Sustainability Framework document for Best in Class Municipality Investment

NV Bank Nederlandse Gemeenten (BNG Bank) Sustainability Bond 2018

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Inhoudsopgave

Summary

NV Bank Nederlandse Gemeenten (BNG Bank) asked Telos, of Tilburg University, to develop a Sustainability Bond Framework to promote BNG Bank's investment in the best-in-class of sustainable municipalities in the Netherlands in 2018. For these bonds, the so-called Sustainability Bond Guidelines apply. In addition, this year's selection of municipalities, using the triple P based sustainability rating, was complemented for the first time with a calculation of the score of the municipalities on the UN Sustainable Development Goals (SDGs).

Telos developed similar triple P-based frameworks since 2014 for BNG Bank, using the methodology applied in its annual Dutch National Monitor Sustainable Municipalities. In this monitor, all Dutch municipalities are assessed. For the BNG Bank Sustainability Bond, Telos has used in 2018 in principle the same methodology as the previous year. The Framework is based on a detailed comparison of all 380 Dutch municipalities using 126 scientific indicators for the ecological, social and economic domains of sustainability. The quantitative data are derived from reliable public sources.

In this triple P-Framework, Dutch municipalities are categorized in 14 types to reflect e.g. size, historical and geographical differences in developmental challenges. The Framework presents, out of the 380 Dutch municipalities, a list of 125 municipalities, which are the top-15 best-in-class municipalities for the 14 types of municipalities involved. These 125 municipalities are the Elected Municipalities for a BNG Bank Sustainability Bond 2018.

A method is presented to derive from the data collected also scores on SDGs. The method is based on the UN definition of these SDGs by 169 targets. Because of the political background of establishing the SDGs, they show sometimes overlap among each other. Such eventual inconsistences are not corrected, as these are designed as such consciously by the UN. However, they may result in e.g. repeated use of some indicators and difficulty in aggregating SDGs. Lists of top-10 scoring municipalities for each of the relevant SDGs (14 of the 17 in total) are presented, as well as a list of 28 municipalities occurring more than once on such top-10 lists. Some 70% of these 28 municipalities belong also to the elected group based on the triple- P assessment.

Finally, a structure for yearly impact reporting is presented.

1 Scopes and objectives

This document describes the Framework for a 2018 BNG Bank Sustainability Bond (SB) for the top class of sustainable municipalities in the Netherlands. For SBs, the international Sustainability Bond Guidelines (SBG) of June 2018 apply. These acknowledge the application of the "use of proceeds" bond concept to bonds financing Green projects and Social projects. Sustainability Bond Guidelines provide transparency and disclosure to this market segment. A Sustainability Bond is a normal bond with specific use-of-proceeds requirements, namely for sustainable projects or borrowers, resulting in improved sustainability performance.

The first principle of SBs is that there must be a clear definition of the relevant criteria. Telos issues since 2014 yearly a National monitor for sustainable municipalities, originally at the request of the Dutch Ministry of Infrastructure and Environment. This National monitor includes a framework and data that provide a useful source for the requirements of BNG Bank in defining its criteria for the SB. A recent National monitor was issued September 2017 (Zoeteman et al., 2017). The National monitors cover all municipalities and apply more than 100 indicators for the economic, ecological and social-cultural aspects of sustainability. Furthermore, 14 types of municipalities are discerned including small, medium-sized and large municipalities and several qualitative types such as agricultural, industrial, historical, tourist, etc.

Telos is part of the Tilburg School of Economics and Management of Tilburg University. It is an independent academic research institute, which specializes in operationalizing sustainable development in, amongst others, regional and urban initiatives. Established in 1999, 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 for this type of 'public accounting' used in sustainability monitoring, as carried out by Telos, come from some 25 official public sources, such as Statistics Netherlands (CBS), the Netherlands Environmental Assessment Agency (PBL) and the Netherlands Institute for Social Research (SCP), and many others.

BNG Bank asked Telos March 2018 to prepare a 2018 Framework for a 2018 municipalities bond. The basis for the framework would be the same as in 2017 (Zoeteman and Mulder, 2017), but it was requested to also include its meaning from the point of view of the UN Sustainable Development Goals (SDGs). This means that the framework presented still elects municipalities based on their performance according to the triple P-sustainability method, but that in addition the contribution of municipalities to the SDGs will be shown. A special methodology to make this possible has been developed and will be described. The result is that all municipalities also obtain an SDGs score.

This report provides the above-mentioned Framework for BNG Bank's 2018 Sustainability Bond. Section 2 describes the concept of a sustainable municipality, the policy context in the Netherlands and the EU, and likely future societal developments in relation to sustainable cities. 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 are facing when improving municipal sustainability. Section 5 presents the results of the sustainability scores for each of the 14 municipality types. In Section 6, the overall result is presented by means of a list of Elected Sustainable Municipalities. Section 7 presents the methodology for measuring SDGs scores as well as the outcome. Subsequently, Section 8 discusses future performance reporting.

2 Monitoring city sustainability

2.1 The triple P approach and the SDGs

The concept of sustainable development, launched in 1987 by the UN Brundtland Commission in its report Our Common Future, gained further momentum when the United Nations (2015) adopted September 2015 new 2030 Global Sustainable Development Goals (SDGs). These international agreements envisage a move towards responsible environmental performance on the part of nations, businesses and cities as well as towards an economic and social performance that results in greater prosperity for all (Zoeteman, 2012). ICLEI (Local Governments for Sustainability, 2017) has defined sustainable municipalities as:

'Cities (that) work towards an environmentally, socially, and economically healthy and resilient habitat for existing populations, without compromising the ability of future generations to experience the same'.

Its essence is characterized as the 'triple P' (People, Profit and Planet) approach, which integrates these three elements in all initiatives on the territory of a municipality or nation by generating 'inclusive green growth' (OECD, 2017). Although the emphasis is still on activities that affect our climate and environment, cities are gradually moving to investment projects and policy initiatives 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 of initiatives at the same time.

The United Nations SDGs include a set of 17 Global Goals that cover, more categorized from a policy than from a scientific point of view, urgent tasks to be addressed by national governments, local authorities and private actors. A detailed analysis of the differences and overlaps between the triple P approach, used in this framework, and the 17 Goals of the SDGs shows that a large part of the indicators are the same but for some goals clear differences occur. Goal 14 on seas and oceans is for example not included because this is not relevant for municipalities. Governance issues, as implemented by partnerships, have explicitly not yet been included in the triple P approach, amongst others because of the different nature of this domain and because comparable data are difficult to collect.

The basic structure of the triple P model will be kept as leading in this framework, as it better represents a structure that can be founded and explored scientifically. The relevant indicators will be also used to assess the SDGs for the municipalities.

2.2 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 given priority to sustainability and green growth (Regeerakkoord, 2017).

It has recently been recognized, 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 at the municipal level. Furthermore, it has established covenants with societal actors to forge major transformations in the national governance structures that have an impact on sustainable development. An example is a major covenant on climate change measures (SER, 2013), in which 40 organizations, including the VNG Association of Dutch Municipalities, have agreed to implement the transition towards a CO_2-neutral society by saving energy and introducing clean technologies and climate measures. Since 2017, the new Dutch government is working together with all stakeholders in climate issues to prepare a national climate action program that has to result in halving greenhouse gas emissions by 2030.These commitments have a long-term horizon and are likely to be retained by future governments, given EU commitments and the Climate agreement of Paris of 2015. New plans have been formulated in a joint effort of all stakeholders and have been assessed summer 2018 by two national planning bureaus (Klimaatakkoord, 2018).

2.3 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 extend 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.

Most municipalities in the Netherlands are rather small to very small. So 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 intense in the cities of the Netherlands as

the largest, Amsterdam and Rotterdam, still have less than 1 million inhabitants.

Yet, other factors than municipality size, such as GDP/capita, a locally diminishing population size, sea harbor activities, industrial history, tourism, etc. are also important from a sustainability point of view. Dutch villages 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.

2.4   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, socio-economic developments have traditionally been measured and reported. However, an integrated environmental, economic and social monitoring is not yet systematically taking place (Zoeteman et al., 2015).

A longer pursued broad monitoring instrument at European urban level is the Urban Audit, carried out by EUROSTAT (2017) for EC DG Regional and Urban Policy with the help of amongst others the national statistics organizations. The International Standardization Organization is taking initiatives to help standardize the collection and assessment of sustainability data of municipalities (ISO, 2017). The OECD (2017) has also collected urban data in the context of its annual Green Growth Forum meetings since 2009. As a result of the SDGs, an 'explosion' of national and urban monitoring activities seem to result (e.g. Sachs et al., 2016).

These examples show that monitoring of urban sustainability is gaining more attention recently and it may be expected that its quality will increase the coming years.

3   Methodology of measuring triple P-sustainability

3.1   The Telos Method of measuring sustainability

The methodology developed by Telos to measure sustainable development, is based on the triple P approach (people, planet, profit). This method has been developed and refined by Telos since 2000. It is based on a detailed comparison of municipalities using 126 scientific indicators for which quantitative data are available from reliable public sources.

The three P's are conceptualized as the socio-cultural capital, the ecological capital and the economic capital. The different aspects of which a capital is composed are described by stocks (themes). For example, the socio-cultural capital is composed of stocks such as 'Social and Economic Participation', 'Arts and Culture' and 'Health'. The ecological capital consists of stocks such as 'Soil', 'Water' and 'Air', and the economic capital consists of stocks such as 'Labor', 'Competitiveness' and 'Infrastructure and Mobility'. In total, there are 20 stocks divided over the three capitals. Every stock in the monitoring method has one or more sustainability requirements. Examples of these requirements are 'The air is clean' (air stock), 'Everybody has access to education facilities' (education stock) or 'All energy should come from renewable energy sources' (energy stock).

The next step is to measure for every municipality separately, to what extend they live up to these requirements. For that purpose, the 126 indicators are used. Every stock with its requirements can consist of multiple indicators. For example, the requirement 'All energy should come from renewable energy sources' in the energy stock, can be measured by the indicators 'Energy generated by solar panels', and 'Total amount of power generated from windmills'.

By means of norms, the indicator values are calculated to indicator scores. The scores are basically percentages, ranging from 0 to 100, which stand for the extent to which the requirements are met. They represent in other words the % goal achievement. When these indicator scores are calculated, they can be aggregated to stock scores. All indicators within a stock weigh equally amongst each other. Subsequently, stock scores are merged into capital scores, in which all stocks within a capital have the same weight. In the end, the capital scores are added up to the total sustainability score of a municipality. This 'total sustainability score' gives the average percentage of goal achievements of all the included sustainability requirements.

The recalculation of the indicator values into indicator scores through norms makes it possible to compare municipalities of different size,

density, composition, etc. with each other on sustainability. An overview of this method is shown in figure 3.1. An overview of all the stocks and indicators used in this report is shown in table 3.1.

The final result is that for all 380 municipalities an overall sustainability score has been calculated, varying between 0-100% achievement of the integrated sustainability goals.

TELOS SUSTAINABILITY MONITOR METHOD
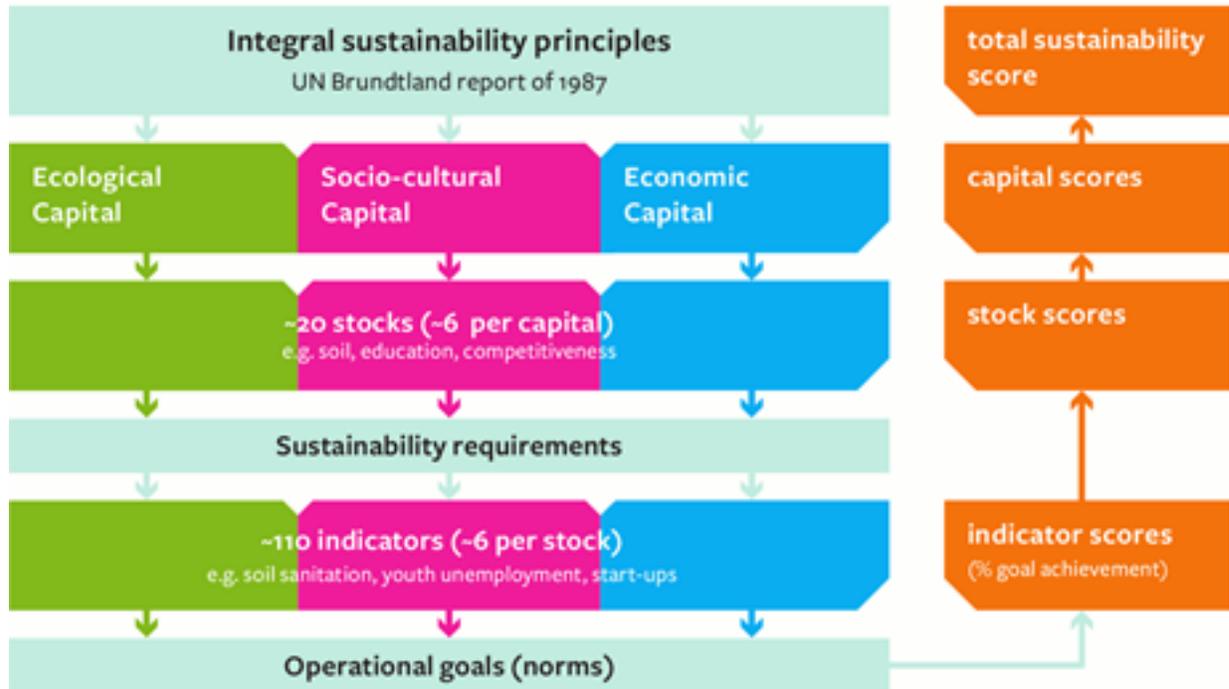
Quantitative data for the 126 indicators used, have been collected from public official sources and are specified in the *'Nationale Monitor Duurzame Gemeenten 2018'* report, which is published separately. More information on this report and on the telos method for measuring sustainability can be found on www.telos.nl.

Tabel 3.1 The three capitals, the 20 themes and the 126 indicators used for quantitative sustainability monitoring of Dutch municipalities

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 behavior
	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 (CO2)
	Emission of Nitrogen (NOx)
	Emission of Particulate matter (PM2.5)
	Emission of volatile organic substances (NMVOS)
	Concentration nitrogen-dioxide (NO2)
	Concentration of ozone (O3)
	Concentration of particulate matter (PM2.5)
Annoyance and emergencies	Annoyance by odors
	Annoyance by noise
	Noise intensity
	Light intensity
	Risk contour
	Floods
	Flooding
	Earthquakes
	Urban heat islands

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 startups
	Share of bankruptcies
	Share of fast-growing enterprises
	Share of employment in economic top sectors
	Investments of non-financial companies
Labor	Employment function
	Human resources exploitation
	Unemployment
	Incapacity for work
	Ageing labor 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

3.2 Municipal reorganizations

In 2017, there were 388 Dutch municipalities. Due to recent municipal reorganizations, the total number of Dutch municipalities has decreased to 380. In comparison to last year's 'Socially Responsible Investment Bond 2017' framework report , there have been several municipal reorganizations:

- The municipalities *'Hoogezand-Sappermeer'*, *'Menterwolde'* and *'Slochteren'* have been merged into the municipality *'Midden-Groningen'*.
- The Municipalities *'Franekeradeel'*, *'Het Bildt'*, *'Menaldumadeel'* and parts of *'Littenseradiel'* have been merged into the new municipality of *'Waadhoeke'*.
- The municipality of *'Leeuwarderadeel'* and parts of *'Littenseradiel'* were added to the municipality of *'Leeuwarden'*.
- The rest of *'Littenseradiel'* was added to *'Súdwest-Fryslân'*.
- The municipalities *'Bellingwedde'* and *'Vlagtwedde'* have been merged into the new municipality of *'Westerwolde'*.
- The municipality *'Rijnwaarde'* was added to the municipality of *'Zevenaar'*.

3.3 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 keeps the instrument as up-to-date as possible. Compared to 2017, one stock was added to the socio-cultural capital: Political participation. The following indicators were added:

- Nitrogen-deposition in the stock 'soil'
- Flooding risk of houses in the annoyance and emergencies stock
- Urban heat islands in the annoyance and emergencies stock.
- Social contacts in the social participation stock
- Loneliness in the social participation stock
- Overall trust in the social participation stock
- Active in society in the social participation stock
- Trust in politics in the political participation stock
- Cultural employment in the arts and culture stock
- Active in politics in the political participation stock
- Use of medicine in the health stock
- Child abuse to the safety stock
- Affordable rental houses in the residential environment stock

- Vacant houses in the residential environment stock
- Knowledge workers in the knowledge stock
- Work locations in the spatial local locations for businesses stock
- Investments of non-financial companies in the competitiveness stock
- Access to public busses in the infrastructure and mobility stock.

3.4   Changed indicators

- Ecological quality of surface water and Chemical quality of surface water are replaced with the sub-indicators of water quality (6 indicators, see table 3.1)
- Turnout local- and turnout national elections are moved to the new stock political participation.

Compared to the 2017 edition, several indicators had to be deleted:

- The indicators manure- Nitrogen quantity produced, and manure Phosphorous quantity produced in the Soil stock. Removed because of the lack of data-availability.
- The indicator drinking water quality in the water stock. Removed due to the lack of regional data, and the good overall quality of drinking water in The Netherlands.
- Risk of road transport of dangerous chemicals in the annoyance and emergencies stock. Removed due to data unavailability.
- Hospital quality because of data unavailability.

4 Eligibility/Sustainability criteria

Triple P-sustainability criteria for selecting municipalities have been defined in this Framework in the same broad sense as in the 2017 Framework for the bond.

Telos recognized from the beginning disadvantages of ranking municipalities using a standard set of sustainability goals, which does not take into account different historic and geographical backgrounds. Municipalities have quite different sustainability challenges. Telos therefore designed an approach that compensates for the limitations of simply ranking municipalities 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 environmental pollution level, 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. Like in 2017 and previous years, 14 types of cities are described. Three are based on city size: small, middle-sized and large municipalities, and 11 are qualitative ones: 'Agricultural', 'Center', 'Former industrial', 'Green', 'Growth', 'Historic', 'New Town', 'Residential', 'Shrink', 'Tourist' and 'Work' cities. This typology will be the basis for the selection of best-in-class municipalities in this Framework as described in Section 5. The criteria used to define the characteristics of the different types of municipalities are similar to those used in the 2017 framework and specified in the National monitor Report 2017 (Zoeteman et al. 2017, p 70). These criteria and types are tailor-made for the Dutch situation. In an EU context, types would be partially different or defined by deviating criteria.

5 Eligible Municipalities

Based on the 14 types of municipalities mentioned in Section 4, the best-ranking 15 municipalities in 2018 for each municipality type will be presented below.

5.1 Quantitative types elected

Three quantitative types are presented: small (<50.000 inhabitants), mid-sized and large (>100.000 inhabitants) municipalities. Below the best-in-class scoring municipalities for each quantitative type are listed with their total sustainability score.

	SMALL MUNICIPALITIES 2018*	SCORE
1	Rozendaal	56.3
2	Haren	56.1
3	Bunnik	55.4
4	Voorschoten	55.2
5	Bloemendaal	55.1
6	Oegstgeest	55.0
7	Ameland	54.8
8	Midden-Delfland	54.8
9	Houten	54.8
10	Heeze-Leende	54.6
11	Dalfsen	54.6
12	Wijk bij Duurstede	54.4
13	Mook en Middelaar	54.3
14	Heumen	54.2
15	Vlieland	54.2
16	Bladel	54.2

* 16 elected, because Vlieland and Bladel have exactly the same score

	MID-SIZED MUNICIPALITIES 2018*	SCORE
1	Barneveld	53.2
2	Kampen	51.7
3	Amstelveen	51.5
4	Katwijk	51.4
5	Zeist	50.4
6	Gooise Meren	50.1
7	Hilversum	50.0

8	Veenendaal	50.0
9	Woerden	49.9
10	Deventer	49.8
11	Hardenberg	49.8
12	Doetinchem	49.5
13	Heerenveen	49.5
14	Pijnacker-Nootdorp	49.5
15	Meierijstad	49.2
16	Krimpenerwaard	49.2

* 16 elected, because Meierijstad and Krimpenerwaard have exactly the same score

	LARGE MUNICIPALITIES 2018	SCORE
1	Zwolle	52.8
2	Ede	52.6
3	Utrecht (gemeente)	52.3
4	Delft	52.2
5	Groningen (gemeente)	52.2
6	Nijmegen	51.7
7	Leiden	51.1
8	Apeldoorn	50.7
9	Westland	50.6
10	Amsterdam	50.6
11	Amersfoort	49.6
12	Breda	49.5
13	's-Hertogenbosch	49.3
14	Eindhoven	49.2
15	Arnhem	49.1

5.2   Qualitative types elected

The 11 qualitative types with their best-in-class municipalities are presented in alphabetical order.

	AGRICULTURAL MUNICIPALITIES 2018	SCORE
1	Bunnik	55.4
2	Midden-Delfland	54.8
3	Dalfsen	54.6
4	Staphorst	53.8
5	Voorst	53.8
6	Dinkelland	53.6
7	Zoeterwoude	53.2

8	Montfoort	53.2
9	Raalte	53.2
10	Zwartewaterland	53.1
11	Eemnes	53.0
12	Olst-Wijhe	53.0
13	Oost Gelre	52.9
14	Eijsden-Margraten	52.9
15	Wierden	52.7

	CENTER MUNICIPALITIES 2018*	SCORE
1	Castricum	53.6
2	Zwolle	52.8
3	Ede	52.6
4	Utrecht (gemeente)	52.3
5	Delft	52.2
6	Groningen (gemeente)	52.2
7	Nijmegen	51.7
8	Katwijk	51.4
9	Leiden	51.1
10	Apeldoorn	50.7
11	Westland	50.6
12	Amsterdam	50.6
13	Gooise Meren	50.1
14	Hilversum	50.0
15	Deventer	49.8
16	Middelburg (Z.)	49.8

* 16 elected, because Deventer and Middelburg have exactly the same score

	FORMER INDUSTRIAL MUNICIPALITIES 2018*	SCORE
1	Bladel	54.2
2	Putten	53.3
3	Waalre	53.2
4	Rijssen-Holten	52.9
5	Wierden	52.7
6	Bergeijk	52.5
7	Brummen	52.2
8	Hattem	52.0
9	Oisterwijk	51.8
10	Oostzaan	51.7
11	Heusden	51.7
12	Landsmeer	51.6
13	Hellendoorn	51.6

14	Losser	51.5
15	Best	51.4
16	Nuenen, Gerwen en Nederwetten	51.4

* 16 elected, because Best and Nuenen, Gerwen en Nederwetten have exactly the same score

	GREEN MUNICIPALITIES 2018	SCORE
1	Rozendaal	56.3
2	Bloemendaal	55.1
3	Heeze-Leende	54.6
4	Mook en Middelaar	54.3
5	Elburg	53.8
6	Leusden	53.8
7	Nunspeet	53.5
8	Putten	53.3
9	Waalre	53.2
10	Utrechtse Heuvelrug	53.2
11	Barneveld	53.2
12	Ermelo	52.8
13	Ede	52.6
14	Wassenaar	52.5
15	Baarn	52.4

	GROWTH MUNICIPALITIES 2018	SCORE
1	Haren	56.1
2	Bunnik	55.4
3	Voorschoten	55.2
4	Bloemendaal	55.1
5	Oegstgeest	55.0
6	Ameland	54.8
7	Midden-Delfland	54.8
8	Houten	54.8
9	Heeze-Leende	54.6
10	Dalfsen	54.6
11	Bladel	54.2
12	Wageningen	53.9
13	Staphorst	53.8
14	Scherpenzeel	53.7
15	Woudenberg	53.5

HISTORIC MUNICIPALITIES 2018		SCORE
1	Ameland	54.8
2	Vlieland	54.2
3	Schiermonnikoog	53.9
4	Staphorst	53.8
5	Eijsden-Margraten	52.9
6	Oudewater	52.6
7	Waterland	52.4
8	Utrecht (gemeente)	52.3
9	Molenwaard	52.3
10	Delft	52.2
11	Zuidhorn	51.9
12	Kampen	51.7
13	Leiden	51.1
14	Bronckhorst	50.7
15	Lopik	50.7

NEW TOWN MUNICIPALITIES 2018		SCORE
1	Midden-Delfland	54.8
2	Houten	54.8
3	Heumen	54.2
4	Barneveld	53.2
5	Urk	53.2
6	Eemnes	53.0
7	Renswoude	52.2
8	Tubbergen	52.1
9	Zeewolde	51.6
10	Best	51.4
11	Duiven	51.1
12	Culemborg	50.9
13	Hendrik-Ido-Ambacht	50.7
14	Koggenland	50.5
15	Langedijk	50.3

RESIDENTIAL MUNICIPALITIES 2018		SCORE
1	Rozendaal	56.3
2	Voorschoten	55.2
3	Bloemendaal	55.1
4	Wijk bij Duurstede	54.4
5	Mook en Middelaar	54.3
6	Heumen	54.2
7	Grave	53.8
8	Castricum	53.6

9	Waalre	53.2
10	Eijsden-Margraten	52.9
11	Waterland	52.4
12	Heiloo	52.1
13	Zuidhorn	51.9
14	Buren	51.8
15	Heusden	51.7

	SHRINK MUNICIPALITIES 2018	SCORE
1	Mook en Middelaar	54.3
2	Grave	53.8
3	Aalten	52.1
4	Berkelland	51.2
5	Bergen (NH.)	51.1
6	Valkenburg aan de Geul	50.9
7	Bronckhorst	50.7
8	Voerendaal	50.2
9	Winsum	50.2
10	Gulpen-Wittem	49.9
11	Meerssen	49.3
12	Schinnen	49.1
13	Leudal	48.7
14	Ferwerderadiel	48.5
15	Nuth	48.4

	TOURIST MUNICIPALITIES 2018	SCORE
1	Ameland	54.8
2	Mook en Middelaar	54.3
3	Vlieland	54.2
4	Terschelling	54.1
5	Schiermonnikoog	53.9
6	Eijsden-Margraten	52.9
7	Veere	52.8
8	Hilvarenbeek	52.6
9	Wassenaar	52.5
10	Bergeijk	52.5
11	Waterland	52.4
12	Groningen (gemeente)	52.2
13	Noordwijk	51.8
14	Oostzaan	51.7
15	Landsmeer	51.6

	WORK MUNICIPALITIES 2018*	SCORE
1	Barneveld	53.2
2	Zwolle	52.8
3	Utrecht (gemeente)	52.3
4	Groningen (gemeente)	52.2
5	Geldermalsen	52.0
6	Noordwijk	51.8
7	Amstelveen	51.5
8	Best	51.4
9	Duiven	51.1
10	Leiden	51.1
11	Oldenzaal	50.9
12	Apeldoorn	50.7
13	Veldhoven	50.7
14	Ouder-Amstel	50.7
15	Westland	50.6
16	Son en Breugel	50.6
17	Amsterdam	50.6

* 17 elected, because Westland, Son en Breugel and Amsterdam have exactly the same score

6 Selection process

From the eligible municipalities shown in Section 5, a final list of Elected Sustainable Municipalities is derived as will be presented in this section. Table 6.1 shows this list, which is based on a compilation of the top-15 best-in-class municipalities of the 14 types of municipalities presented in Section 5. The table shows the scores and the number of municipality types for which the municipality classified.

In principle, this list should include 14x15=210 municipalities. However, a number of municipalities qualify for more than one type. When this is taken into account, a final list of 125 Elected Sustainable Municipalities results. This selection represents 33% of the total number of Dutch municipalities.

Tabel 6.1 List of of 125 Elected Sustainable Municipalities for the 2018 BNG SRI Bond in alphabetical order (also see Annex 1 for a score based ranking)

NO	ELECTED BEST-IN-CLASS MUNICIPALITY	NUMBER OF SELECTIONS	TOTAL SUSTAINABILITY SCORE
1	Aalten	1	52.1
2	Ameland	4	54.8
3	Amersfoort	1	49.6
4	Amstelveen	2	51.5
5	Amsterdam	3	50.6
6	Apeldoorn	3	50.7
7	Arnhem	1	49.1
8	Baarn	1	52.4
9	Barneveld	4	53.2
10	Bergeijk	2	52.5
11	Bergen (NH.)	1	51.1
12	Berkelland	1	51.2
13	Best	3	51.4
14	Bladel	3	54.2
15	Bloemendaal	4	55.1
16	Breda	1	49.5
17	Bronckhorst	2	50.7
18	Brummen	1	52.2
19	Bunnik	3	55.4
20	Buren	1	51.8
21	Castricum	2	53.6
22	Culemborg	1	50.9
23	Dalfsen	3	54.6
24	Delft	3	52.2
25	Deventer	2	49.8

Tabel 6.1 List of of 125 Elected Sustainable Municipalities for the 2018 BNG SRI Bond in alphabetical order (also see Annex 1 for a score based ranking)

NO	ELECTED BEST-IN-CLASS MUNICIPALITY	NUMBER OF SELECTIONS	TOTAL SUSTAINABILITY SCORE
26	Dinkelland	1	53.6
27	Doetinchem	1	49.5
28	Duiven	2	51.1
29	Ede	3	52.6
30	Eemnes	2	53.0
31	Eijsden-Margraten	4	52.9
32	Eindhoven	1	49.2
33	Elburg	1	53.8
34	Ermelo	1	52.8
35	Ferwerderadiel	1	48.5
36	Geldermalsen	1	52.0
37	Gooise Meren	2	50.1
38	Grave	2	53.8
39	Groningen (gemeente)	4	52.2
40	Gulpen-Wittem	1	49.9
41	Hardenberg	1	49.8
42	Haren	2	56.1
43	Hattem	1	52.0
44	Heerenveen	1	49.5
45	Heeze-Leende	3	54.6
46	Heiloo	1	52.1
47	Hellendoorn	1	51.6
48	Hendrik-Ido-Ambacht	1	50.7
49	Heumen	3	54.2
50	Heusden	2	51.7
51	Hilvarenbeek	1	52.6
52	Hilversum	2	50.0
53	Houten	3	54.8
54	Kampen	2	51.7
55	Katwijk	2	51.4
56	Koggenland	1	50.5
57	Krimpenerwaard	1	49.2
58	Landsmeer	2	51.6
59	Langedijk	1	50.3
60	Leiden	4	51.1
61	Leudal	1	48.7
62	Leusden	1	53.8
63	Lopik	1	50.7
64	Losser	1	51.5
65	Meerssen	1	49.3
66	Meierijstad	1	49.2

Tabel 6.1 List of of 125 Elected Sustainable Municipalities for the 2018 BNG SRI Bond in alphabetical order (also see Annex 1 for a score based ranking)

NO	ELECTED BEST-IN-CLASS MUNICIPALITY	NUMBER OF SELECTIONS	TOTAL SUSTAINABILITY SCORE
67	Middelburg (Z.)	1	49.8
68	Midden-Delfland	4	54.8
69	Molenwaard	1	52.3
70	Montfoort	1	53.2
71	Mook en Middelaar	5	54.3
72	Nijmegen	2	51.7
73	Noordwijk	2	51.8
74	Nuenen, Gerwen en Nederwetten	1	51.4
75	Nunspeet	1	53.5
76	Nuth	1	48.4
77	Oegstgeest	2	55.0
78	Oisterwijk	1	51.8
79	Oldenzaal	1	50.9
80	Olst-Wijhe	1	53.0
81	Oost Gelre	1	52.9
82	Oostzaan	2	51.7
83	Ouder-Amstel	1	50.7
84	Oudewater	1	52.6
85	Pijnacker-Nootdorp	1	49.5
86	Putten	2	53.3
87	Raalte	1	53.2
88	Renswoude	1	52.2
89	Rijssen-Holten	1	52.9
90	Rozendaal	3	56.3
91	Scherpenzeel	1	53.7
92	Schiermonnikoog	2	53.9
93	Schinnen	1	49.1
94	's-Hertogenbosch	1	49.3
95	Son en Breugel	1	50.6
96	Staphorst	3	53.8
97	Terschelling	1	54.1
98	Tubbergen	1	52.1
99	Urk	1	53.2
	Utrecht (gemeente)	4	52.3
101	Utrechtse Heuvelrug	1	53.2
102	Valkenburg aan de Geul	1	50.9
103	Veenendaal	1	50.0
104	Veere	1	52.8
105	Veldhoven	1	50.7
106	Vlieland	3	54.2
107	Voerendaal	1	50.2

Tabel 6.1 List of of 125 Elected Sustainable Municipalities for the 2018 BNG SRI Bond in alphabetical order (also see Annex 1 for a score based ranking)

NO	ELECTED BEST-IN-CLASS MUNICIPALITY	NUMBER OF SELECTIONS	TOTAL SUSTAINABILITY SCORE
108	Voorschoten	3	55.2
109	Voorst	1	53.8
110	Waalre	3	53.2
111	Wageningen	1	53.9
112	Wassenaar	2	52.5
113	Waterland	3	52.4
114	Westland	3	50.6
115	Wierden	2	52.7
116	Wijk bij Duurstede	2	54.4
117	Winsum	1	50.2
118	Woerden	1	49.9
119	Woudenberg	1	53.5
120	Zeewolde	1	51.6
121	Zeist	1	50.4
122	Zoeterwoude	1	53.2
123	Zuidhorn	2	51.9
124	Zwartewaterland	1	53.1
125	Zwolle	3	52.8

7 SDGs scores

This section describes a translation of the triple P-sustainability scores, discussed before, into scores on the UN Sustainable Development Goals (SDGs) of 2015. Showing the impacts of social activities in terms of their contribution to the SDGs is becoming mainstream among many organizations, including the banking sector and pension funds. These have been active since 2015 to develop a so-called 'taxonomy on Sustainable Development Investments (SDIs) that translates the SDGs into investable opportunities from the perspective of Asset Owners (EC, 2018; UNEP, 2018; UN Sustainable Development Knowledge Platform, 2018). A standardized method to show the SDGs impacts is, however, not yet available and may never be accomplished because of the many possible approaches for and the ambiguity in the SDGs themselves. The European Commission will contribute to harmonization of SDGs monitoring methods for certain sectors, but like all work with impact indicators, it will take a long way to satisfy all demands.

The SDGs are not developed according to scientifically agreed clearly separable themes, but are the result of politically agreed international priorities, a compromise that should accommodate the wishes of all nations of the world. The result is a set of 17 goals and within those 169 targets that have many overlaps and sometimes non-logical elements to measure them. This is recognized in the UN documents.

Furthermore, it is clear that activities do not always impact all SDGs. And, although all levels of government and all business sectors are in principle addressed, the character of the SDGs still reminds strongly of the Millennium Development Goals of 2000 that were mainly focusing on the challenges of developing countries.

Nevertheless, the framework proposed attempts to show the impact of the municipalities in terms of the SDGs. The first part of this chapter will discuss the method Telos developed, and the second part summarizes the outcome.

7.1 Translation of triple P sustainability assessment to SDG scoring

There are different options to link the outcome of triple P sustainability assessments to SDG impacts. Which option to use depends on the type of data available. In this case, data for potentially 126 indicators are available, which makes it possible to allocate most of them to the SDGs in conformity with the targets linked to these goals. As SDGs have some overlap, indicators may show up more than one time. This is found acceptable and a logical consequence of the way the SDGs are designed. Where indicators

seem to be positioned in a non-logical way, e.g. earthquakes under nr.1 (No poverty), this is due to the targets defined by the UN for this Goal.

An overview of the SDGs, and the indicators available to measure them, is given in Table 7.1. As this table shows, no indicators were available for 3 SDGs: 5. Gender equality, 14. Life below Water and 17. Partnerships for the Goals. For some other Goals only very limited indicators were available, as in the case of 2. Zero Hunger, and 13. Climate Action. This may result in a SDG score, which is not really representative for the municipal situation. The latter is mainly due to the fact that SDGs are primarily meant to inspire national governments and are not primarily designed to monitor actions of e.g. municipalities.

Yet, Telos has not found it wise to correct for such imbalances, but to stick as close as possible to the definitions given by the UN. For a more balanced approach, the triple P assessment is available.

Tabel 7.1 Overview of the 17 SDGs and available indicators to measure them

GOAL	SHORT TITLE	DESCRIPTION	INDICATOR
1	No Poverty	End poverty in all its forms everywhere	Poor households
			Social welfare benefits
			Risk contour
			Floods
			Earthquakes
			Incapacity for work
2	Zero Hunger	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Risky behavior
3	Good Health and Well-being	Ensure healthy lives and promote well-being for all at all ages	Assessment of own health
			Chronicle illness
			Distance to general practitioner
			Distance to public hospital
			Road safety
			Concentration of ozone (O3)
			Concentration of particulate matter (PM2.5)
			Risky behavior
4	Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Distance to primary school
			Distance to secondary school
			Final examination mark
			School dropouts
			Youth unemployment
			Education level population
5	Gender Equality	Achieve gender equality and empower all women and girls	No suitable indicator in database

6	Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all	Water quality: Fish population
			Water quality: Macro-fauna
			Water quality: flora
			Physical-chemical water quality
			Water quality: other substances
			Water quality: Priority substances
7	Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all	Wind energy
			Solar energy
			Natural gas use households
			Electricity use households
			Energy label houses
			Natural gas use companies
			Energy use companies
8	Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Cultural employment
			Gross regional product per capita
			Share of employment in economic top sectors
			Employment function
			Human resources exploitation
			Unemployment
			High- and medium-tech employment
			Employment in the creative industry
			School dropouts
			Youth unemployment
9	Industry, Innovation and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Emission of carbon-dioxide (CO2)
			Share of knowledge workers
			Access to main roads and highways
			Recharging stations for electric vehicles
			High- and medium-tech employment
10	Reduced Inequa-lities	Reduce inequality within and among countries	Loneliness
			Political engagement
			Financial assets households
			Migration
			Social welfare benefits
			Poor households
11	Sustainable Cities and Communities	Make cities and human settle-ments inclusive, safe, resilient and sustainable	National monuments
			New houses developed
			Affordable housing
			Public green
			Household general Waste
			Access to train station
			Access to public busses
			Risk contour
			Concentration of particulate matter (PM2.5)

12	Responsible Consumption and Production	Ensure sustainable consumption and production patterns	Organic waste
			Household general Waste
13	Climate Action	Take urgent action to combat climate change and its impacts	Flooding
			Urban heat islands
14	Life below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	No suitable indicator in database
15	Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Nitrogen deposition
			Share of forest and natural area
			Biodiversity
16	Peace, Justice and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	Turnout local elections
			Turnout national elections
			Violent crimes
			Property crimes
			Vandalism
			Child abuse
			Feelings of insecurity
17	Partnerships for the Goals	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	No suitable indicator in database

The scores for the indicators are the same as the sustainability scores discussed previously, as are the rules for aggregation. However, the SDG scores themselves have not been aggregated for methodological reasons, such as the sometimes overlapping targets and therefore the multiple use of several indicators.

In total 14 of the 17 SDGs can be measured for Dutch municipalities, excluding Goals 5, 14 and 17.

7.2   SDG scores of municipalities

7.2.1   Impact of the municipaities in the years 2014-2018 from the point of view of the SDGs
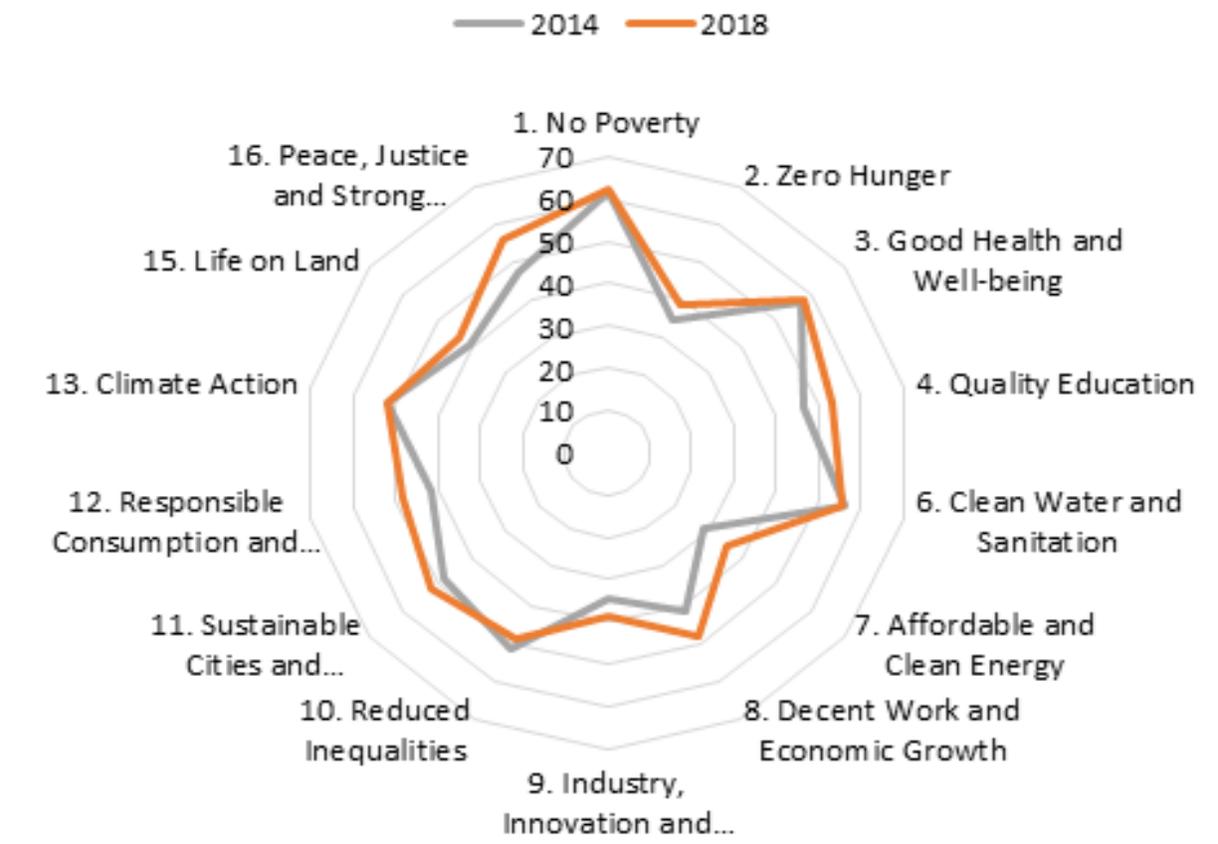
Figure 7.1 Average scores for the 14 SDGs of all municpalities in reporting years 2014-2018

This figure shows the general outcome of the SDGs scores for the total group of 380 Dutch municipalities in reporting years 2014 and 2018.

It clearly indicates that over the period 2014-2018 the score for nearly all SDGs improved or remained stable. The one exception to this trend is Goal 10: Reduced Inequalities, as is further shown in table 7.2.

Tabel 7.2 Overview of the SDGs scores of Dutch municipalities over the periode 2014-2018

SDG	2014	2015	2016	2017	2018	Difference 2014-2018
1. No Poverty	61.3	61.1	60.8	61.5	62.1	0.7
2. Zero Hunger	34.7	34.7	34.7	34.7	39.0	4.3
3. Good Health and Well-being	57.1	57.5	59.0	58.7	58.0	0.9
4. Quality Education	46.8	48.4	50.9	51.5	53.3	6.5
5. Gender Equality						
6. Clean Water and Sanitation	56.4	56.4	56.4	54.5	55.6	-0.8
7. Affordable and Clean Energy	28.8	31.3	33.1	34.1	35.4	6.6
8. Decent Work and Economic Growth	41.4	41.8	44.4	45.7	48.3	6.9
9. Industry, Innovation and Infrastructure	34.3	36.0	37.2	37.8	38.8	4.5
10. Reduced Inequalities	51.3	50.6	50.6	50.4	48.6	-2.7
11. Sustainable Cities and Communities	47.8	48.4	49.8	50.4	51.7	3.9
12. Responsible Consumption and Production	41.6	42.2	44.7	45.7	48.6	7.0
13. Climate Action	52.3	52.3	52.3	52.3	52.3	0.0
14. Life below Water						
15. Life on Land	40.8	41.0	45.1	44.3	43.5	2.7
16. Peace, Justice and Strong Institutions	47.0	48.8	49.9	53.0	56.0	9.0
17. Partnerships for the Goals						

Aggregation of the SDG scores listed in table 7.2 for each year cannot be done. This would not be correct because of overlapping indicators in the SDGs. Table 7.2, however, demonstrates that 11 of the 14 Goals improved in score over the past 5 years. Highest improvements occurred for Goals 4, 7, 8, 12 and 16. The stable outcome for Goal 13: Climate Action is due to the type of indicators involved: Flooding, and Urban heat islands. Mitigation measures are found under Goal 7: Affordable and Clean Energy, which improved substantially.

7.2.2   Best scoring municipalities for 14 SDGs in 2018

In this paragraph, the 10 best scoring municipalities for each of the relevant SDGs are given.

The scores present the calculated score for the specific SDG in 2018, based on the indicator scores used in the triple P assessment as listed in table 7.1.

RANK	NAME	1. NO POVERTY
1	Rozendaal	94
2	Renswoude	85.6
3	Schiermonnikoog	84.7
4	Ameland	84.6
5	Korendijk	83.5
6	Bloemendaal	83.1
7	Haaren	83
8	Reusel-De Mierden	82.5
9	Tubbergen	81.5
10	Dinkelland	81

RANK	NAME	2. ZERO HUNGER
1	Kapelle	75
2	Cranendonck	67.5
3	Sint Anthonis	65
4	Heumen	65
5	Oegstgeest	65
6	Bunnik	62.5
7	Houten	62.5
8	Son en Breugel	62.5
9	Alphen-Chaam	60
10	Castricum	60
10	Horst aan de Maas	60
10	Heiloo	60
10	Beemster	60

RANK	NAME	3. GOOD HEALTH AND WELL-BEING
1	Urk	74.7
2	Oegstgeest	72.4
3	Voorschoten	72
4	Amstelveen	71.6
5	Wageningen	71.6
6	Houten	70.9
7	Rozendaal	70.9
8	Pijnacker-Nootdorp	70.9
9	Edam-Volendam	70.6
10	Lansingerland	70.4

RANK	NAME	4. QUALITY EDUCATION
1	Schiermonnikoog	73.8
2	Oegstgeest	71.7
3	Gooise Meren	69
4	Bloemendaal	68.4
5	Heiloo	66.9
6	Utrecht (gemeente)	66.2
7	Borne	65.9
8	Teylingen	65.4
9	Montfoort	65.3
10	Lisse	65.3

RANK	NAME	6. CLEAN WATER AND SANITATION
1	Landgraaf	100
2	Schouwen-Duiveland	92.8
3	Marum	83.4
4	Apeldoorn	83.3
5	Doetinchem	83.3
6	Pekela	83.3
7	Berkelland	82.1
8	Noordwijkerhout	81.7
9	Meppel	80.6
10	De Wolden	80.6

RANK	NAME	7. AFFORDABLE AND CLEAN ENERGY
1	Nieuwegein	62.1
2	Almere	59.5
3	Amsterdam	58.3
4	Duiven	57.8
5	Purmerend	57.4
6	Capelle aan den IJssel	57.1
7	Zoetermeer	55.7
8	Culemborg	54
9	Utrecht (gemeente)	53.9
10	Nijmegen	53.3

RANK	NAME	8. DECENT WORK AND ECONOMIC GROWTH
1	Ouder-Amstel	65.8
2	Best	65.2
3	Amsterdam	64.3
4	Eemnes	63.3
5	Bladel	62.8
6	Schiermonnikoog	62.8
7	Utrecht (gemeente)	61.8
8	Son en Breugel	61.6
9	Oostzaan	61.2
10	Landsmeer	61.2

RANK	NAME	9. INDUSTRY, INNOVATION AND INFRASTRUCTURE
1	Wageningen	65.9
2	Delft	63.2
3	Vaals	61.2
4	Teylingen	61.1
5	Vlaardingen	60.6
6	Weesp	59
7	Oldenzaal	58.5
8	Groningen (gemeente)	58.1
9	De Bilt	56.6
10	Leiden	56.4

RANK	NAME	10. REDUCED INEQUALITIES
1	Rozendaal	73.1
2	Zoeterwoude	67.6
3	Renswoude	67.6
4	Edam-Volendam	66.1
5	Beemster	65.7
6	Bunnik	65.3
7	Bloemendaal	65
8	Haaren	65
9	Bunschoten	64.8
10	Woudenberg	64.4

RANK	NAME	11. SUSTAINABLE CITIES AND CUMMUNITIES
1	Rozendaal	66.8
2	Deventer	66.8
3	Grave	65.8
4	Voorst	65.4
5	Vaals	65.3
6	Bloemendaal	65.2
7	Voerendaal	65.2
8	Kampen	65.2
9	Culemborg	65.1
10	Vught	64.9

RANK	NAME	12. RESPONSIBLE CONSUMPTION AND PRODUCTION
1	Pekela	100
2	Dalfsen	83.4
3	Druten	83.4
4	Heumen	83
5	Oost Gelre	82.6
6	Grave	82.5
7	Cuijk	82.5
8	Boxmeer	82.5
9	Mill en Sint Hubert	82.5
10	Boekel	82.5

RANK	NAME	13. CLIMATE ACTION
1	Ameland	100
2	Schiermonnikoog	100
3	Vlieland	100
4	De Marne	99.3
5	Ferwerderadiel	97
6	Waterland	90.9
7	Beemster	90.2
8	Hollands Kroon	89.9
9	Ten Boer	89.1
10	Texel	86.5

RANK	NAME	15. LIFE ON LAND
1	Bloemendaal	79
2	Zandvoort	78.7
3	Bergen (NH.)	72.2
4	Wassenaar	71.4
5	Noordwijk	69.1
6	Schiermonnikoog	67.5
7	Vlieland	67.4
8	Roerdalen	67.4
9	Heemskerk	67.1
10	Westvoorne	66.6

RANK	NAME	16. PEACE, JUSTICE AND STRONG INSTITUTIONS
1	Staphorst	78.7
2	Dalfsen	77.9
3	Tubbergen	76.1
4	Schiermonnikoog	75.6
5	Zwartewaterland	74.5
6	Rozendaal	73.7
7	Dinkelland	73.7
8	De Wolden	72.9
9	Rijssen–Holten	72.9
10	Sint Anthonis	72.9

7.2.3 Best scoring municipalities for a combination of SDGs

Although it was for methodological reasons not possible to derive a list of best scoring municipalities for the SDGs combined, an approximation of a list of best scoring municipalities can be developed using a different approach. Based on the lists of top 10 scoring municipalities for each of the SDGs monitored, it can be assessed which municipalities are occurring most frequently on such top 10 lists. The result is presented in Table 7.3.

Tabel 7.3 Overview of best scoring Dutch municipalities occurring most frequently in top 10 lists of individual SDGs in 2018

NO	NAME	NUMBER OF TOP 10 LIST OCCUR-RENCES	SDGS INVOLVED	RANKING NO. BASED ON TOTAL SUSTAINABILITY SCORE OF SELECTED MUNICIPALITIES (ANNEX 1)
1	Schiermonnikoog	6	1. No Poverty, 4. Quality Education, 8. Decent Work and Economic Growth, 13. Climate Action,15. Life on Land, 16. Peace, Justice and Strong Institutions	19
2	Rozendaal	5	1. No Poverty, 3. Good Health and Well-being, 10. Reduced Inequalities, 11. Sustainable Cities and Communities, 16. Peace, Justice and Strong Institutions	1
3	Bloemendaal	5	1. No Poverty, 4. Quality Education, 10. Reduced Inequalities, 11. Sustainable Cities and Communities, 15. Life on Land	5
4	Beemster	3	2. Zero Hunger, 10. Reduced Inequalities, 13. Climate Action	Not in selection
5	Oegstgeest	3	2. Zero Hunger, 3. Good Health and Well-being, 4. Quality Education	6
6	Utrecht (gemeente)	3	4. Quality Education, 7. Affordable and Clean Energy, 8. Decent Work and Economic Growth	56
7	Dalfsen	2	12. Responsible Consumption and Production, 16. Peace, Justice and Strong Institutions	11
8	Tubbergen	2	1. No Poverty, 16. Peace, Justice and Strong Institutions	63
9	Dinkelland	2	1. No Poverty, 16. Peace, Justice and Strong Institutions	27
10	De Wolden	2	6. Clean Water and Sanitation, 16. Peace, Justice and Strong Institutions	Not in selection
11	Sint Anthonis	2	2. Zero Hunger, 16. Peace, Justice and Strong Institutions	Not in selection
12	Ameland	2	1. No Poverty, 13. Climate Action	7
13	Edam-Volendam	2	3. Good Health and Well-being, 10. Reduced Inequalities	Not in selection
14	Son en Breugel	2	2. Zero Hunger, 8. Decent Work and Economic Growth	95
15	Wageningen	2	3. Good Health and Well-being, 9. Industry, Innovation and Infrastructure	18
16	Haaren	2	1. No Poverty, 10. Reduced Inequalities	Not in selection
17	Renswoude	2	1. No Poverty, 10. Reduced Inequalities	59
18	Houten	2	2. Zero Hunger, 3. Good Health and Well-being	8
19	Bunnik	2	2. Zero Hunger, 10. Reduced Inequalities	3
20	Heumen	2	2. Zero Hunger, 12. Responsible Consumption and Production	14
21	Heiloo	2	2. Zero Hunger, 4. Quality Education	62
22	Grave	2	11. Sustainable Cities and Communities, 12. Responsible Consumption and Production	20
23	Vlieland	2	13. Climate Action, 15. Life on Land	16
24	Teylingen	2	4. Quality Education, 9. Industry, Innovation and Infrastructure	Not in selection

25	Vaals	2	9. Industry, Innovation and Infrastructure, 11. Sustainable Cities and Communities	Not in selection
26	Culemborg	2	7. Affordable and Clean Energy, 11. Sustainable Cities and Communities	87
27	Pekela	2	6. Clean Water and Sanitation, 12. Responsible Consumption and Production	Not in selection
28	Amsterdam	2	7. Affordable and Clean Energy, 8. Decent Work and Economic Growth	97

In total 6 municipalities are found which occur 3 times or more on top 10 lists for individual SDGs. Another 22 municipalities occur 2 times on such top 10 lists. More than 70% of these in total 28 municipalities are also found in the group of 125 selected municipalities based on the triple P sustainability scores. However, 8 municipalities are listed in table 7.3 while not belonging to the tripe P based selected group. These are Beemster, De Wolden, Sint Anthonis, Edam-Volendam, Haaren, Teylingen, Vaals and Pekela, all relatively small municipalities.

8 Performance reporting

Telos will prepare annually for BNG Bank a Performance or Impact Report to investors. This report will give an update on the sustainability scores of the 125 Elected Municipalities for the 2018 BNG Bank Sustainability Bond, showing:

- performance of the group of Elected Municipalities compared to the previous year(s);
- a list of Elected Municipalities showing the largest improvement or reduction in overall score and an indication of the main causes for these results;
- performance of the group of Elected Municipalities in comparison with the total group of Dutch Municipalities;
- more detailed performance reporting on changes for the group of Elected Municipalities at a more detailed level of interest, such as CO2-emissions.

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

- allowing a common language and decision framework in the municipal executive board and city council by measuring ec obonomic, social and environmental goals on a same basis;
- learning, by benchmarking own performance with performance of municipalities with a similar typology, to apply proven sustainability practices or avoid less productive approaches;
- shaping all major projects and initiatives from a sustainability point of view by 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 procurement and during permitting procedures for new buildings, (re)constructions, etc.;
- forming coalitions and alliances with parties concerned (other municipalities, businesses, NGOs, co-investors, etc.) to develop innovative best possible solutions for sustainability challenges of the municipality;
- building trust by open communication practices showing performance changes on the broad issues of municipal sustainability.

9 References

EC, 2018, https://ec.europa.eu/info/sites/info/files/180131-sustainable-fi-nance-final-report-annex-3_en.pdf

European Environment Agency, 2018, http://www.eea.europa.eu/data-and-maps

EUROSTAT, 2018, http://epp.eurostat.ec.europa.eu/portal/page/portal/region_cities/introduction

ICLEI, 2017, Sustainable City, see http://www.iclei.org/our-activities/our-agendas/sustainable-city.html (accessed 8 September 2018)

ISO (2018), Measuring smart city performance, ISO/TS 37151 and ISO 37120 http://www.iso.org/sites/mysmartcity/index.html

Klimaatakkoord, 2018, Analysis of Planning Bureaus, https://www.klimaatakkoord.nl/actueel/nieuws/2018/09/28/analyses-planbureaus

OECD (2015), Towards Green Growth? Taking progress, 27 July, http://www.oecd.org/greengrowth/towards-green-growth-9789264234437-en.htm

Regeerakkoord, 2017,   Vertrouwen in de toekomst, Regeerakkoord 2017 – 2021, VVD, CDA, D66 en ChristenUnie, 10 oktober, https://www.kabinetsformatie2017.nl/documenten/publicaties/2017/10/10/regeerak-koord-vertrouwen-in-de-toekomst

Sachs, J., G. Schmidt-Traub, C. Kroll, D. Durand-Delacre, K. Teksoz, 2016, SDG Index and Dashboards - Global Report,New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN)

SER, 2013, Energieakkoord voor duurzame groei, http://www.energieak-koordser.nl/energieakkoord (accessed 15 September 2017)

Sustainable Bond Guidelines, 2018, https://www.icmagroup.org/green-so-cial-and-sustainability-bonds/sustainability-bond-guidelines-sbg/

Telos, see www.telos.nl

UNEP, 2018, http://unepinquiry.org/wp-content/uploads/2018/04/Making_Waves_lowres.pdf

UN Sustainable Development Goals, 2015, http://www.un.org/sustainable-development/sustainable-development-goals/

UN Sustainable Development Knowledge Platform, 2018, https://sustaina-bledevelopment.un.org/hlpf/2018

Zoeteman, K., (Ed.), 2012, Sustainable Development Drivers. The Role of Leadership in Government, Business and NGO Performance, Cheltenham UK: Edward Elgar Publishing, p. 74-98, 249

Zoeteman, K., H. Mommaas, J. Dagevos, 2015, Are larger cities more sustainable? Lessons from integrated sustainability monitoring in 403 Dutch municipalities, Environmental Development, http://www.sciencedirect.com/science/article/pii/S2211464515300014

Zoeteman, B.C.J., J.F.L.M. Dagevos, R. Mulder, C.H.M. Wentink, N. Hoven, C. Visser, 2017, Nationale monitor duurzame gemeenten 2017, Duurzaam-heidstrends over de periode 2014-2017 voor de 388 Nederlandse gemeenten en de relatie met de VN Sustainable Development Goals, (with English summary), Report nr 17.170, Tilburg: Telos Tilburg University, (with English summary) http://www.telos.nl/ Publicaties/PublicatiesRapporten/default.aspx

Zoeteman, B.C.J., R. Mulder, 2017, NV Bank Nederlandse Gemeenten (BNG Bank) Sustainability Bond 2017, Sustainability Framework Document for Best-in-Class Municipality Investment, Telos, Tilburg University, the Netherlands, 6 October, Document number 17.172, https://www.bngbank.com/Documents/Investors/Sustainability%20Framework%202017.pdf

Annexes

A Elected Sustainable Municipalities 2018 ranked by their sustainability score

NO	ELECTED BEST-IN-CLASS MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2018
1	Rozendaal	56.3
2	Haren	56.1
3	Bunnik	55.4
4	Voorschoten	55.2
5	Bloemendaal	55.1
6	Oegstgeest	55.0
7	Ameland	54.8
8	Houten	54.8
9	Midden-Delfland	54.8
10	Heeze-Leende	54.6
11	Dalfsen	54.6
12	Wijk bij Duurstede	54.4
13	Mook en Middelaar	54.3
14	Heumen	54.2
15	Bladel	54.2
16	Vlieland	54.2
17	Terschelling	54.1
18	Wageningen	53.9
19	Schiermonnikoog	53.9
20	Grave	53.8
21	Staphorst	53.8
22	Voorst	53.8
23	Elburg	53.8
24	Leusden	53.8
25	Scherpenzeel	53.7
26	Castricum	53.6
27	Dinkelland	53.6
28	Nunspeet	53.5
29	Woudenberg	53.5
30	Putten	53.3
31	Utrechtse Heuvelrug	53.2
32	Waalre	53.2
33	Zoeterwoude	53.2
34	Montfoort	53.2
35	Raalte	53.2

NO	ELECTED BEST-IN-CLASS MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2018
36	Barneveld	53.2
37	Urk	53.2
38	Zwartewaterland	53.1
39	Eemnes	53.0
40	Olst-Wijhe	53.0
41	Oost Gelre	52.9
42	Rijssen-Holten	52.9
43	Eijsden-Margraten	52.9
44	Zwolle	52.8
45	Veere	52.8
46	Ermelo	52.8
47	Wierden	52.7
48	Hilvarenbeek	52.6
49	Oudewater	52.6
50	Ede	52.6
51	Bergeijk	52.5
52	Wassenaar	52.5
53	Baarn	52.4
54	Waterland	52.4
55	Molenwaard	52.3
56	Utrecht (gemeente)	52.3
57	Brummen	52.2
58	Delft	52.2
59	Renswoude	52.2
60	Groningen (gemeente)	52.2
61	Aalten	52.1
62	Heiloo	52.1
63	Tubbergen	52.1
64	Geldermalsen	52.0
65	Hattem	52.0
66	Zuidhorn	51.9
67	Buren	51.8
68	Noordwijk	51.8
69	Oisterwijk	51.8
70	Kampen	51.7
71	Nijmegen	51.7
72	Oostzaan	51.7
73	Heusden	51.7
74	Hellendoorn	51.6
75	Landsmeer	51.6
76	Zeewolde	51.6
77	Amstelveen	51.5
78	Losser	51.5

NO	ELECTED BEST-IN-CLASS MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2018
79	Best	51.4
80	Katwijk	51.4
81	Nuenen, Gerwen en Nederwetten	51.4
82	Berkelland	51.2
83	Duiven	51.1
84	Leiden	51.1
85	Bergen (NH.)	51.1
86	Oldenzaal	50.9
87	Culemborg	50.9
88	Valkenburg aan de Geul	50.9
89	Bronckhorst	50.7
90	Lopik	50.7
91	Apeldoorn	50.7
92	Hendrik-Ido-Ambacht	50.7
93	Ouder-Amstel	50.7
94	Veldhoven	50.7
95	Son en Breugel	50.6
96	Westland	50.6
97	Amsterdam	50.6
98	Koggenland	50.5
99	Zeist	50.4
100	Langedijk	50.3
101	Voerendaal	50.2
102	Winsum	50.2
103	Gooise Meren	50.1
104	Hilversum	50.0
105	Veenendaal	50.0
106	Gulpen-Wittem	49.9
107	Woerden	49.9
108	Deventer	49.8
109	Middelburg (Z.)	49.8
110	Hardenberg	49.8
111	Amersfoort	49.6
112	Doetinchem	49.5
113	Heerenveen	49.5
114	Pijnacker-Nootdorp	49.5
115	Breda	49.5
116	Meerssen	49.3
117	's-Hertogenbosch	49.3
118	Eindhoven	49.2
119	Krimpenerwaard	49.2
120	Meierijstad	49.2
121	Arnhem	49.1

NO	ELECTED BEST-IN-CLASS MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2018
122	Schinnen	49.1
123	Leudal	48.7
124	Ferwerderadiel	48.5
125	Nuth	48.4