

N.V. Bank Nederlandse Gemeenten

BNG Sustainability Bond Presentation



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Key Facts

- Founded by (local) government in 1914
- Dutch Government owned
 - Dutch State 50% (since 1921)
 - Dutch local governments 50%
 - Ownership restricted to Dutch public authorities (art. 6 Articles of Association)
 - Registered shares only (not listed)
- Dutch Promotional Bank
 - Lending restricted to local authorities and public sector institutions in the Netherlands and the E.U. (art. 2.3 Articles of Association)
- BNG Bank's ratings: Aaa (stable) / AAA (stable) / AA+ (stable)

Developments in Rules and Regulations

- High Quality Liquid Assets (“HQLA”) eligibility for the Liquidity Coverage Ratio (“LCR”)
 - European Union: level 1 (confirmed: <http://www.toezicht.dnb.nl/3/50-232044.jsp>)
European Commission “Delegated Act of 10.10.2014” : Article 10 (1e ii)
 - Switzerland: level 2a (confirmed: all currencies)
 - US: level 2A Liquid Assets (guidelines are subject to individual investor interpretation)
Federal Register/Vol. 79, No 197/Friday, October 10, 2014/Rules and Regulations
- BNG Bank Euro-denominated bonds eligible under ECB Public Sector Purchase Programme (“PSPP”)
- Dutch Central Bank has designated BNG as a bank of national systemic importance

Dutch Public Sector

Municipalities

- credit quality: similar as the State of the Netherlands
- Municipal Act / Financial Relationship Act
- 0% BIS risk-weighted by Dutch Central Bank

Housing Associations

- social housing: subsidizing rent
- guarantee fund "WSW": rated Aaa(stable)/AAA(stable)
- back stop by the State of the Netherlands:
irrevocable/irreversible/unlimited
- 0% BIS risk-weighted by Dutch Central Bank

Health Care institutions

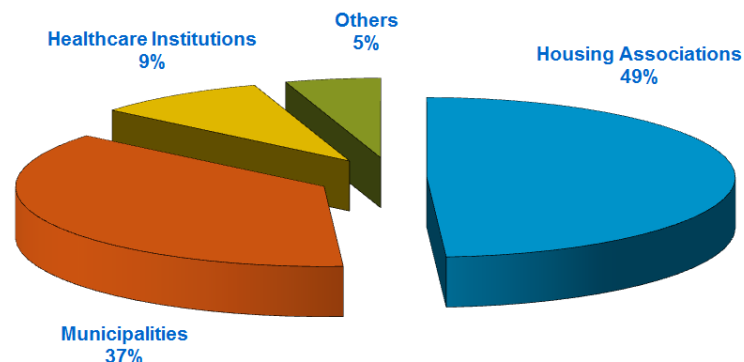
- hospitals, elderly homes
- guarantee fund "WFZ": rated AAA(stable) by S&P
- 0% BIS risk-weighted by Dutch Central Bank

Other

- education sector (universities/colleges), ETFF

Public Utilities

- network companies only / waste management



BNG Long Term Assets:

Eur 79.8 bn

(June 2017)

BNG Bank's Market Share

(of **total outstanding** loans to Dutch public sector)

	2016	2015	2014
Municipalities	67%	66%	65%
Housing Associations	54%	54%	54%
Health Care	48%	47%	47%
Public Utilities	8%	8%	9%
Others	27%	27%	27%

Financial Data

	2017 1st half	2016	2015	2014
Total Assets (EUR bn)	146.3	154.0	149.5	153.5
Leverage Ratio	3.5%	3.3%	2.9%	2.0%
TIER 1 Ratio	36.1%	31.9%	26.7%	23.6%
Profit (EUR mn)				
- Profit (before tax)	322	503	314	179
- Net Profit (after tax)	242	369	226	126
Net Interest Margin	0.30%	0.26%	0.30%	0.29%
Cost to Income Ratio	9.3%	11.3%	13.4%	23.0%
Return on Equity	13.4%	11.5%	7.3%	4.3%

Dividend pay-out ratio 2016-2011: 25%

2010-2008: 50%

Short Term Funding

- Objective: managing BNG's short term liquidity
- Financing instruments:
 1. Euro Commercial Paper program EUR 20bn, in all major currencies
 - ratings A-1+/P-1/F1+
 - dealers BoAML, Barclays, Citi, NatWest, UBS
 - minimum ticket size EUR 10mn equivalent
 2. US Commercial Paper program USD 15bn
 - ratings A-1+/P-1
 - dealers Barclays, Goldman, JPMorgan
 - minimum ticket size USD 10mn
 3. Deposits from 1 to 12 months, in all major currencies
 - minimum size EUR 10mn equivalent
- Investor base:
 - central banks, money market funds, corporates, pension funds

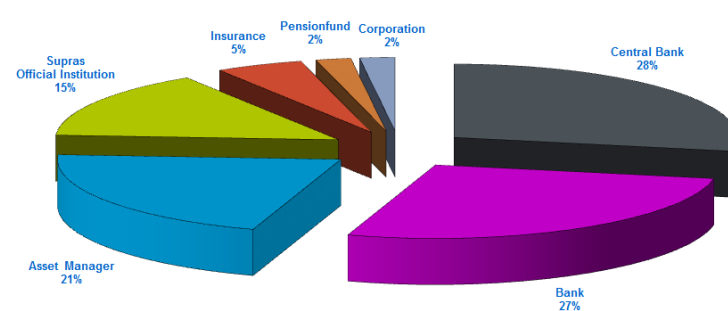
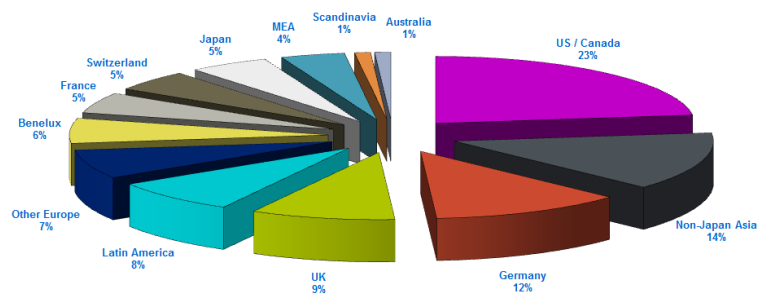
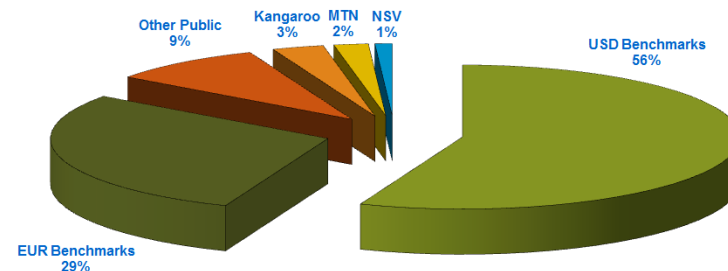
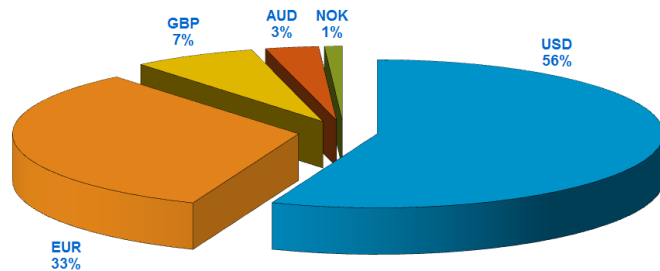
Long Term Funding

- Long term funding requirement
 - 2017 (f): EUR 17bn
- Strategic funding
 - maintenance of a benchmark curve in EUR and USD
 - regular issuance of liquid transactions (minimum size 1bn)
- Regular presence in public markets
 - AUD, CAD, CHF, GBP, JPY, NOK, NZD and SEK
- Sustainability Bonds for Dutch Municipalities and Social Bonds for Dutch Housing Associations
- Private placements
- Repo eligible with
 - European Central Bank, Federal Reserve Bank of New York, Reserve Bank of New Zealand and Swiss National Bank

Funding 2017

(as per October 27, 2017)

- Total Issuance: EUR ± 15.5 bn equivalent
- Weighted average maturity: 5.4 years
- 59 transactions / 5 currencies



BNG and Sustainability

- Sustainability is an integral part of BNG's strategy
- BNG Bank awarded a C 'prime' sustainability rating by Oekom research AG (December 2016)
- The BNG Sustainability Bonds criteria are defined in the 'Framework for Best-in-Class Municipality Investment' and the Social Bond criteria are defined in the 'Framework for Dutch Housing Associations'. Both Frameworks are based on the methodology developed by an independent party: Sustainability Centre of Tilburg University (TSC-Telos)
- Sustainalytics has provided second party review for both Frameworks
- The proceeds of the sustainability and social bonds are earmarked and allocated to lending to sustainable municipalities and social housing associations respectively
The earmarking and allocation process is reviewed yearly by BNG's external auditor
- The data used for the annual impact reporting by TSC-Telos come from official public sources
- Sustainability Bonds linked to Dutch Municipalities
 - 2014: EUR 500,000,000 0.375% due October 2019
 - 2015: EUR 650,000,000 0.125% due November 2020
 - 2016: USD 600,000,000 1.625% due November 2019
- Social Bond linked to Dutch Housing Associations
 - 2016: EUR 1,000,000,000 0.05% due July 2024

BNG - Sustainability Bond Guidelines

BNG applies the Sustainability Bond Guidelines:

- 1. Use of proceeds criteria:** The BNG Sustainability Bonds criteria are defined in the 'Framework document for Best-in-Class Municipality Investment'. Based on the Reference Framework for European Sustainable Cities (RFSC) defined by the EU.
- 2. Selection and analysis of the investments** is done based on the methodology developed by an independent party: [Tilburg Sustainability Center of Tilburg University](#) (TSC-Telos). TSC-Telos specializes in operationalizing sustainable development in regional and urban initiatives. TSC-Telos Research areas are Climate Action & Resource Efficiency, Corporate Social Responsibility, Social Innovation and Governance. Sustainability provides an external opinion on the framework.
- 3. Management of the proceeds:** The proceeds of the sustainability bonds are tracked by the issuer and allocated to BNG's lending and investment operations to sustainable municipalities. This is externally audited.
- 4. Reporting:** The data used for the annual impact reporting by TSC-Telos come from official public sources.



BNG Sustainability Bonds – Selection of the investments

- Sustainability Bond Framework by Telos, University of Tilburg



- 3 Pillars

- Social-Cultural Capital
- Ecological Capital
- Economic Capital



- 19 Themes



- 109 Quantitative Impact Indicators from public official sources*



- 14 Types of Municipalities

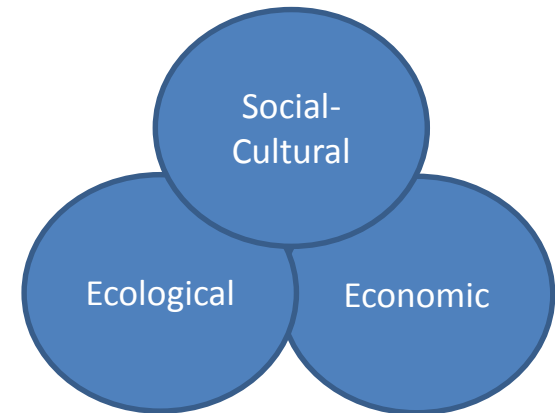
- Quantitative types (small, mid-sized, large)
- Qualitative types (agricultural, center, former industrial, green, growth, historic, residential, new town, shrink, tourist, work)

- 388 Dutch Municipalities**



- Top 15 best-in-class of sustainable municipalities in the Netherlands

- 34% of the total number of Dutch municipalities
- 115 Elected Sustainable municipalities
- Sustainability challenge differs per class because of different historic and geographical backgrounds

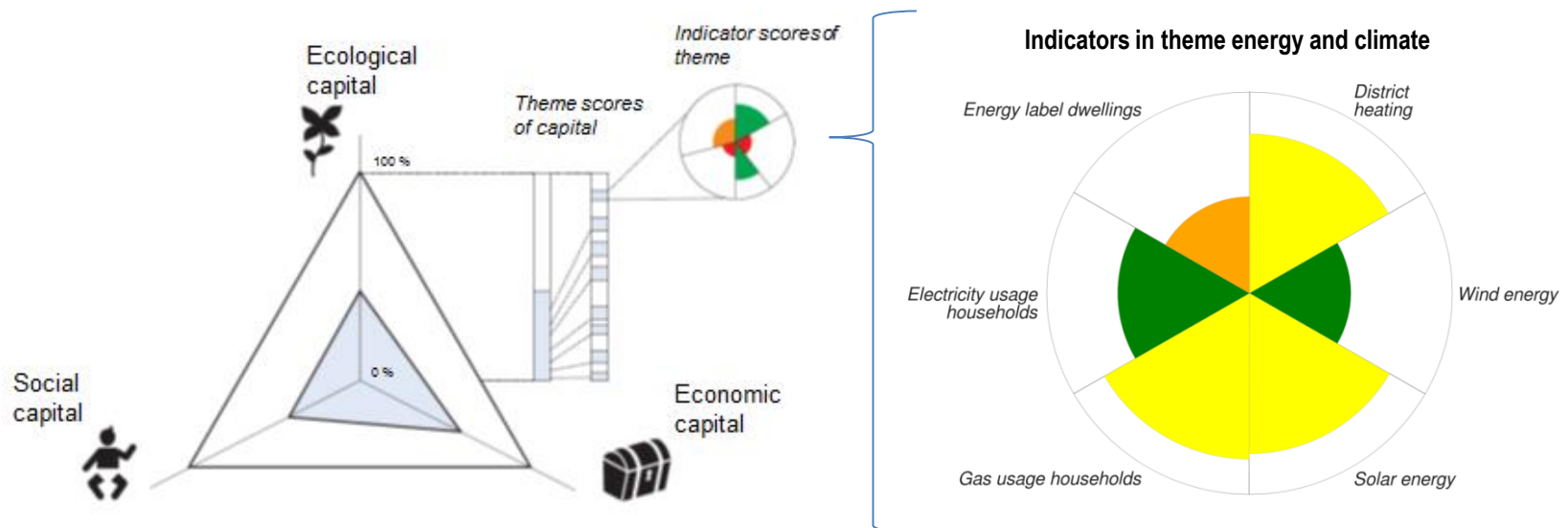


*Five indicators were added to the dataset, and one indicator was removed compared to 2016. Please see Appendix 1 for more information.

**Due to recent municipal reorganizations, the total number of Dutch municipalities has decreased from 390 in 2016 to 388 in 2017. Please see Appendix 1 for more information.

BNG Sustainability Bonds – Methodology

- The overall sustainability score of a Dutch municipality is calculated as the average score of the three sustainability capital scores
- Each sustainability capital score is calculated as the average score of the theme scores
- Each theme score is calculated as the average score of the indicators scores
- The higher the achievement of a Dutch municipality, the longer the pie piece (0-100%)
- Example 'Energy and Climate theme':



BNG Sustainability Bonds – Methodology

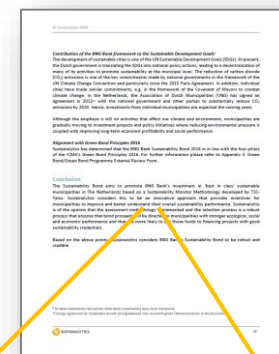
Ecological Capital	
Theme	Indicators
Soil	Contaminated sites with unacceptable human risks, contaminated sites with high ecological risks, contaminated sites with high distribution risks, Manure- Nitrogen quantity produced, Manure- Phosphorous quantity produced, Soil sealing
Air	Emission of CO ₂ , Emission of NO _x , Emission of Particulate Matter (PM _{2.5}), Emission of Volatile Organic Substances, Concentration NO _x , Concentration of Ozone, Concentration of PM _{2.5}
Annoyance and Emergencies	Noise intensity, Noise annoyance, Light intensity during the night, Annoyance by odors, Risk of road transport of dangerous chemicals, Land surface with a 10-6 risk contour, Earthquakes, Floods
Water	Ecological quality of surface water, Chemical quality of surface water, Nitrogen emissions to surface water, Phosphorous emissions to surface water, Drinking-water quality
Nature and Landscape	Share of forest and natural area, Distance of public green, Distance to inland recreational water, Biodiversity total, Biodiversity red list species
Energy and Climate	Wind energy, Solar energy, Average natural gas consumption households, Average electricity consumption households, Energy label houses, Average natural gas consumption businesses, Average electricity consumption businesses
Resources and Waste	Household waste, residual waste, Organic waste, Paper and cardboard waste, Packaging glass, Plastics

Social-Cultural Capital	
Theme	Indicators
Social Participation	Cohesion, Volunteers, Turnout municipal elections, Turnout national elections, Informal care
Economic Participation	Financial assets household, Long lasting unemployment, Social assistance, Poor households
Arts and Culture	Distance to performing arts, National monuments, Municipal monuments, Distance to museum, Protected city/village views
Health	Insufficient exercise, Risky behavior, Distance to GP practice, Quality of hospitals, Distance to hospital, Life expectancy, Assessment of own health, Chronically sick people, Confused people
Safety	Violent crimes, Crimes against property, Youth crime, Vandalism, Road safety, Feeling of insecurity
Residential Environment	Housing deficit, Distance to daily goods and services, Satisfaction with living environment, Satisfaction with shops, Mutations in number of residents, Satisfaction with dwelling
Education	Youth unemployment, Distance to elementary schools, Distance to secondary education schools, Early school leavers, Real-time to diploma, Final examination mark, Education level population

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

BNG Sustainability Bonds – External Review

- BNG has obtained a distinct Second Party Opinion for **each** Sustainability Bond that has been issued
- All Sustainalytics reports can be found on BNG's website*



Conclusion

The Sustainability Bond aims to promote BNG Bank's investment in 'best in class' sustainable municipalities in The Netherlands based on a Sustainability Monitor Methodology developed by TSC-Telos. Sustainalytics considers this to be an innovative approach that provides incentives for municipalities to improve and better understand their overall sustainability performance. Sustainalytics is of the opinion that the assessment methodology implemented and the selection process is a robust process that ensures that bond proceeds will be directed to municipalities with stronger ecological, social and economic performance and that are more likely to use those funds to financing projects with good sustainability credentials.

Based on the above points, Sustainalytics considers BNG Bank's Sustainability Bond to be robust and credible.



*The link to more information regarding BNG's sustainability bonds: <https://www.bngbank.com/funding/sustainability-bond>

BNG Sustainability Bonds – Impact Reporting

- Telos of Tilburg University provides annual impact reports for BNG's Sustainability Bonds, based on its yearly National Monitor Sustainable Municipalities for the Netherlands
- The full reports can be found on BNG's website*
- Example of the results:

Sustainability Capital	Score Elected Muni's 2016	Score Elected Muni's 2017	Elected Difference 2016-17
Ecological	55.63	55.91	0.28
Economic	49.59	51.13	1.54
Socio-cultural	53.79	54.60	0.81
Total	53.01	53.89	0.88

Agricultural Municipality	Sustainability Score 2016	Sustainability Score 2017	Difference
Voorst	54.8	56.8	2.0
Sint-Michielsgestel	53.7	55.4	1.7
Boekel	53.3	54.8	1.5
Montfoort	55.6	57.0	1.4
Oudewater	54.2	55.6	1.4
Midden-Delfland	58.7	59.9	1.2
Bunnik	57.0	58.1	1.1
Wierden	53.3	54.3	1.0
Eijsden-Margraten	54.9	55.8	0.9
Olst-Wijhe	53.7	54.4	0.7
Eemnes	51.9	52.5	0.6
Renswoude	55.8	56.2	0.4
Sint Anthonis	53.1	53.4	0.3
Zoeterwoude	54.4	54.4	0.0
Dalfsen	56.8	56.5	-0.3
Average	54.7	55.7	0.9

*The link to more information regarding BNG's sustainability bonds: <https://www.bngbank.com/funding/sustainability-bond>

Summary



- Dutch Promotional Bank
- Aaa (stable) / AAA (stable) / AA+ (stable)
- 100% Dutch Government owned
- Standard & Poor's (5 December 2016)
 - "Leading lender to Dutch public authorities, supporting very strong asset quality"
 - "Sound capitalization"
 - "Almost certain likelihood of extraordinary government support"
- Moody's (2 January 2017)
 - "The largest lender to the Dutch public sector, fully owned by Dutch public entities"
 - "High asset quality"
 - "Very high probability of government support resulting in two-notch uplift for debt and deposit ratings"

Contact Information

Capital Markets

- Public Issuance
- Investor Relations

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Money Markets

- Commercial Paper
- Short Term Deposits

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Appendix 1 The Telos Method of measuring sustainability

Changes in indicator set

- Every year, the set of indicators is evaluated and refined to the latest data availability and scientific insights. In this way Telos makes sure that the instrument stays up-to-date. This year, five indicators were added to the dataset and one indicator was removed. The following indicators were added:
 - Satisfaction with dwelling, in the stock Residential Environment
 - Soil sealing, in the stock Soil
 - Contaminated sites with high ecological risks, in the stock Soil
 - Contaminated sites with high distribution risks, in the stock Soil
 - Total amount of household waste, in the stock Resources and Waste
- Compared to the 2016 edition, one indicator has been deleted due to a lack of data:
 - Mixed sewerage system, from the stock Water

Municipal reorganizations

- In 2016, there were 390 Dutch municipalities. Due to recent municipal reorganizations, the total number of Dutch municipalities has decreased to 388. In comparison to last year's report 'Socially Responsible Investment Bond 2016', there has been one municipal reorganization.
- The municipalities 'Schijndel', 'Sint-Oedenrode' and 'Veghel' have been merged into the municipality 'Meerijstad'.