

BNG Bank Socially Responsible Investment Bond

Sustainability Framework document for Best-in-Class Municipality Investment

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Summary

BNG Bank asked Telos, of Tilburg University, for its support in creating a Socially Responsible Investment (SRI) Bond framework to promote BNG Bank's investment in the best-in-class of sustainable municipalities in the Netherlands. Telos developed a framework using the same methodology applied in its Dutch National Monitor of Sustainability of Municipalities, which it published in March 2014. This methodology is an operationalization of a similar approach known as the European Reference Framework for Sustainable Cities (RFSC). It is based on a detailed comparison of the municipalities using 90 scientific indicators for which quantitative data are available from reliable public sources.

Moreover, municipalities have been categorized in several types to reflect e.g. historical and geographical structural differences in developmental challenges. The Framework presents, out of a total of 403 Dutch municipalities, a list of 96 municipalities which are the top-15 best-in-class municipalities for 8 types of municipalities as defined in the Dutch National Monitor. Furthermore a structure for Reporting and Impact assessment is presented.

1 Scope and objectives

Telos - which forms part of the Tilburg Sustainability Center at Tilburg School of Economics and Administration of Tilburg University - was commissioned by BNG Bank to help create a 'Socially Responsible Investment' (SRI) or 'Green Bond' framework to support investments made by BNG Bank in the top class of sustainable municipalities in the Netherlands. This framework is consistent with the Green Bond Principles (2014), which are voluntary Process Guidelines for issuing Green Bonds, established in January 2014 by a group of international banks. A SRI bond is a normal bond with specific use-of-proceeds requirements, namely for sustainable projects or borrowers. The first principle of green bonds is that there must be a clear definition of the relevant criteria. BNG Bank asked Telos to develop a document to describe the sustainability criteria that Telos would use to assess the sustainability of Dutch cities. In March 2014, Telos published a National Monitor for Sustainability in Dutch Municipalities at the request of the Dutch Ministry of Infrastructure and Environment (Zoeteman et al., 2014a). This National Monitor includes a framework and data that provides a useful source for the requirements of BNG Bank in defining its criteria for the "Sustainability Bond". The Framework document will help investors and other stakeholders to understand these criteria.

Telos is part of Tilburg University and is an independent academic research institute which specializes in operationalizing sustainable development in regional and urban initiatives. Established in 2000, its work concentrates on innovative designs for the facilitation and monitoring of sustainable development processes. Telos takes an integrated view of sustainability monitoring which not only includes environmental sustainability but also economic and social sustainability. The data used for the sustainability monitoring carried out by Telos come from official public sources such as Statistics Netherlands (CBS), the Netherlands Environmental Assessment Agency (PBL) and the Netherlands Institute for Social Research (SCP), located in The Hague.

This report provides an outline of the above mentioned Framework for BNG Bank's "Sustainability Bond". Section 2 describes the concept of a sustainable municipality, the policy context in the Netherlands and the EU, and likely societal developments in relation to sustainable cities in the coming years. Section 3 presents the methodology that Telos uses to monitor municipal sustainability and

its rationale. Section 4 discusses the way in which municipalities have been selected, the data used, and the best-in-class approach as a fair way to value the different individual challenges that municipalities have to face when improving municipal sustainability. Section 5 presents the results of the sustainability scores for each type of municipality. In Section 6 the overall result is presented by means of a list of Elected Sustainable Municipalities. Subsequently, Sections 7 discusses Reporting and Impact.

2 Introduction

The triple P approach

The sustainable development movement was started by the UN Brundtland Commission report *Our Common Future* in 1987. It envisages a move towards responsible environmental performance on the part of nations and cities as well as towards an economic and social performance that results in greater prosperity for all (Zoeteman, 2012). In recent decades, this movement has continued to grow and has recently reached the core of activity in business, civil society and municipal authorities. Its essence is characterized as the 'triple P' (People, Profit and Planet) approach, which integrates these three elements in all initiatives. Although the emphasis is still on activities that affect our climate and environment, cities are moving to (investment) projects where reducing environmental pressure is coupled with improving long-term economic profitability and social performance. In a Sustainable City, all three P's of people, planet and profit are in balance and benefit at the same time.

Growing role of sustainability in The Netherlands

The Netherlands has a long tradition of national policy planning that values environmental improvement while simultaneously building long-term economic strength and improving social-cultural conditions. This is reflected in its national Agencies for Economic Planning (CPB), Social-Cultural Planning (SCP) and Environmental Planning (PBL). The Dutch government has prioritized sustainability and green growth (Regeerakkoord, 2012). It has recently been recognized, however, that many issues are better addressed by local authorities than at the national level. The Dutch government has therefore started a process of decentralizing many of its activities to promote sustainability to the municipal level. Furthermore, it has established covenants with societal actors to forge major transformations in the national governance structures that have an effect on sustainable development. A recent example is a major covenant on climate change measures (SER, 2013), in which 40 organizations, including the Association of Dutch Municipalities, have agreed to implement the transition towards a CO₂-neutral society by saving energy and introducing clean

technologies and climate measures. These commitments have a long-term horizon and are likely to be retained by future governments.

Sustainability initiatives at the EU level

At the EU level, a similar movement is taking place towards strengthening the role of cities in generating sustainable development, since it is at the municipal level that most problems become visible and have to be addressed. An example is URBACT, a European exchange and learning program for 500 (currently) participating cities, jointly financed by the European Commission (DG Regional and Urban Policies) and the member states, to promote sustainable urban development. A voluntary tool with which to monitor urban sustainability (Reference Framework for European Sustainable Cities - RFSC) will be included in URBACT's activities by 2015 as a means of promoting sustainability of cities. Another initiative of the European Commission (DG Environment) to promote sustainable development among cities is the Green Capital Award program. Furthermore, the Dutch Ministry of Interior and Kingdom Relations has announced that it will make the Urban Agenda a key issue of the Dutch Presidency of the EU in 2016 (Frequin, 2014). Similar initiatives are expected from the new European Commission. In addition, the Covenant of Mayors (2014) strongly promotes sustainable energy in European cities.

The position of Dutch municipalities in the wider EU context

The Netherlands is a densely populated and wealthy region within the EU. The Dutch population contributes 3.3% to the total EU population, while the surface area of the country is only 0.9% of the total EU surface. Its GDP contributes 4.3% to the total GDP of the EU. The high population density and high economic output, in combination with its location in a delta of several larger European rivers, defines to a large extent the specific sustainability challenges of municipalities in the Netherlands. The Dutch have struggled to gain land from the sea; spatial planning and water safety therefore have been a high policy priority for centuries. An additional characteristic of Dutch municipalities is their relative large number and small size. An inventory of the distribution of city sizes in the EU has been made by Dijkstra and Poelman (2012). Cities are defined in this EC-OECD study as municipalities with more than 50,000 inhabitants. An overview of the results of their study is presented in table 1, in which corresponding data for Dutch cities have been added.

Table 1 City types (sizes in population) in the EU (Dijkstra and Poelman, 2012, Zoeteman et al., 2014a)

Type	Population Sizes	Number of EU Cities	Number of Dutch Cities
Small	50,000 – 100,000	410	45
Medium	100,000 – 250,000	261	25
Large	250,000 – 500,000	71	1
XLarge	500,000 – 1,000,000	38	3
XXLarge	1,000,000 – 5,000,000	24	0
Global City	more than 5,000,000	2	0
Total		806	74

The comparison given in table 1 shows that the Netherlands has relatively few cities of 250,000 - 500,000 inhabitants (only Utrecht) and no cities at all of more than 1 million inhabitants. Its three largest cities are Amsterdam, Rotterdam and The Hague. Sometimes these three cities are regarded as forming a metropolis of about 2 million inhabitants, with a green center that is left open.

Most municipalities in the Netherlands are rather small to very small. Among the total of 403 municipalities, the main group of 142 municipalities has a population size of 25,000-50,000, while 187 municipalities in the Netherlands have less than 25,000 inhabitants. This shows that the metropolis type of sustainability problems, as can be found in Paris, London, Rome, Hamburg, Vienna and Barcelona, which are all above 1 million inhabitants, are less likely to be as intense in the largest cities of the Netherlands.

Yet, other factors than size, such as GDP/capita, yearly diminishing population size, sea harbor activities, industrial history, tourism, etc. are also important from a sustainability point of view. Dutch municipalities and cities are characterized by high specialization in an environment of close neighbors and the need to offer their population a high potential of environmental, social and economic qualities.

From a recent preliminary study of Telos among 20 large EU cities, in which sustainability data were collected or estimated for nearly 60 indicators from public sources (Zoeteman et al., 2014b), highest scores were found for Vienna, Stockholm, Helsinki and Amsterdam, and lowest for Thessaloniki, Rome, Łódź and Cluj-Napoca. Cities in the northern part of the EU seem to perform better on sustainability, although this is not always the case.

Current efforts to monitor city sustainability

As shown above, sustainability monitoring of cities is being explored only recently. Sub-aspects of sustainability monitoring, including climate and environmental issues, have been best developed. Separately, socioeconomic developments have traditionally been measured and reported. But an integrated environmental, economic and social monitoring is not yet systematically taking place. Several,

mostly voluntary, initiatives for more or less integrated sustainability monitoring of European cities are underway. An example is the Reference Framework for European Sustainable Cities (RFSC)¹, an online toolkit to help cities promote and enhance their work on integrated sustainable urban development which was initiated since the Leipzig Charter of May 2007 by amongst others the Member States and the European Commission (EC).

Another example is the process leading to the yearly selected European Green Capital Award² for a city which was launched in 2008 by EC DG Environment after an initiative of 15 European cities in Tallinn, Estonia in 2006. The awarded city is committed to ambitious goals and shows consistent records of achieving high environmental standards and therefore can act as a role model to inspire other cities.

A longer pursued broad monitoring instrument at European urban level is the Urban Audit, carried out by EUROSTAT for EC DG Regional and Urban Policy with the help of amongst others the national statistics organizations. A first pilot of the Urban Audit started in 1999.³ The Urban Audit assesses socioeconomic urban conditions across cities in the EU and for this purpose collects data every three years to help 'improve the attractiveness of regions and cities as one of the priorities targeted by the renewed Lisbon Strategy and the EU's strategic guidelines for cohesion policy for 2007-2013'. The first round of data collection took place in 2003/2004, followed by similar rounds in 2006/2007, 2009 and 2011. In 2009 329 variables were collected for 323 EU cities. However, not all Member States have fulfilled their commitments to provide data. Parallel to the Urban Audit a perception survey was conducted in 75 cities in the EU-27 in December 2006 and again in November 2009. The outcome is published in EUROSTAT's Regional Yearbooks. Together with the websites of cities themselves the Urban Audit data are at present main sources of publicly available data on sustainability of EU cities.

An example of private environmental sustainability reporting was published in 2009 by Economist Intelligence Unit, sponsored by Siemens (Watson, Shields and Langer, 2009).⁴ This European Green City Index for 30 leading European cities is based on assessing 30 environmental indicators and offers a tool to enhance the understanding and decision-making abilities of all those interested in environmental performance.

¹ <http://www.rfsc-community.eu/about-rfsc/rfsc-at-a-glance/>

² <http://ec.europa.eu/environment/europeangreencapital/about-the-award/>

³ http://epp.eurostat.ec.europa.eu/portal/page/portal/region_cities/introduction and

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-BD-04-002

⁴ http://www.siemens.com/entry/cc/features/greencityindex_international/all/en/pdf/report_en.pdf

3 Methodology

The methodology used by Telos is developed since 2000 and is strongly related to a similar approach known as the earlier mentioned EU RFSC. It is based on a detailed comparison of municipalities using 90 scientific indicators for which quantitative data are available from reliable public sources. The EU RFSC also applies the 'triple-P' approach. Each 'P' can be composed of some five to seven sustainability themes.

The Planet pillar may consist of the themes such as Soil and Groundwater, Surface Water, Air, Nature and Landscape, Raw (waste) materials, Energy and Climate, Annoyance and Calamities. The People pillar can be composed of Social Cohesion, Participation, Art and Culture, Health, Safety, Residential Environment, and Education (primary and secondary). The Profit pillar may consist of Labor, Knowledge, Spatial Local Conditions, Economic Structure, Infrastructure and Mobility. The themes themselves are based on specific indicators such as CO₂ emissions, the use of solar and wind power for the theme Energy and Climate, and so on. The RFSC tool adds a fourth pillar of Governance (Zoeteman et al., 2011) to the other three. The RFSC does not prescribe any specific indicators or sustainability goals, as it is a voluntary webtool that can help cities to organize their sustainability strategy and its implementation by applying the monitoring tool.

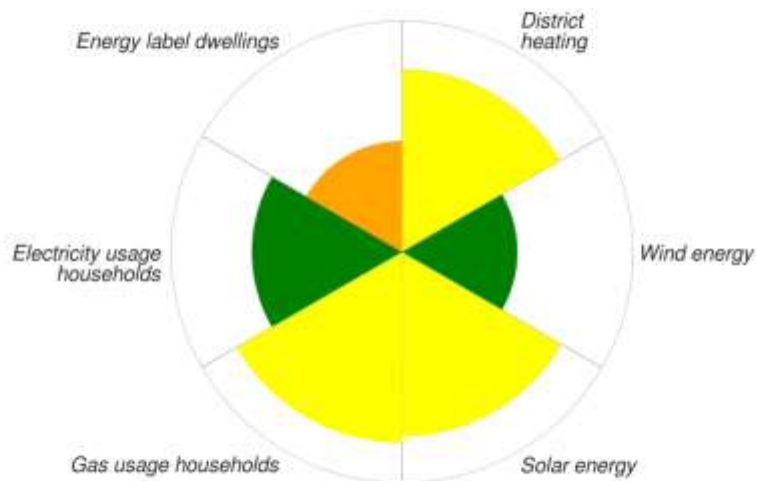
The method that Telos has been developing since 2000 and applied in its National Monitor of Sustainability for Dutch Municipalities is based on similar principles to the RFSC approach (Hermans et al., 2011; Mommaas and Eweg, 2011; Zoeteman, 2012). However, the governance pillar is not included because data on governance aspects of communities are not generally available at the moment. The RFSC webtool allows its users to define their own sustainability goals and indicators. The disadvantage of this element is that cities cannot be compared to one another. Furthermore, it is in practice rather difficult to collect relevant and comparable data for cities. Because Telos wanted to study differences and common factors among municipalities, Telos made the monitoring method more specific and concrete. It applied the instrument in such a way that for each theme and subsequently for each indicator, sustainability goals were defined and applied. The outcome of the monitor was therefore determined by the detailed sustainability requirements that Telos formulated as goals for each indicator.

Table 2 The three pillars (capitals), the 19 themes and the 90 indicators used for quantitative monitoring

THEME	INDICATORS
ECOLOGICAL CAPITAL	
Soil and Groundwater	Soil clean-up, Manure quantity applied
Air	Emission of CO ₂ , Emission of NO _x , Emission of PM ₁₀ , Emission of VOS, Concentration NO _x , Concentration PM ₁₀ , Concentration VOS
Noise/Odors/External safety	Noise annoyance, Annoyance by odors/dirt, Risk of a disaster
Surface water	Ecological quality, Chemical quality
Nature and Landscape	Satisfaction with green in city, Share of forest and natural area, Distance of public green, Share inland recreational water, Biodiversity
Energy and Climate	District heating, Wind energy, Solar energy, Average natural gas consumption, Average electricity consumption, Energy label houses
Waste and Raw Materials	Household waste, Organic waste, Paper and cardboard waste, Packaging glass, Plastic
SOCIAL-CULTURAL CAPITAL	
Social Cohesion	Poor households, Social inclusiveness, Volunteers
Participation	Turnout municipal elections, Turnout national elections, Long lasting unemployment, Long lasting social assistance, Informal care
Arts and Culture	Performing arts, National monuments, Museums
Health	Insufficient exercise, Risky behavior, Number of GP practices, Quality of hospitals, Distance to hospital, Life expectancy, Assessment of own health, Chronically sick people
Safety	Violent crimes, Crimes against property, Youth crime, Vandalism, Road safety, Feeling of insecurity
Residential Environment	Housing deficit, Distance to supermarket, Satisfaction with living environment, Satisfaction with shops, Real Estate value, Moving mutations, Population development
Education	Youth unemployment, Number of elementary schools, Number of secondary education schools, Early school leavers, Real-time to diploma, Graduation rate, Education level population
ECONOMIC CAPITAL	
Labor	Employment function, Human resources exploitation, Unemployment, Hazing and ageing, Incapacity for work
Spatial Local Conditions for Businesses	Stock business parks, Net/gross ratio business parks, Share out of date business parks, Stock of office space, Vacant office space
Economic Structure	Share starters, Bankruptcies, Disposable income, Gross Regional Product per capita, Share nationally promoted (top) sectors
Infrastructure and Mobility	Access to public transport, Access to main roads
Knowledge	Share highly educated people, Capacity science education/higher vocational education, High- and medium tech employment, Creative industry

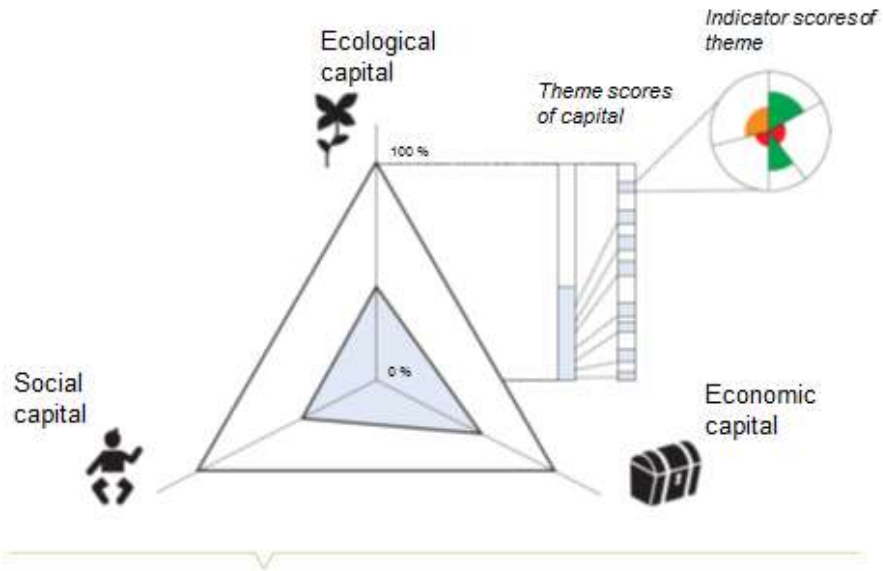
Table 2 gives an overview of the indicators used. Quantitative data for these 90 indicators have been collected from public official sources and are specified in the Dutch Monitor report. The actual value for each indicator (e.g. capacity of solar power installed on roofs, or % of wind power in total energy supply of municipality) is compared with its sustainability goal and subsequently the achievement percentage of the goal is calculated. The sustainability goals are derived by Telos from EU and national regulations and experiences with municipal practices. The achievement percentages are subsequently combined per theme resulting in a theme achievement percentage. Figure 1 shows an example of a diagram of the six indicators within the Energy and Climate theme of a Dutch city. The higher the achievement percentage the longer the pie piece.

Figure 1 Example of a pie-diagram showing the sustainability score (0-100%) of the six 'Energy and Climate theme' indicators for a Dutch city



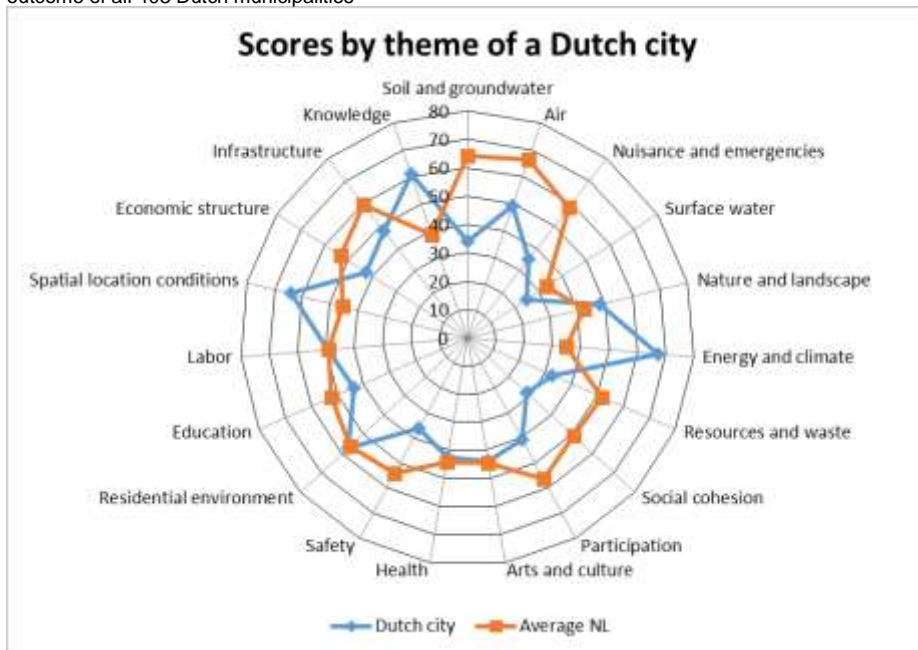
The average theme scores are subsequently added to calculate the average score for a sustainability capital. Finally the average score of the total of the three capitals is calculated as the overall sustainability score of a municipality (Figure 2).

Figure 2 The aggregation of indicator scores to theme scores, capital scores and overall sustainability score



The overview of all 19 theme scores for a city can also be used to benchmark cities among each other and with a group of cities. Figure 3 shows for example how the theme scores for a major Dutch city compare to the average scores of the 403 municipalities in the Netherlands.

Figure 3 Illustrative example of all theme scores for a Dutch city in comparison with the average outcome of all 403 Dutch municipalities



A Factsheet provides for each of the 90 indicators the technical specifications of the indicator, the sustainability goal and the norms for subclasses of achievement of the sustainability goal, as well as the year of data collection. These factsheets are available in Dutch at the Telos website www.telos.nl under "Nationale Monitor gemeentelijke duurzaamheid 2014/data gemeenten: [Factsheets National Monitor](#)". Annex 1 to this report gives an example of such a factsheet. The sources and year of collection of data are summarized in Annex 2 of the [National Monitor report](#).

The final result is that for all 403 municipalities an overall sustainability score has been calculated varying between in principle 0-100% (in practice between 39-61%) achievement of the integrated sustainability goals.

4 Eligibility / SRI Criteria

SRI Criteria for sustainable municipalities have been defined in this Framework in the same broad sense as in the Dutch National Monitor. These SRI Criteria therefore cover more than the outcome of climate and green investment alone, although these make up part of the overall picture and are important triggers for sustainable city initiatives.

Furthermore, Telos recognized the disadvantage of ranking all municipalities using the same sustainability goals, because municipalities have very different historic and geographical backgrounds. Each municipality has its own sustainability challenge. Telos therefore designed an approach that compensates for the limitations of simply ranking cities using their sustainability score. This approach is based on the application of city typologies. A city type characterizes a typical sustainability feature of a group of cities that has far-reaching consequences for a number of sustainability indicators such as a historic pollution levels, a certain proportion of the population working in low wage jobs, the role of immigrants, the level of education, the diversity of economic sectors, and so on. In the National Monitor, ten types of cities were described, including 'Old industry', 'Agriculture', 'Center', 'Historic', 'Green', 'Shrink', 'Growth', 'New Town', 'Work' and 'Sleep' cities. This typology will also be the basis for the selection of best-in-class municipalities in this Framework report, as far as these types were found to be significantly correlated with deviating P-scores and/or total scores from the average scores of the total of 403 municipalities.⁵ The result is that only 7 of the 10 types were found to deviate significantly from the average scores for all municipalities: Agricultural, Center, Green, Shrink, New Town, Old Industrial, and Work municipalities. Growth, Historical and Sleep municipalities were excluded from the selection for this reason. These seven classes of municipalities were used for the selection of the sustainable municipalities as described in Section 5. The criteria used to define the characteristics of the different types of cities are specified in the National Monitor Report (pp 72-73). These criteria and types are tailor-made for the Dutch situation.

⁵ See table 5.2 on p. 84 of National Monitor report.

5 Eligible Municipalities

Based on the seven types of municipalities that deviate significantly in their total and/or P-scores from the average scores for all 403 Dutch municipalities, the best-ranking 15 municipalities for each type of municipality will be presented. Furthermore, an additional class based on size of municipality is introduced using as a criterion: more than 100,000 inhabitants. The reason for including this additional criterion is that the National Monitoring study showed (p. 67, 95) that larger cities provide better economic opportunities but also 'accumulate' the greatest ecological and social problems. This means that, at least in the Netherlands, city size is, in itself, an important factor when assessing urban sustainability in a fair way.

The 15 best-scoring municipalities in each class are presented below for each of the 8 classes of municipalities.

Agricultural Municipalities		
Number	Municipality	Score
1	Midden-Delfland	60.13
2	Zoeterwoude	57.33
3	Voorst	55.46
4	Olst-Wijhe	55.40
5	Dalfsen	55.36
6	Woerden	55.05
7	Vlist	53.74
8	Eemnes	53.46
9	Staphorst	53.35
10	Zuidhorn	53.31
11	Montfoort	53.17
12	Renswoude	52.99
13	Raalte	52.84
14	Bunschoten	52.81
15	Littenseradiel	52.71

Center Municipalities		
Number	Municipality	Score
1	Westland	53.95
2	Delft	53.19
3	Almere	51.32
4	Meppel	51.25
5	Dordrecht	51.23
6	Hilversum	51.22
7	Alphen aan den Rijn	50.99
8	Zwolle	50.98
9	Groningen	50.68
10	Leiden	50.10
11	De Friese Meren	49.90
12	Haarlem	49.21
13	Alkmaar	48.82
14	Utrecht	48.67
15	Deventer	48.56

Green Municipalities		
Number	Municipality	Score
1	Naarden	60.14
2	Bloemendaal	58.49
3	Noordwijk	57.46
4	Leusden	56.86
5	Rozendaal	56.39
6	Castricum	56.02
7	Waalre	56.00
8	Baarn	55.93
9	Wassenaar	55.20
10	Utrechtse Heuvelrug	54.90
11	Mook en Middelaar	54.73
12	Nunspeet	54.54
13	Laren	54.45
14	Rheden	54.42
15	Putten	54.34

New Town Municipalities		
Number	Municipality	Score
1	Houten	60.00
2	Leusden	56.86
3	Ouder-Amstel	55.97
4	Heumen	55.70
5	Hendrik-Ido-Ambacht	55.36
6	Nuenen, Gerwen en Nederwetten	55.15
7	Woerden	55.05
8	Langedijk	54.59
9	Pijnacker-Nootdorp	53.47
10	Harderwijk	53.46
11	Eemnes	53.46
12	Zeewolde	53.40
13	Best	53.26
14	Montfoort	53.17
15	Wijk bij Duurstede	52.81

Old Industrial Municipalities		
Number	Municipality	Score
1	Hendrik-Ido-Ambacht	55.36
2	Heemstede	54.61
3	Rijssen-Holten	54.21
4	Muiden	54.01
5	Borne	53.26
6	Voerendaal	52.51
7	Beek	52.09
8	Hellendoorn	51.77
9	Geldermalsen	51.74
10	Eijsden-Margraten	51.65
11	Hengelo	51.53
12	Krimpen aan den IJssel	51.51
13	Veenendaal	51.48
14	Goirle	51.28
15	Nuth	50.91

Shrink Municipalities		
Number	Municipality	Score
1	Bloemendaal	58.49
2	Rozendaal	56.39
3	Vught	55.87
4	Veere	55.84
5	Utrechtse Heuvelrug	54.90
6	Ubbergen	54.35
7	Heeze-Leende	52.88
8	Valkenburg aan de Geul	52.80
9	Ermelo	52.53
10	Voerendaal	52.51
11	Renkum	52.38
12	Hof van Twente	52.28
13	Bergen (NH.)	52.28
14	Haaren	52.18
15	Meerssen	51.97

Work Municipalities		
Number	Municipality	Score
1	Bunnik	58.86
2	Zoeterwoude	57.33
3	Ouder-Amstel	55.97
4	Voorst	55.46
5	Boxmeer	55.45
6	Middelburg	54.94
7	Ubbergen	54.35
8	Westland	53.95
9	Vlieland	53.92
10	Zeist	53.67
11	Best	53.26
12	Oirschot	53.11
13	Renswoude	52.99
14	Son en Breugel	52.70
15	Schiermonnikoog	52.62

100,000-plus Municipalities		
Number	Municipality	Score
1	Westland	53.95
2	Delft	53.19
3	Amersfoort	52.45
4	Ede	51.94
5	Apeldoorn	51.90
6	Almere	51.32
7	Dordrecht	51.23
8	Alphen aan den Rijn	50.99
9	Zwolle	50.98
10	Groningen	50.68
11	Haarlemmermeer	50.21
12	Nijmegen	50.17
13	Leiden	50.10
14	Maastricht	49.79
15	's-Hertogenbosch	49.72

6 Selection process

The eligible municipalities shown in Section 5 form the basis for a final list of Elected Sustainable Municipalities which is presented in this section. Table 4 shows this list, which is based on a compilation of the top-15 best-in-class municipalities of the 8 municipal classes presented in section 5.

The table shows the scores and the typology in which the municipality ranked among the top-15 in class.

In principle this list should include $8 \times 15 = 120$ municipalities. However, a number of municipalities qualify for more than one city type. When this is taken into account, a final list of 96 Elected Sustainable Municipalities results. This selection represents 23.8% of the total number of Dutch municipalities. All 96 municipalities score above a sustainability level of 48.5%.

Table 4 List of Elected Sustainable Municipalities 2014 for the BNG SRI Bond in alphabetical order (also see Annex 2 for a score based ranking)

Municipality	Qualifying Municipality Typology	Sustainability Score
Alkmaar	Center	48.82
Almere	Center/100,000-plus	51.32
Alphen aan den Rijn	Center/100,000-plus	50.99
Amersfoort	100,000-plus	52.45
Apeldoorn	100,000-plus	51.9
Baarn	Green	55.93
Beek	Old Industrial	52.09
Bergen (NH.)	Shrinking	52.28
Best	New Town/Shrink	53.26
Bloemendaal	Shrinking/Green	58.49
Borne	Old Industrial	53.26
Boxmeer	Work	55.45
Bunnik	Work	58.86
Bunschoten	Agricultural	52.81
Castricum	Green	56.02
Dalfsen	Agricultural	55.36

De Friese Meren	Center	49.9
Delft	Center/100,000-plus	53.19
Deventer	Center	48.56
Dordrecht	Center/100,000-plus	51.23
Ede	100,000-plus	51.94
Eemnes	New Town/Agricultural	53.46
Eijsden-Margraten	Old Industrial	51.65
Ermelo	Shrinking	52.53
Geldermalsen	Old Industrial	51.74
Goirle	Old Industrial	51.28
Groningen	Center/100,000-plus	50.68
Haaren	Shrinking	52.18
Haarlem	Center	49.21
Haarlemmermeer	100,000-plus	50.21
Harderwijk	New Town	53.46
Heemstede	Old Industrial	54.61
Heeze-Leende	Shrinking	52.88
Hellendoorn	Old Industrial	51.77
Hendrik-Ido-Ambacht	New Town/Old Industrial	55.36
Hengelo	Old Industrial	51.53
Heumen	New Town	55.7
Hilversum	Center	51.22
Hof van Twente	Shinking	52.28
Houten	New Town	60
Krimpen aan den IJssel	Old Industrial	51.51
Langedijk	New Town	54.59
Laren	Green	54.45
Leiden	Center/100,000-plus	50.1
Leusden	New Town/Green	56.86
Littenseradiel	Agricultural	52.71
Maastricht	100,000-plus	49.79
Meerssen	Shrinking	51.97
Meppel	Center	51.25
Middelburg	Work	54.94
Midden-Delfland	Agricultural	60.13
Montfoort	New Town/Agricultural	53.17
Mook en Middelaar	Green	54.73
Muiden	Old Industrial	54.01
Naarden	Green	60.14

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Nijmegen	100,000-plus	50.17
Noordwijk	Green	57.46
Nuenen. Gerwen en Nederwetten	New Town	55.15
Nunspeet	Green	54.54
Nuth	Old Industrial	50.91
Oirschot	Work	53.11
Olst-Wijhe	Agricultural	55.4
Ouder-Amstel	New Town/Work	55.97
Pijnacker-Nootdorp	New Town	53.47
Putten	Green	54.34
Raalte	Agricultural	52.84
Renkum	Shrinking	52.38
Renswoude	Work/Agricultural	52.99
Rheden	Green	54.42
Rijssen-Holten	Old Industrial	54.21
Rozendaal	Shrinking/Green	56.39
Schiermonnikoog	Work	52.62
's-Hertogenbosch	100,000-plus	49.72
Son en Breugel	Work	52.7
Staphorst	Agricultural	53.35
Ubbergen	Shrinking/Work	54.35
Utrecht	Center	48.67
Utrechtse Heuvelrug	Shrinking/Green	54.9
Valkenburg aan de Geul	Shrinking	52.8
Veenendaal	Old Industrial	51.48
Veere	Shrinking	55.84
Vlieland	Work	53.92
Vlist	Agricultural	53.74
Voerendaal	Shrinking/Old Industrial	52.51
Voorst	Work/Agricultural	55.46
Vught	Shrinking	55.87
Waalre	Green	56
Wassenaar	Green	55.2
Westland	Center/100,000-plus/Work	53.95
Wijk bij Duurstede	New Town	52.81
Woerden	Agricultural/New Town	55.05
Zeewolde	New Town	53.4
Zeist	Work	53.67
Zoeterwoude	Agricultural/Work	57.33

Zuidhorn	Agricultural	53.31
Zwolle	Center/100,000-plus	50.98

7 Reporting and Impact

Telos will prepare a report to investors. This report will give an update on the sustainability scores of the Elected Municipalities showing:

- how the total group of Elected Municipalities performed compared to the previous year;
- how the total group of Elected Municipalities performed in comparison with the group of Non-Elected Municipalities;
- changes in the relative ranking of Elected Municipalities;
- more detailed progress reporting on changes for the group of Elected Municipalities at the level of the three P's, selected themes and selected impact indicators of interest (e.g. CO₂ emission, degree of solar and wind power installed, youth unemployment, level of high and medium tech jobs, etc.).

In order to improve the sustainability score, municipalities can use the framework provided for the SRI Bond to select best performing investments and practices, such as:

- measuring economic, social and environmental goals on a same basis, allowing a common language and decision framework in municipal executive board and city council;
- shaping all major projects from a sustainability point of view, which means taking an integrated view and optimizing projects and initiatives for economic as well as environmental and social performance, e.g. by applying in an early phase a PPP-scan;
- allowing room for sustainability optimization in key procedures for new buildings, (re)constructions and procurement;

- promoting alliances and communication practices with all parties concerned (businesses, NGOs, co-investors, etc.) to build trust and develop innovative best possible solutions for sustainability challenges of the municipality.

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Annex 1: Factsheet example for Solar energy use indicator

Indicator	3	Solar energy
Stock / Theme	Energy and climate	
Requirement	All consumed energy is generated from a renewable energy source	
Color code	Red	

Description indicator
Installed capacity solar energy within a municipality.

Relationship with requirement
Within the region, energy is generated by an alternative method that does not emit CO2 and does not deplete fossil fuels. One of the methods to generate energy from a renewable energy source is via solar power.

Unit	Kwh
Aggregation level	Municipality
Weighting	16.67
Direction	+
Norm Red	< 500
Norm Orange	500 - 1000
Norm Green	1000 - 2500
Norm Gold	> 2500
Year of data	2013

Annex 2: Selected Sustainable Municipalities ranked by their sustainability score

Municipality	Qualifying Municipality Typology	Sustainability Score
Naarden	Green	60.14
Midden-Delfland	Agricultural	60.13
Houten	New Town	60
Bunnik	Work	58.86
Bloemendaal	Shrinking/Green	58.49
Noordwijk	Green	57.46
Zoeterwoude	Agricultural/Work	57.33
Leusden	New Town/Green	56.86
Rozendaal	Shrinking/Green	56.39
Castricum	Green	56.02
Waalre	Green	56
Ouder-Amstel	New Town/Work	55.97
Baarn	Green	55.93
Vught	Shrinking	55.87
Veere	Shrinking	55.84
Heumen	New Town	55.7
Voorst	Work/Agricultural	55.46
Boxmeer	Work	55.45
Olst-Wijhe	Agricultural	55.4
Dalfsen	Agricultural	55.36
Hendrik-Ido-Ambacht	New Town/Old Industrial	55.36
Wassenaar	Green	55.2
Nuenen, Gerwen en Nederwetten	New Town	55.15
Woerden	Agricultural/New Town	55.05
Middelburg	Work	54.94
Utrechtse Heuvelrug	Shrinking/Green	54.9
Mook en Middelaar	Green	54.73
Heemstede	Old Industrial	54.61
Langedijk	New Town	54.59
Nunspeet	Green	54.54
Laren	Green	54.45
Rheden	Green	54.42
Ubbergen	Shrinking/Work	54.35
Putten	Green	54.34

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Rijssen-Holtten	Old Industrial	54.21
Muiden	Old Industrial	54.01
Westland	Center/100,000-plus/Work	53.95
Vlieland	Work	53.92
Vlist	Agricultural	53.74
Zeist	Work	53.67
Pijnacker-Nootdorp	New Town	53.47
Eemnes	New Town/Agricultural	53.46
Harderwijk	New Town	53.46
Zeewolde	New Town	53.4
Staphorst	Agricultural	53.35
Zuidhorn	Agricultural	53.31
Best	New Town/Shrink	53.26
Borne	Old Industrial	53.26
Delft	Center/100,000-plus	53.19
Montfoort	New Town/Agricultural	53.17
Oirschot	Work	53.11
Renswoude	Work/Agricultural	52.99
Heeze-Leende	Shrinking	52.88
Raalte	Agricultural	52.84
Bunschoten	Agricultural	52.81
Wijk bij Duurstede	New Town	52.81
Valkenburg aan de Geul	Shrinking	52.8
Littenseradiel	Agricultural	52.71
Son en Breugel	Work	52.7
Schiermonnikoog	Work	52.62
Ermelo	Shrinking	52.53
Voerendaal	Shrinking/Old Industrial	52.51
Amersfoort	100,000-plus	52.45
Renkum	Shrinking	52.38
Bergen (NH.)	Shrinking	52.28
Hof van Twente	Shinking	52.28
Haaren	Shrinking	52.18
Beek	Old Industrial	52.09
Meerssen	Shrinking	51.97
Ede	100,000-plus	51.94
Apeldoorn	100,000-plus	51.9
Hellendoorn	Old Industrial	51.77
Geldermalsen	Old Industrial	51.74

Eijsden-Margraten	Old Industrial	51.65
Hengelo	Old Industrial	51.53
Krimpen aan den IJssel	Old Industrial	51.51
Veenendaal	Old Industrial	51.48
Almere	Center/100,000-plus	51.32
Goirle	Old Industrial	51.28
Meppel	Center	51.25
Dordrecht	Center/100,000-plus	51.23
Hilversum	Center	51.22
Alphen aan den Rijn	Center/100,000-plus	50.99
Zwolle	Center/100,000-plus	50.98
Nuth	Old Industrial	50.91
Groningen	Center/100,000-plus	50.68
Haarlemmermeer	100,000-plus	50.21
Nijmegen	100,000-plus	50.17
Leiden	Center/100,000-plus	50.1
De Friese Meren	Center	49.9
Maastricht	100,000-plus	49.79
's-Hertogenbosch	100,000-plus	49.72
Haarlem	Center	49.21
Alkmaar	Center	48.82
Utrecht	Center	48.67
Deventer	Center	48.56