

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. While the eligibility criteria, 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. 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. In addition, unallocated proceeds will be held in accordance with BNG Bank’s liquidity management policy.



REPORTING BNG Bank intends to report on allocation of proceeds in its annual report on an annual basis. In addition, BNG Bank has committed to publishing the BNG Bank Performance Report, including an update on the sustainability scores of the 125 elected municipalities for the BNG Bank 2018 Sustainability Bond. Sustainalytics recognizes that the sustainability performance of municipalities cannot directly be linked to bonds proceeds, which is a limitation of the bond.

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For inquires, contact the Sustainable Finance Solutions project team:

Lili Hocke (Amsterdam)
 Project Lead
 lili.hocke@sustainalytics.com
 (+31) 20 205 00 40

Jean-Claude Berthelot (Amsterdam)
 Client Relations
 Jean-claude.berthelot@sustainalytics.com
 (+31) 20 205 00 15

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/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 municipalities that have experience in improving sustainability, 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 2017 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 <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 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 2018 Sustainability Bond will be allocated to loans originated in 2018.
- Project Selection Process:
 - 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 liquidity management policy.
- Reporting:
 - Aligned with market practices, BNG Bank will report allocation of proceeds to eligible municipalities within one year of issuance and on an annual level hereafter. 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 125 elected municipalities for the BNG Bank 2018 Sustainability Bond for Dutch Municipalities. Sustainalytics recognizes that the sustainability performance of municipalities cannot directly be linked to bonds proceeds, which is a limitation of the bond.

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 (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.

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).

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 3: 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."⁵

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 in the Netherlands.⁶ In addition, BNG Bank signed the Climate Statement of the Dutch Banking Association⁷ (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.

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 with changes conducted in the 2018 methodology compared to 2017 methodology in Appendix 2. Sustainalytics has a positive view on the methodology changes implemented. Namely, a more refined

⁴ BNG Bank Sustainability Policy 2018, <https://www.bngbank.com/Documents/About%20BNG%20Bank/Sustainability-policy.pdf>

⁵ BNG Bank Sustainability Policy 2018

⁶ BNG Bank website, Sustainability: <https://www.bngbank.com/sustainability>

⁷ https://www.nvb.nl/media/document/000718_climate-statement-banks.pdf

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 3), 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 20 of the eligible municipalities in 2018 rank below 50 points, compared to two in 2017, BNG clarified that the number of municipalities below 50 points can relate to the change in the indicator set and changed indicators. The 2018 methodology adjustment (see Appendix 2) included adding a set of four indicators that speak to political participation and addition of 14 other indicators, speaking to socio-cultural, environmental and economic topics. In addition, six municipalities with scores below 50 belong to the category of shrink municipalities, i.e. municipalities for which the population has declined by more than 2% between 2008 and 2018. 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 European Commission has recognized the importance of cities and their impact on the environment,⁸ as well as the importance of local governments and authorities to address the many challenges of urban areas.⁹ Additionally, the Dutch government acknowledged that more than half of all CO₂ emissions originate in and around cities.¹⁰ 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 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 2013¹¹ 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 period¹² (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

⁸ <http://ec.europa.eu/environment/europeangreencapital/wp-content/uploads/2011/08/Making-our-cities-attractive-and-sustainable.pdf>

⁹ <http://ec.europa.eu/environment/europeangreencapital/about-the-award/policy-guidance/>

¹⁰ <https://www.government.nl/topics/climate-change/dutch-vision-on-global-climate-action>

¹¹ Energy Agreement for Sustainable Growth [Energieakkoord voor duurzame groei] referenced earlier in the document

¹² <https://www.kabinetsformatie2017.nl/documenten/publicaties/2017/10/10/regeerakkoord-vertrouwen-in-de-toekomst>

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sustainability strategy and the Dutch commitment to reduce greenhouse gas emission by 20% in 2020 and 40% in 2030 (from 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 2017 Report,¹³ there was an overall improvement of sustainability scores of 0.9 -1% points in the 2017 selected municipalities. In addition, the following improvements were made in the selected municipalities from the 2014, 2015, 2016 and 2017 sustainability bond for Dutch municipalities. In addition, the municipalities selected in the 2014 bond showed improvement of 2.95% points in the overall score and 2.32% points for the socio-cultural, 2.88% points for the economic and 3.66% points for the ecological indicator sets between 2014 and 2018,¹⁴ indicating that the overall sustainability of municipalities improves.

- (i) The overall scores of selected municipalities from 2014 improved by 2.95% points between 2014 and 2018, 2.33% points for 2015 municipalities between 2015 and 2018, 1.51% points for 2016 municipalities between 2016 and 2018 and 0.92% points for 2017 municipalities between 2017 and 2018, indicating a continuous improvement of sustainability performance.
- (ii) For the socio-cultural indicator set, the following improvements were made until 2018 for the 2014, 2015, 2016, and 2017 selected municipalities. The scores increased by 2.32% points, 2.09% points, 1.71% points, and 1.15% points, respectively.
- (iii) For the ecological indicator set, the following improvements were made until 2018 for the 2014, 2015, 2016, and 2017 selected municipalities. The scores increased by 3.66% points, 1.91% points, 0.76% points, and 0.65% points, respectively.
- (iv) For the economic indicator set, the following improvements were made until 2018 for the 2014, 2015, 2016, and 2017 selected municipalities. The scores increased by 2.88% points, 2.98% points, 2.08% points, and 0.95% points, respectively.

Furthermore, the analysis shows that 97% of 2014 elected municipalities reduced or stabilized their CO₂-emissions in reporting years 2014-2018 and 93.5% of 2016 elected municipalities realized a stable or improved total sustainability score in 2018.

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 2020.¹⁵ 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 2015-2018,¹⁶ further elaborates on detailed targets, including subsidies for sustainable housing, and knowledge sharing on sustainability. Finally, the municipality of Utrecht developed a mobility plan¹⁷ 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.

¹³ 1st Performance Report of Elected Dutch Municipalities of BNG Bank Sustainability Bond of November 2017:

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

¹⁴ BNG Bank, Fourth Performance Report of the 2014 Sustainability Bond: <https://www.bngbank.com/Documents/Investors/4th-performance-report-sustainability-bond-2014.pdf>

¹⁵ Midden-Delfland municipality website https://www.middendelfland.nl/voor-inwoners/klimaatadaptatie_43226/; https://www.middendelfland.nl/over-midden-delfland/convenant-of-mayors_42864/

¹⁶ Bloemendaal sustainability programme 2015-2018, <http://docplayer.nl/42251928-Uitvoeringsprogramma-duurzaamheid.html>

¹⁷ 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>

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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. 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>

Conclusion

BNG Bank is the bank of and for local authorities and public-sector institutions in the Netherlands and its 2018 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 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.

Sustainalytics has a positive view on the 2018 methodology changes, which provide a more refined assessment including political participation. In addition, Sustainalytics views BNG Bank's approach as 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 financing 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 2018 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 2018 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 2018 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').¹⁸ The 14 types of municipalities are listed in the table below.

Table 1: types of municipalities use on the TSC-Telos Methodology

Criteria	Source data	Type of municipality	Definition
Size	2018	Small	<50.000 inhabitants
	2018	Mid-sized	between 50.000 and 100.000 inhabitants
	2018	Large	>100.000 inhabitants
Development of population	2008-2018	Growing	Population growth between 2008-201: >5%
	2008-2018	Shrinking	Decline of population between 2008-2018: <2%
Housing stock	2018	New town	> 35% houses placed after 1990
	2017	Historical municipality	Housing stock before 1905 >8% + one or several monumental cityscapes
Working opportunity	2017	Residential municipality	Working opportunity function <60
	2017	Work focused municipality	Working opportunity function >100 + number of jobs >14.000
Land use	2012	Green municipality	Share of forest and nature land use >30%
	2012	Agricultural municipality	Share of agricultural land use >75%
Different criteria	2012; 2016	Centre municipality	Municipality includes >15% of inhabitants of one Corop ¹⁹ area + score of >50 in service provision of the region
	1960	Former industrial municipality	> 53% of working population worked in the industrial jobs according to the 1960 census
	2017	Touristic municipality	> 10% of businesses focusses on tourism or >14% of working population works in tourism

¹⁸ 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.

¹⁹ 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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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),²⁰ 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 2018 TSC-Telos methodology monitors 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 2018. 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 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
Political participation	Political engagement, Turnout local elections, Turnout national elections, Political trust
Economic participation	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	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, Vandalism, Youth crimes, 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, New houses developed, Vacancy houses, Affordable 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	Annoyance by odours, Annoyance by noise, Noise intensity, Light intensity, Risk contour, Floods, Flooding, Earthquakes, Urban heat islands

²⁰ 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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Nature and landscape	Public green, Distance to recreational water, Share of forest and natural area, 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
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 start-ups, Share of bankruptcies, Share of fast-growing enterprises, Share of employment in economic top sectors, Investments of non-financial companies
Labour	Employment function, Human resources exploitation, Unemployment, Incapacity for work, Ageing 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, Work locations, Vacant office spaces, Vacant retail spaces
Infrastructure and mobility	Access to train station, Access to main roads and highways, Share of electric vehicles, 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 2018, the overall sustainability scores for the municipalities varied from 48.4% to 56.3%.

Appendix 2: 2018 Methodology adjustments

TSC-Telos developed similar frameworks in 2014, 2015, 2016 and 2017 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 2017, changes had to be made in (i) the number of indicators, and (ii) the number of Dutch municipalities. The number of indicators increased from 109 indicators in 2017 to 126 indicators in 2018. While 18 indicators were added,²¹ four were removed²² and two changed reflecting latest scientific data available and information that could be reliably collected. The number of municipalities decreased from 388 in 2017 to 380 in 2018, reflecting mergers between small municipalities. The number of 'municipality types' was not changed.

²¹ 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.

²² Mixed sewerage system, from the stock Water

Appendix 3: 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>	2018 BNG Bank Sustainability Bond for Dutch Municipalities
Review provider's name:	Sustainalytics
Completion date of this form:	November 2018
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 2017. Overall this is the fourth 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 Executive 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. 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 2018 Sustainability Bond for Dutch Municipalities will be allocated to loans originated in 2018.

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 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>): see specified in the appendix |

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

Use of proceeds categories as per SBP:

- | | |
|--|--|
| <input 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) |
| <input type="checkbox"/> Food security | <input checked="" type="checkbox"/> Socioeconomic advancement and empowerment |

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- Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBPs
 Other (please specify): see specified in the appendix

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.

Tracking of proceeds:

- | |
|---|
| <input checked="" type="checkbox"/> Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input checked="" type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (please specify): |

Additional disclosure:

- | | |
|--|---|
| <input type="checkbox"/> Allocations to future investments only | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements | <input type="checkbox"/> Allocation to a portfolio of disbursements |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other <i>(please specify)</i> : |

4. REPORTING

Overall comment on section (if applicable):

Aligned with market practices, BNG Bank will report allocation of proceeds to eligible municipalities within one year of issuance and on an annual level hereafter. 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 125 elected municipalities for the BNG Bank 2018 Sustainability Bond for Dutch Municipalities. Sustainalytics recognizes that the sustainability performance of municipalities cannot directly be linked to bonds proceeds, which is a limitation of the bond.

Use of proceeds reporting:

- | | |
|--|--|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other <i>(please specify)</i> : |

Information reported:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Allocated amounts | <input checked="" type="checkbox"/> Sustainability Bond financed share of total investment |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

Frequency:

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

Impact reporting:

- | | |
|--|--|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify): |

Frequency:

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

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Information reported (expected or ex-post):

- | | |
|--|---|
| <input type="checkbox"/> GHG Emissions / Savings | <input type="checkbox"/> Energy Savings |
| <input type="checkbox"/> Decrease in water use | <input type="checkbox"/> Number of beneficiaries |
| <input type="checkbox"/> Target populations | <input checked="" type="checkbox"/> Other ESG indicators (please specify): Sustainability score of elected municipalities |

Means of Disclosure

- | | |
|---|---|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report |
| <input checked="" type="checkbox"/> Information published in ad hoc documents | <input type="checkbox"/> Other (please specify): |
| <input type="checkbox"/> 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:

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

Review provider(s):

Date of publication:

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- i. Consultant Review: An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental and social sustainability or other aspects of the issuance of a Sustainability Bond, such as the establishment/review of an issuer's Sustainability Bond framework. "Second Party Opinions" may fall into this category.
- ii. Verification: An issuer can have its Sustainability Bond, associated Sustainability 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 and socially sustainable features of underlying assets may be termed verification and may reference external criteria.
- iii. Certification: An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against an external green and social 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 Sustainability Bond or associated Sustainability Bond framework rated by qualified third parties, such as specialised research providers or rating agencies. Sustainability Bond ratings are separate from an issuer's ESG rating as they typically apply to individual securities or Sustainability Bond frameworks / programmes.

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For more information, visit www.sustainalytics.com

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