional disclosure:

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

4. REPORTING

Overall comment on section (if applicable):

While BNG Bank will not provide annual allocation reporting, it intends to report to investors when the proceeds are fully allocated, which is expected to be shortly after issuance. In addition, BNG Bank is committed to disclosing the selection of the municipalities, their sustainability score and contribution to the SDGs as well as changes in sustainability scores compared to previous years via its Performance Reports on an annual basis. Sustainalytics recognizes that the sustainability performance of municipalities cannot directly be linked to bonds proceeds.

Use of proceeds reporting:

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

Information reported:

- Allocated amounts
- Other (*please specify*):
- Sustainability Bond financed share of total investment

Frequency:

- Annual
- Other (please specify):
- Semi-annual

Impact reporting:

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

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Frequency:

- Annual
 Semi-annual
 Other (please specify):

Information reported (expected or ex-post):

- GHG Emissions / Savings
 Energy Savings
 Decrease in water use
 Number of beneficiaries
 Target populations
 Other ESG indicators (please specify):

Means of Disclosure

- Information published in financial report
 Information published in sustainability report
 Information published in ad hoc documents
 Other (please specify):
 Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

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.)

BNG Bank website, Sustainability Bond: <https://www.bngbank.com/funding/sustainability-bond>

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 AND THE SBP

- i. **Second Party Opinion:** An institution with sustainability expertise that is independent from the issuer may provide a Second Party Opinion. The institution should be independent from the issuer's adviser for its Sustainability Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy, and/or processes relating to sustainability and an evaluation of the environmental and social features of the type of Projects intended for the Use of Proceeds.
- ii. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or sustainability criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally or socially sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Sustainability Bond proceeds, statement of environmental or social impact or alignment of reporting with the Principles may also be termed verification.
- iii. **Certification:** An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against a recognised external sustainability standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. **Green, Social and Sustainability Bond Scoring/Rating:** An issuer can have its Sustainability Bond, associated Sustainability Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental and/or social performance data, process relative to the Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material sustainability risks.

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For more information, visit www.sustainalytics.com

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