Sustainability Framework for Best-in-Class Municipality Investment

NV Bank Nederlandse Gemeenten (BNG Bank) Sustainability Bond 2019

telos brabant centre for sustainable development

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Summary

NV Bank Nederlandse Gemeenten (BNG Bank) asked Telos (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 2019. For these bonds the so-called Sustainability Bond Guidelines apply. In addition, the triple P based sustainability rating was complemented 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 on their sustainable development. For the BNG Bank Sustainability Bond, Telos has used in 2019 in principle the same methodology as the previous year. The Framework is based on a detailed comparison of all 355 Dutch municipalities using 132 scientific indicators for the ecological, social and economic domains of sustainability. The quantitative data are derived from the best available and 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 355 Dutch municipalities, a list of 114 municipalities, which are the top-15 best-in-class municipalities for the 14 types of municipalities involved. These 114 municipalities are the Elected Municipalities for a BNG Bank Sustainability Bond 2019. This selection represents 32% of the total number of Dutch municipalities.

A method is presented to also derive scores on SDGs from the 3P-data collected. The method is based on the UN definition of these SDGs by 169 sub-targets. Because of the political background of establishing the SDGs they show sometimes overlap among each other and an illogical categorization from a scientific perspective. Such eventual inconsistences are not corrected, as these are designed as such consciously by the UN. However, they cause a difficulty when aggregating SDGs to one figure per year. But on the level of individual SDGs a comparison can be made as shown in figure S1.
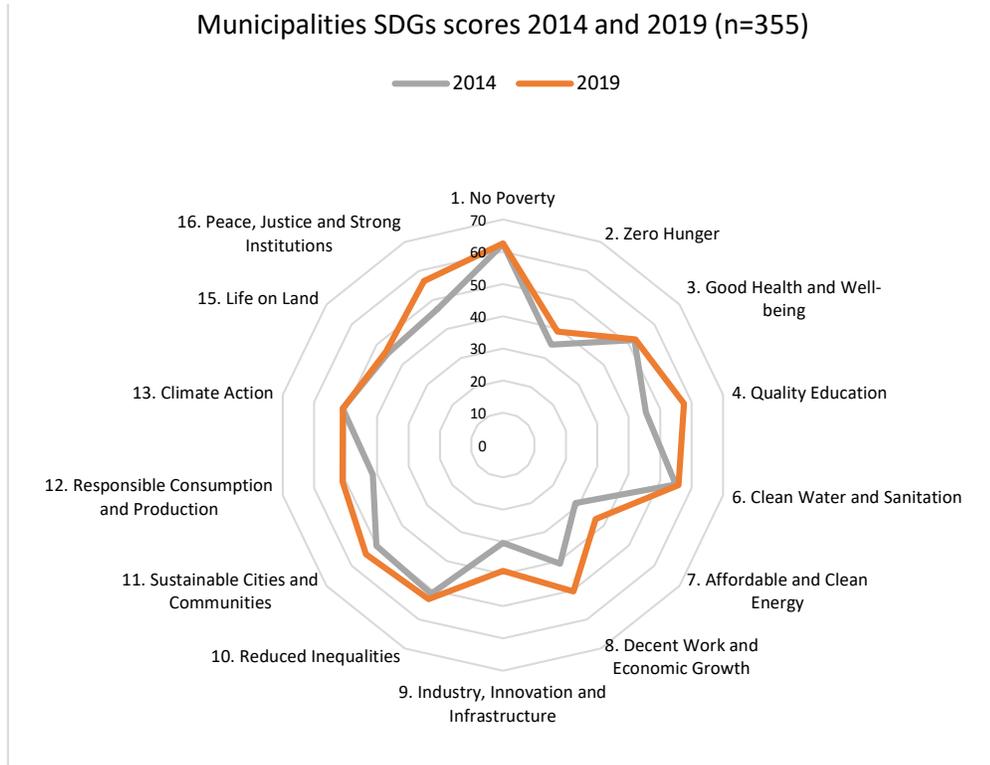
Figure S1 Comparison between SDGs scores of all Dutch municipalities in 2014 and 2019

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 34 municipalities occurring more than once on such top-10 lists. A steady improvement in SDGs performance is found for nearly all SDG's, although one should take into account the sometimes low representative value of the outcome due to the kind of indicators prescribed.

Finally, a structure for yearly impact reporting is presented.

1 Scopes and objectives

This document describes the Framework for a 2019 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.

"Sustainability Bonds are bonds where the proceeds will be exclusively applied to finance or re-finance a combination of both Green and Social Projects. The Sustainability Bond Guidelines as of June 2018 have been published to confirm the relevance of the Principles in this context and facilitate the application of their guidance on transparency and disclosure to the Sustainability Bond market. The common four core components of the Principles and their recommendations on the use of external reviews and impact reporting therefore also apply to Sustainability Bonds."

ICMA: https://www.icmagroup.org/green-social-and-sustainability-bonds/ sustainability-bond-guidelines-sbg/.

Sustainability Bond Guidelines provide transparency and disclosure to the market. 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. The outcome of the national monitor is public and made available on an annual basis at ***http://www.sustainablecitiesbenchmark.eu/***. The National monitor covers all 355 Dutch municipalities and applies more than 130 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 at 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

SUSTAINABILITY FRAMEWORK FOR BEST-IN-CLASS MUNICIPALITY INVESTMENT | SCOPES AND OBJECTIVES

(CBS), the Netherlands Environmental Assessment Agency (PBL) and the Netherlands Institute for Social Research (SCP), and many others.

BNG Bank asked Telos Spring 2019 to prepare a 2019 Framework for a 2019 sustainability bond. The basis for the framework would be the same as in 2018 (Zoeteman and Mulder, 2018), which means that it was requested to also include an assessment from the point of view of the UN Sustainable Development Goals (SDGs). The framework presented elects municipalities based on their performance according to the triple P-sustainability method In addition, the contribution of municipalities to the SDGs will be shown. The special methodology to make this possible was developed and reported in 2018 and will be used again in 2019. The result is that all municipalities also obtain an SDGs score.

This report provides the Framework for BNG Bank's 2019 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 types of municipalities. In Section 6, the overall result is presented by means of a list of Elected Sustainable Municipalities. Section 7 present the methodology for measuring SDGs scores as well as the outcome. Subsequently, Section 8 discusses future performance reporting.

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2 Monitoring of municipal 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, Planet and Profit) 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 prosperity 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 which 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 socio-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 CO2-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 2018 a joint effort of all stakeholders and have been assessed summer 2018 by two national planning bureaus (Klimaatakkoord, 2018). After long discussions the Dutch government has agreed and committed itself on 28 June 2019 to a National Climate Agreement with 600 concrete measures. (National Climate Agreement of the Netherlands 2019). The Netherlands will implement measures 'to put it on track for a 49% reduction of Green House Gas emissions by 2030 compared to 1990'. A large group of stakeholders have also committed themselves to contributing to this goal, including the Dutch financial sector.

Figure 2.1 The commitment of the Dutch financial sector to climate action, visualized on 28 June 2019

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 in 2019 132 scientific indicators for which quantitative data are available from reliable public sources.

The three P's are conceptualized as the socio-cultural capital (people), the ecological capital (planet) and the economic capital (profit). 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 each municipality separately, to what extend they live up to these requirements. For that purpose, the 132 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, 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. After 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 with equal weight 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. among 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 framework report is shown in table 3.1.

The final result is that for all 355 Dutch municipalities an overall sustainability score has been calculated, varying theoretically between 0-100% achievement of the integrated sustainability goals

TELOS SUSTAINABILITY MONITOR METHOD
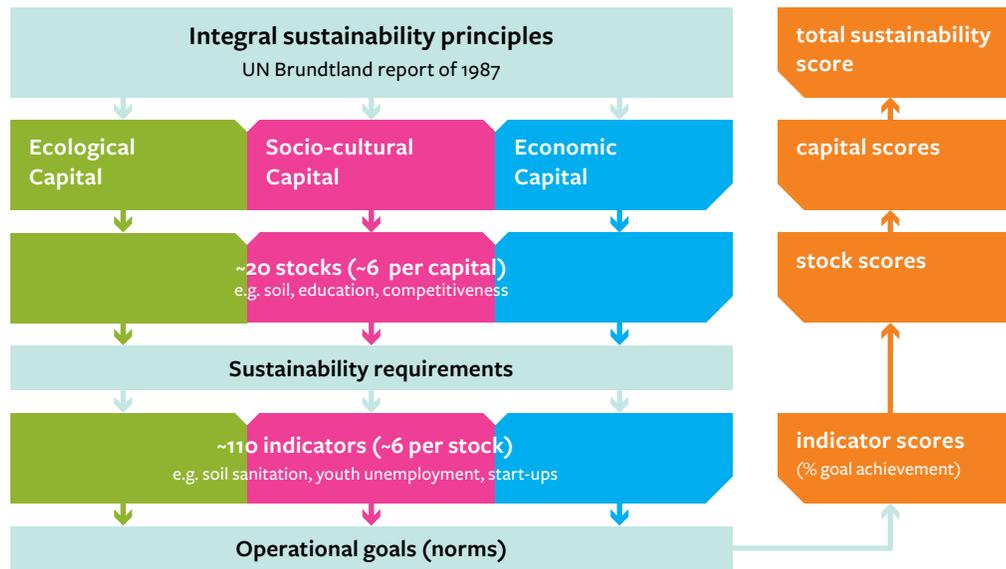
Figure 3.1 Overview of the Telos Sustainability Monitor Method

Quantitative data for the 132 indicators used, have been collected from public official sources and are specified in the *'Nationale Monitor Duurzame Gemeenten 2019'* 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**.

Table 3.1 The three capitals, the 20 themes and the 132 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
	Donor registrations
Political participation	Political engagement
	Turnout local elections
	Turnout national elections
	Political trust
Economic participation	Gini-index
	Long-term unemployment
	Poor households
	Social welfare benefits
	Financial assets households
Arts and culture	Performing Arts & Cinema's
	Distance to Museum
	National monuments
	Municipal monuments
	Protected sights
	Cultural employment
Health	Mental health costs
	Life expectancy
	Assessment of own health
	Chronic illness
	Hospital quality
	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
	Confused people
	Vandalism
	Youth crimes
	Police response time
	Road safety
	Child abuse
	Feelings of insecurity
Residential environment	Satisfaction with dwelling
	Satisfaction with living environment
	Satisfaction with local shops and services
	Distance to daily services
	Migration
	Affordable housing
	Vacancy houses
	Affordable rental housing

ECOLOGICAL CAPITAL

Soil	Contaminated sites with health risks
	Contaminated sites with spreading risks
	Contaminated sites with ecological risks
	Soil sealing
	Nitrogen deposition
Water	Water quality: Fish population
	Water quality: Macro-fauna
	Water quality: Flora
	Physical-chemical water quality
	Water quality: other substances
	Water quality: Priority substances
	Nitrogen emissions to surface water
	Phosphorous emissions to surface water
Air	Emission of carbon-dioxide (CO_2)
	Emission of Nitrogen (NO_x)
	Emission of Particulate matter (PM2.5)
	Emission of volatile organic substances (NMVOS)
	Concentration nitrogen-dioxide (NO_2)
	Concentration of ozone (O_3)
	Concentration of particulate matter (PM2.5)

Annoyance and emergencies	Noise annoyance by neighbors
	Noise Annoyance by traffic
	Noise intensity
	Light intensity
	Risk contour
	Floods
	Flooding
	Earthquakes
	Urban heat islands
Nature and landscape	Natural landscapes
	Biodiversity
	Red list species
Energy	Wind energy
	Solar energy
	Natural gas use households
	Electricity use households
	Energy label houses
	Natural gas use companies
	Energy use companies
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
Labor	Employment function
	Human resources exploitation
	Unemployment
	Incapacity for work
	Ageing labor force
	Rejuvenation 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
	Accessibility of business parks
	Vacant office spaces
	Vacant retail spaces
Infrastructure and mobility	Access to train station
	Access to main roads and highways
	Share of electric personal vehicles
	Share of electric commercial vehicles
	Glass-fiber internet connectivity
	Congestion
	Recharging stations for electric vehicles
	Access to public busses

3.2   Municipal reorganizations

In 2018, there were 380 Dutch municipalities. Due to recent municipal reorganizations, the total number of Dutch municipalities has decreased to 355. In comparison to last year's 'Sustainably Responsible Investment Bond 2018' report, the following municipal reorganizations took place:

- The municipalities *'Bedum'*, *'Eemsmond'*, *'De Marne'* and parts of *'Winsum'* have been merged into the municipality *'Het Hogeland'*.
- The Municipalities *'Grootegast'*, *'Leek'*, *'Marum'*, *'Zuidhorn'* and parts of *'Winsum'* have been merged into the new municipality of *'Westerkwartier'*.
- The municipalities of *'Ten Boer'* and *'Haren'* were added to the municipality of *'Groningen'*
- The municipalities *'Dongeradeel'*, *'Kollumerland en Nieuwkruisland'* and *'Verwerderadiel'* have been merged into the new municipality of *'Noardeast-Fryslân'*.
- The municipalities *'Geldermalsen'*, *'Neerijnen'* and *'Lingewaal'* have been merged into the new municipality of *'West-Betuwe'*.
- The municipality of *'Haarlemmerliede en Spaarnwoude'* was added to the municipality of *'Haarlemmermeer'*.
- The municipalities *'Leerdam'*, *'Vianen'* and *'Zederik'* have been merged into the new municipality of *'Vijfheerenlanden'*.
- The municipalities *'Oud-Beijerland'*, *'Binnenmaas'*, *'Korendijk'*, *'Cromstrijen'* and *'Strijen'* have been merged into the new municipality of *'Hoeksche Waard'*.
- The municipality of *'Noordwijkerhout'* was added to the municipality of *'Noordwijk'*.
- The municipalities *'Giessenlanden'* and *'Molenwaard'* have been merged into the new municipality of *'Molenlanden'*.
- The municipalities *'Aalburg'*, *'Werkendam'* and *'Woudrichem'* have been merged into the new municipality of *'Altena'*.

- The municipalities *'Onderbanken', 'Nuth'* and *'Schinnen'* have been merged into the new municipality of *'Beekdaelen'.*

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 2018, the following indicators were added:

- *'Donor registrations'* was added to the social participation stock.
- '*The Gini-index (income inequality)'* was added to the economic participation stock.
- *'Mental health costs per inhabitant'* was added to the health stock
- *'Hospital quality'* was added to the health stock
- *'Response time of the police'* was added to the safety stock
- *'Affordable houses'* was added to the living environment stock
- *'Accessibility of business parks'* was added to the spatial conditions for businesses stock
- *'Rejuvenation of the labor force'* was added to the labor stock
- *'Glass-fiber internet connections'* were added in the infrastructure and mobility stock
- *'Congestion'* was added to the infrastructure and mobility stock.

The following indicators changed:

- *'Noise annoyance'* has been split up in *'noise annoyance by traffic',* and *'noise annoyance by neighbors'* (annoyance and emergencies stock).
- *'Distance to public green'*, *'Distance to recreational water bodies and forest'* have been combined to one indicator: *'natural landscapes'* (nature and landscape stock).
- *'Confused people'* moved from the health stock to the safety stock.
- *'Electric vehicles'* was split op into *'electric personal vehicles'* and *'electric commercial vehicles'* (infrastructure and mobility stock).

Compared to the 2018 edition, the following indicators had to be deleted:

- *'New developed houses'* was deleted due to new scientific insights (living environment).
- *'Odor and dust annoyances'* was deleted due to lack of data (annoyance and emergencies)
- *'Investments of non-financial companies'* was deleted due to scientific insights (competitiveness).
- *'Work-locations'* was deleted due to new scientific insights (spatial conditions for businesses).

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 2018 Framework for the bond.

Municipalities have quite different sustainability challenges. 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. 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 2018 and previous years, 14 types of municipalities are described. Three are based on city size: small, middle-sized and large municipalities, and 11 are based on qualitative characteristics: 'Agricultural', 'Center', 'Former industrial', 'Green', 'Growth', 'Historic', 'New Town', 'Residential', 'Shrink', 'Tourist' and 'Work' cities.

These 14 types of municipalities 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 2018 framework and specified in table 4.1. 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.

Table 4.1 Characteristics and definitions for the 2019 typologies

CHARACTERISTIC	TYPOLOGY	DEFINITION	COUNT
Size	Small municipalities	Municipalities with less than 50,000 inhabitants	270
	Medium size municipalities	Municipalities with between 50,000 and 100,000 inhabitants	54
	Large municipalities	Municipalities with over 100,000 inhabitants	31
Demographic development	Growth municipalities	Municipalities with a growth rate of inhabitants larger than 5% over the last 10 years	102
	Shrinking municipalities	Municipalities with a growth rate of inhabitants smaller than -2% over the last 10 years	40
Housing stock	New towns	>35% of the housing stock was built after 1990	38
	Historic municipalities	>8% of the housing stock was built before 1905, and the municipality has at least one protected historical area	40
Employment opportunities	Residential municipalities	Municipalities with an employment function <60	43
	Work municipalities	Municipalities with an employment function >100, and with more than 14,000 jobs	67
Soil use	Green municipalities	Over 30% of the municipal surface is forest or natural area	52
	Agricultural municipalities	Over 75% of the municipal surface is for agricultural purposes	101
Others	Centre municipalities	Municipality contains over 15% of the inhabitants of the Nuts3 area, and has an above average level of facilities and services	50
	Former industrial municipalities	In 1960, more than 55% of the inhabitants worked in the industrial sector	66
	Touristic municipalities	Over 10% of the companies based in the municipality is related to tourism, or over 14% of the jobs in the municipality is in the touristic sector	65
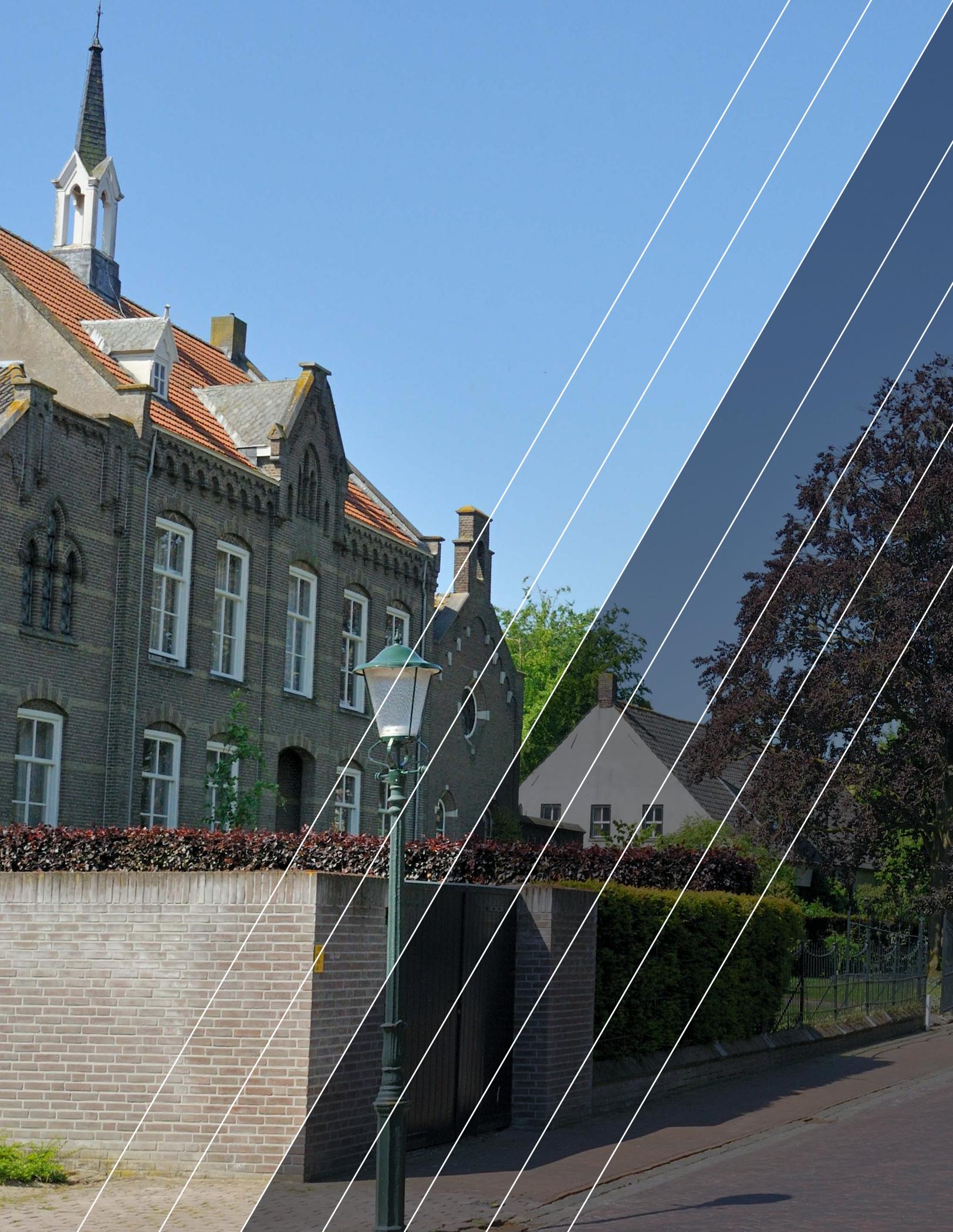
5 Eligible Municipalities

Based on the 14 types of municipalities mentioned in section 4, the best-ranking 15 municipalities in 2019 for each type of municipality 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 2019	SCORE
1	Wageningen	56.7
2	Noordenveld	55.9
3	Houten	55.9
4	Bloemendaal	55.6
5	Dalfsen	55.6
6	Ameland	55.5
7	Mook en Middelaar	55.5
8	Leusden	55.5
9	Schiermonnikoog	55.3
10	Tynaarlo	55.3
11	Rozendaal	55.2
12	Urk	55.1
13	Heumen	54.9
14	Midden-Delfland	54.8
15	Bunnik	54.7

	MID-SIZED MUNICIPALITIES 2019	SCORE
1	Deventer	54.2
2	Kampen	54.0
3	Hilversum	53.6
4	Woerden	53.2
5	Gooise Meren	52.7
6	Amstelveen	52.4
7	Heerenveen	52.1
8	Katwijk	51.9
9	Assen	51.7
10	Doetinchem	51.7
11	Krimpenerwaard	51.6
12	Westerkwartier	51.5
13	Barneveld	51.5
14	Gouda	51.5
15	Stichtse Vecht	51.5

	LARGE MUNICIPALITIES 2019	SCORE
1	Delft	54.5
2	Nijmegen	54.5
3	Zwolle	54.5
4	Groningen (gemeente)	54.1
5	Utrecht (gemeente)	53.9
6	Leiden	53.6
7	Amsterdam	53.3
8	Ede	52.7
9	Apeldoorn	52.5
10	Haarlem	52.4
11	Amersfoort	52.1
12	Arnhem	52.0
13	Almere	51.7
14	Eindhoven	51.1
15	's-Hertogenbosch	50.8

5.2 Qualitative types elected

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

AGRICULTURAL MUNICIPALITIES 2019		SCORE
1	Dalfsen	55.6
2	Tynaarlo	55.3
3	Midden-Delfland	54.8
4	Bunnik	54.7
5	Hof van Twente	54.7
6	Wijk bij Duurstede	54.5
7	Dinkelland	54.3
8	Kampen	54.0
9	Eemnes	53.9
10	Winterswijk	53.9
11	Voorst	53.8
12	Oost Gelre	53.8
13	Lochem	53.5
14	Raalte	53.5
15	Staphorst	53.4

CENTER MUNICIPALITIES 2019		SCORE
1	Delft	54.5
2	Nijmegen	54.5
3	Zwolle	54.5
4	Castricum	54.3
5	Deventer	54.2
6	Groningen (gemeente)	54.1
7	Utrecht (gemeente)	53.9
8	Hilversum	53.6
9	Leiden	53.6
10	Amsterdam	53.3
11	Ede	52.7
12	Gooise Meren	52.7
13	Apeldoorn	52.5
14	Haarlem	52.4
15	Huizen	52.3

	GREEN MUNICIPALITIES 2019	SCORE
1	Bloemendaal	55.6
2	Ameland	55.5
3	Mook en Middelaar	55.5
4	Leusden	55.5
5	Schiermonnikoog	55.3
6	Rozendaal	55.2
7	Heeze-Leende	54.7
8	Vlieland	54.6
9	Waalre	54.6
10	Nunspeet	54.2
11	Ermelo	54.2
12	Soest	54.0
13	Hellendoorn	53.7
14	Heerde	53.7
15	Hilversum	53.6

	GROWTH MUNICIPALITIES 2019	SCORE
1	Wageningen	56.7
2	Houten	55.9
3	Bloemendaal	55.6
4	Dalfsen	55.6
5	Ameland	55.5
6	Leusden	55.5
7	Rozendaal	55.2
8	Urk	55.1
9	Midden-Delfland	54.8
10	Bunnik	54.7
11	Heeze-Leende	54.7
12	Voorschoten	54.7
13	Delft	54.5
14	Nijmegen	54.5
15	Zwolle	54.5

HISTORIC MUNICIPALITIES 2019		SCORE
1	Ameland	55.5
2	Schiermonnikoog	55.3
3	Vlieland	54.6
4	Delft	54.5
5	Waterland	54.4
6	Kampen	54.0
7	Utrecht (gemeente)	53.9
8	Hilversum	53.6
9	Leiden	53.6
10	Staphorst	53.4
11	Amsterdam	53.3
12	Molenlanden	53.2
13	Rheden	53.1
14	Eijsden-Margraten	53.0
15	Bronckhorst	52.7

NEW TOWN MUNICIPALITIES 2019		SCORE
1	Houten	55.9
2	Urk	55.1
3	Heumen	54.9
4	Midden-Delfland	54.8
5	Eemnes	53.9
6	Culemborg	53.9
7	Tubbergen	53.1
8	Woudenberg	52.4
9	Overbetuwe	52.2
10	Amersfoort	52.1
11	Zeewolde	52.1
12	Nijkerk	52.1
13	IJsselstein	52.0
14	Harderwijk	52.0
15	Aalsmeer	51.7

	TOURIST MUNICIPALITIES 2019	SCORE
1	Ameland	55.5
2	Mook en Middelaar	55.5
3	Schiermonnikoog	55.3
4	Vlieland	54.6
5	Waterland	54.4
6	Bergeijk	54.1
7	Groningen (gemeente)	54.1
8	Steenwijkerland	53.6
9	Leiden	53.6
10	Amsterdam	53.3
11	Bergen (NH.)	53.1
12	Terschelling	53.1
13	Eijsden-Margraten	53.0
14	Westerveld	52.8
15	Hilvarenbeek	52.7

	WORK MUNICIPALITIES 2019	SCORE
1	Delft	54.5
2	Nijmegen	54.5
3	Zwolle	54.5
4	Oldenzaal	54.3
5	Nunspeet	54.2
6	Deventer	54.2
7	Groningen (gemeente)	54.1
8	Utrecht (gemeente)	53.9
9	Oost Gelre	53.8
10	Hilversum	53.6
11	Leiden	53.6
12	Rijssen-Holten	53.4
13	Amsterdam	53.3
14	Woerden	53.2
15	Ouder-Amstel	53.1

FORMER INDUSTRIAL MUNICIPALITIES 2019		SCORE
1	Waalre	54.6
2	Oldenzaal	54.3
3	Bergeijk	54.1
4	Culemborg	53.9
5	Hellendoorn	53.7
6	Putten	53.4
7	Rijssen-Holten	53.4
8	Losser	53.3
9	Haaksbergen	53.1
10	Hattem	52.8
11	Bladel	52.6
12	Borne	52.3
13	Oisterwijk	52.2
14	Wierden	52.1
15	Best	51.7

RESIDENTIAL MUNICIPALITIES 2019		SCORE
1	Bloemendaal	55.6
2	Mook en Middelaar	55.5
3	Rozendaal	55.2
4	Heumen	54.9
5	Voorschoten	54.7
6	Waalre	54.6
7	Wijk bij Duurstede	54.5
8	Waterland	54.4
9	Castricum	54.3
10	Eijsden-Margraten	53.0
11	Sint-Michielsgestel	52.5
12	Borne	52.3
13	Hendrik-Ido-Ambacht	51.7
14	Reusel-De Mierden	51.5
15	Landsmeer	51.5

	SHRINK MUNICIPALITIES 2019	SCORE
1	Mook en Middelaar	55.5
2	Bergen (NH.)	53.1
3	Berkelland	53.0
4	Bronckhorst	52.7
5	Valkenburg aan de Geul	52.2
6	Brummen	52.1
7	Meerssen	51.0
8	Stein (L.)	50.4
9	Voerendaal	50.3
10	Gulpen-Wittem	50.3
11	Leudal	49.7
12	Laren (NH.)	49.3
13	Beekdaelen	49.2
14	Westervoort	49.1
15	Roerdalen	49.0

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 3 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 classifies.

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 114 Elected Sustainable Municipalities results. This selection represents 32% of the total number of Dutch municipalities.

Table 6.1 List of 114 Elected Sustainable Municipalities for the 2019 BNG Sustainability Bond in alphabetical order (also see Annex A for a score-based ranking)

NO.	ELECTED BEST-IN-CLASS MUNICIPALITY	NUMBER OF SELECTIONS	TOTAL SUSTAINABILITY SCORE
1	Aalsmeer	1	51.7
2	Almere	1	51.7
3	Ameland	5	55.5
4	Amersfoort	2	52.1
5	Amstelveen	1	52.4
6	Amsterdam	5	53.3
7	Apeldoorn	2	52.5
8	Arnhem	1	52.0
9	Assen	1	51.7
10	Barneveld	1	51.5
11	Beekdaelen	1	49.2
12	Bergeijk	2	54.1
13	Bergen (NH.)	2	53.1
14	Berkelland	1	53.0
15	Best	1	51.7
16	Bladel	1	52.6
17	Bloemendaal	4	55.6
18	Borne	2	52.3
19	Bronckhorst	2	52.7
20	Brummen	1	52.1
21	Bunnik	3	54.7
22	Castricum	2	54.3
23	Culemborg	2	53.9
24	Dalfsen	3	55.6
25	Delft	5	54.5

NO.	ELECTED BEST-IN-CLASS MUNICIPALITY	NUMBER OF SELECTIONS	TOTAL SUSTAINABILITY SCORE
26	Deventer	3	54.2
27	Dinkelland	1	54.3
28	Doetinchem	1	51.7
29	Ede	2	52.7
30	Eemnes	2	53.9
31	Eijsden-Margraten	3	53.0
32	Eindhoven	1	51.1
33	Ermelo	1	54.2
34	Gooise Meren	2	52.7
35	Gouda	1	51.5
36	Groningen (gemeente)	4	54.1
37	Gulpen-Wittem	1	50.3
38	Haaksbergen	1	53.1
39	Haarlem	2	52.4
40	Harderwijk	1	52.0
41	Hattem	1	52.8
42	Heerde	1	53.7
43	Heerenveen	1	52.1
44	Heeze-Leende	2	54.7
45	Hellendoorn	2	53.7
46	Hendrik-Ido-Ambacht	1	51.7
47	Heumen	3	54.9
48	Hilvarenbeek	1	52.7
49	Hilversum	5	53.6
50	Hof van Twente	1	54.7
51	Houten	3	55.9
52	Huizen	1	52.3
53	IJsselstein	1	52.0
54	Kampen	3	54.0
55	Katwijk	1	51.9
56	Krimpenerwaard	1	51.6
57	Landsmeer	1	51.5
58	Laren (NH.)	1	49.3
59	Leiden	5	53.6
60	Leudal	1	49.7
61	Leusden	3	55.5
62	Lochem	1	53.5
63	Losser	1	53.3
64	Meerssen	1	51.0
65	Midden-Delfland	4	54.8
66	Molenlanden	1	53.2
67	Mook en Middelaar	5	55.5
68	Nijkerk	1	52.1

NO.	ELECTED BEST-IN-CLASS MUNICIPALITY	NUMBER OF SELECTIONS	TOTAL SUSTAINABILITY SCORE
69	Nijmegen	4	54.5
70	Noordenveld	1	55.9
71	Nunspeet	2	54.2
72	Oisterwijk	1	52.2
73	Oldenzaal	2	54.3
74	Oost Gelre	2	53.8
75	Ouder-Amstel	1	53.1
76	Overbetuwe	1	52.2
77	Putten	1	53.4
78	Raalte	1	53.5
79	Reusel-De Mierden	1	51.5
80	Rheden	1	53.1
81	Rijssen-Holten	2	53.4
82	Roerdalen	1	49.0
83	Rozendaal	4	55.2
84	Schiermonnikoog	4	55.3
85	's-Hertogenbosch	1	50.8
86	Sint-Michielsgestel	1	52.5
87	Soest	1	54.0
88	Staphorst	2	53.4
89	Steenwijkerland	1	53.6
90	Stein (L.)	1	50.4
91	Stichtse Vecht	1	51.5
92	Terschelling	1	53.1
93	Tubbergen	1	53.1
94	Tynaarlo	2	55.3
95	Urk	3	55.1
96	Utrecht (gemeente)	4	53.9
97	Valkenburg aan de Geul	1	52.2
98	Vlieland	3	54.6
99	Voerendaal	1	50.3
100	Voorschoten	2	54.7
101	Voorst	1	53.8
102	Waalre	3	54.6
103	Wageningen	2	56.7
104	Waterland	3	54.4
105	Westerkwartier	1	51.5
106	Westerveld	1	52.8
107	Westervoort	1	49.1
108	Wierden	1	52.1
109	Wijk bij Duurstede	2	54.5
110	Winterswijk	1	53.9
111	Woerden	2	53.2

NO.	ELECTED BEST-IN-CLASS MUNICIPALITY	NUMBER OF SELECTIONS	TOTAL SUSTAINABILITY SCORE
112	Woudenberg	1	52.4
113	Zeewolde	1	52.1
114	Zwolle	4	54.5

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 sub-targets, that have many overlaps and sometimes non-logical elements to measure them, from a scientific perspective. 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 for this Framework report, and the second part summarizes the outcome. A somewhat comparable approach Telos did develop with the UN Sustainable Solutions Network for EU cities, although this study had to deal with more constraints than present for the Dutch municipalities and made a different choice for aggregation rules (Lafortune et al., 2019).

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 132 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 defined. 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 three 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 S DGs are 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.

Table 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 every-where	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

GOAL	SHORT TITLE	DESCRIPTION	INDICATOR
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)
			Glass-fiber internet connections
			Share of knowledge workers
			Access to main roads and highways
			Recharging stations for electric vehicles
			High- and medium-tech employment

GOAL	SHORT TITLE	DESCRIPTION	INDICATOR
10	Reduced Inequalities	Reduce inequality within and among countries	Loneliness
			Political engagement
			Gini coefficient
			Financial assets households
			Migration
			Social welfare benefits
			Poor households
11	Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient and sustainable	National monuments
			Affordable housing
			Affordable rental housing
			Natural landscapes
			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
			Natural landscapes
			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

GOAL	SHORT TITLE	DESCRIPTION	INDICATOR
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, which would lead to imbalances in overall outcome.

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 municipalities in the years 2014-2019 from the point of view of the SDGs

Figure 7.1 shows the general outcome of the SDGs scores for the elected group of 114 municipalities compared to all 355 Dutch municipalities in reporting year 2019.
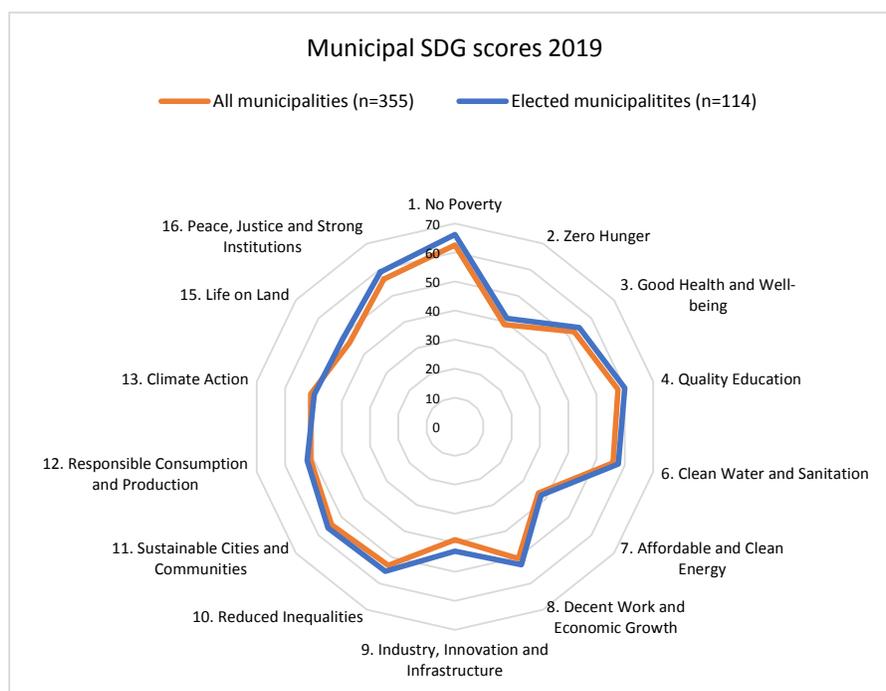

Figure 7.1 Average scores for the 14 SDGs in reporting year 2019

Figure 7.1 clearly indicates that the group of 114 elected municipalities performs better than average on the SDGs. Especially on goal 1 (no poverty) and goal 9 (Industry, Innovation and Infrastructure) the difference between the groups is big in favor of the elected municipalities. It is remarkable that the elected municipalities only score worse than average on goal 13, climate action. This might be due to the fact that big cities are overrepresented in the group of elected municipalities.

Table 7.2 Overview of the SDGs scores of Dutch municipalities over the period 2014-2019

SDG	ALL MUNICIPALITIES (N=355)			ELECTED MUNICIPALITIES (N=114)		
	2014	2019	DIFFERENCE 2014-2019	2014	2019	DIFFERENCE 2014-2019
1. No Poverty	62.4	62.6	0.2	65.9	66.2	0.3
2. Zero Hunger	34.6	39.0	4.5	36.8	41.3	4.5
3. Good Health and Well-being	52.2	52.6	0.4	54.1	54.8	0.7
4. Quality Education	45.4	57.6	12.1	47.3	60.0	12.7
5. Gender Equality						
6. Clean Water and Sanitation	55.0	55.8	0.9	58.2	57.7	-0.5
7. Affordable and Clean Energy	28.8	36.7	7.9	29.7	37.9	8.1
8. Decent Work and Economic Growth	40.8	50.4	9.6	42.8	52.8	10.0
9. Industry, Innovation and Infrastructure	30.4	39.0	8.6	32.9	42.9	10.0
10. Reduced Inequalities	51.2	53.0	1.8	53.3	55.3	2.0
11. Sustainable Cities and Communities	50.1	54.3	4.1	51.7	56.0	4.3
12. Responsible Consumption and Production	41.4	51.0	9.6	41.5	52.2	10.7
13. Climate Action	50.9	50.9	0.0	49.7	49.7	0.0
14. Life below Water						
15. Life on Land	45.6	46.4	0.8	48.7	49.2	0.5
16. Peace, Justice and Strong Institutions	46.8	56.4	9.6	49.6	59.1	9.6
17. Partnerships for the Goals						

It has not been chosen to aggregate the SDG scores listed in table 7.2 for each year. This would have the disadvantage of adding overlapping indicators in the SDGs. Table 7.2, however, demonstrates that all 14 Goals improved or were stable in score over the past 6 years, except for clean water and sanitation in the elected group. Compared the total group of municipalities, the score on goal 9 (Industry, Innovation and Infrastructure) improved greatly for the elected group of municipalities.

Highest improvements occurred for Goals 4 (Quality of education), 8 (Decent Work and Economic Growth), 12 (Responsible Consumption and Production) and 16 (Peace, Justice and Strong Institutions).

The absence of progress for Goal 13: Climate Action, is due to the type of indicators involved: Flooding, and Urban heat islands. Mitigation measures, which improved, are found under Goal 7: Affordable and Clean Energy, which improved substantially with over 8%points. The other low

improvement of 0.3%points was found for Goal 1 (No poverty), which is striking in view of the recent strong recovery of the economy.

7.2.2 Best scoring municipalities for 14 SDGs in 2019

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 2019, based on the indicator scores used in the triple P assessment as listed in table 7.1.

RANK	NAME	1. NO POVERTY
1	Rozendaal	94.1
2	Heeze-Leende	85.7
3	Schiermonnikoog	85.2
4	Ameland	84.9
5	Bloemendaal	84.0
6	Reusel-De Mierden	83.7
7	Renswoude	83.6
8	Haaren	83.1
9	Dalfsen	83.0
10	Blaricum	82.9

RANK	NAME	2. ZERO HUNGER
1	Kapelle	75.0
2	Cranendonck	67.5
3	Sint Anthonis	65.0
4	Heumen	65.0
5	Oegstgeest	65.0
6	Bunnik	62.5
7	Houten	62.5
8	Son en Breugel	62.5
9	Alphen-Chaam	60.0
10	Castricum	60.0
10	Horst aan de Maas	60.0
10	Heiloo	60.0
10	Beemster	60.0

RANK	NAME	3. GOOD HEALTH AND WELL-BEING
1	Urk	68.0
2	Rozendaal	66.5
3	Lansingerland	65.3
4	Wageningen	64.3
5	Bunschoten	63.1
6	Castricum	62.8
7	Albrandswaard	62.7
8	Oegstgeest	62.7
9	Houten	62.7
10	Midden-Delfland	62.5

RANK	NAME	4. QUALITY EDUCATION
1	Rozendaal	77.4
2	Gooise Meren	74.5
3	Mook en Middelaar	73.3
4	Weesp	69.1
5	Woerden	69.1
6	Midden-Delfland	68.6
7	Grave	68.5
8	Bloemendaal	68.2
9	Heiloo	67.8
10	Utrecht (gemeente)	67.7

RANK	NAME	6. CLEAN WATER AND SANITATION
1	Leiden	83.3
2	Voorschoten	83.3
3	Valkenburg aan de Geul	83.3
4	Heemstede	77.8
5	Weesp	75.0
6	Oegstgeest	75.0
7	Lisse	75.0
8	Hillegom	75.0
9	Leiderdorp	75.0
10	Zwijndrecht	75.0

RANK	NAME	7. AFFORDABLE AND CLEAN ENERGY
1	Nieuwegein	65.4
2	Almere	60.6
3	Duiven	59.7
4	Purmerend	59.0
5	Amsterdam	58.5
6	Capelle aan den IJssel	58.0
7	Zoetermeer	57.7
8	Utrecht (gemeente)	55.6
9	Culemborg	54.9
10	Zwolle	54.3

RANK	NAME	8. DECENT WORK AND ECONOMIC GROWTH
1	Ouder-Amstel	65.9
2	Amsterdam	65.6
3	Son en Breugel	65.1
4	Gooise Meren	62.0
5	Weesp	61.0
6	Utrecht (gemeente)	60.9
7	Best	60.6
8	Uithoorn	60.4
9	Eemnes	60.3
10	Bunnik	60.1

RANK	NAME	9. INDUSTRY, INNOVATION AND INFRASTRUCTURE
1	Oldenzaal	63.5
2	Teylingen	61.4
3	Veenendaal	60.3
4	Uithoorn	59.7
5	Bunnik	59.6
6	Almere	59.4
7	Soest	59.3
8	Oost Gelre	58.5
9	Best	58.5
10	Hendrik-Ido-Ambacht	58.3

RANK	NAME	10. REDUCED INEQUALITIES
1	Rozendaal	72.7
2	Woudenberg	71.2
3	Koggenland	70.4
4	Heerde	69.5
5	Scherpenzeel	69.2
6	Boekel	68.9
7	Kapelle	68.8
8	Dalfsen	68.7
9	Reusel-De Mieren	68.6
10	Bunschoten	68.3

RANK	NAME	11. SUSTAINABLE CITIES AND CUMMUNITIES
1	Deventer	70.8
2	Rheden	70.6
3	Landgraaf	67.4
4	Maastricht	67.3
5	Valkenburg aan de Geul	67.0
6	Vaals	67.0
7	Steenwijkerland	67.0
8	Kampen	67.0
9	Hattem	66.9
10	Zutphen	66.7

RANK	NAME	12. RESPONSIBLE CONSUMPTION AND PRODUCTION
1	Mill en Sint Hubert	87.8
2	Boxmeer	86.6
3	Cuijk	86.6
4	Grave	86.6
5	Sint Anthonis	86.6
6	Boekel	86.6
7	Druten	85.0
8	Oost Gelre	84.0
9	Dalfsen	83.7
10	Dinkelland	82.4

RANK	NAME	13. CLIMATE ACTION
1	Waterland	90.9
2	Beemster	90.2
3	Hollands Kroon	89.9
4	Texel	86.5
5	Koggenland	85.9
6	Opmeer	84.2
7	Terschelling	83.5
8	Bergen (L.)	83.4
9	Lopik	82.2
10	Westerwolde	81.1

RANK	NAME	15. LIFE ON LAND
1	Bloemendaal	83.0
2	Zandvoort	81.9
3	Vlieland	80.3
4	Schiermonnikoog	78.3
5	Wassenaar	77.6
6	Terschelling	77.1
7	Bergen (NH.)	74.6
8	Heemstede	73.2
9	Westvoorne	72.3
10	Velsen	70.3

RANK	NAME	16. PEACE, JUSTICE AND STRONG INSTITUTIONS
1	Dalfsen	78.4
2	Staphorst	77.7
3	Rozendaal	77.1
4	Tubbergen	77.1
5	Dinkelland	77.0
6	Mill en Sint Hubert	76.6
7	Sint Anthonis	75.1
8	Rijssen-Holten	74.7
9	Wierden	74.3
10	Zwartewaterland	74.2

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 in such top-10 lists. The result is presented in table 7.3.

Table 7.3 Overview of best scoring Dutch municipalities occurring moest frequently in top-10 lists of individual SDGs in 2019

NO.	NAME	NUMBER OF TOP-10 LIST OCCUR-RENCES	SDGS INVOLVED	RANKING NO BASED ON TOTAL SUSTAINABILITY SCORE OF SELECTED MUNICIPALITIES (ANNEX A)
1	Rozendaal	5	1. No Poverty, 3. Good Health and Well-being, 4. Quality Education, 10. Reduced Inequalities, 16. Peace, Justice and Strong Institutions	11
2	Dalfsen	4	1. No Poverty, 10. Reduced Inequalities, 12. Responsible Consumption and Production, 16. Peace, Justice and Strong Institutions	5
3	Sint Anthonis	3	2. Zero Hunger, 12. Responsible Consumption and Production, 16. Peace, Justice and Strong Institutions	Not in selection
4	Oegstgeest	3	2. Zero Hunger, 3. Good Health and Well-being, 6. Clean Water and Sanitation	Not in selection
5	Bunnik	3	2. Zero Hunger, 8. Decent Work and Economic Growth, 9. Industry, Innovation and Infrastructure	15
6	Bloemendaal	3	1. No Poverty, 4. Quality Education, 15. Life on Land	4
7	Weesp	3	4. Quality Education, 6. Clean Water and Sanitation, 8. Decent Work and Economic Growth	Not in selection
8	Utrecht (gemeente)	3	4. Quality Education, 7. Affordable and Clean Energy, 8. Decent Work and Economic Growth	36
9	Dinkelland	2	12. Responsible Consumption and Production, 16. Peace, Justice and Strong Institutions	26
10	Mill en Sint Hubert	2	12. Responsible Consumption and Production, 16. Peace, Justice and Strong Institutions	Not in selection
11	Kapelle	2	2. Zero Hunger, 10. Reduced Inequalities	Not in selection
12	Midden-Delfland	2	3. Good Health and Well-being, 4. Quality Education	14
13	Oost Gelre	2	9. Industry, Innovation and Infrastructure, 12. Responsible Consumption and Production	41
14	Boekel	2	10. Reduced Inequalities, 12. Responsible Consumption and Production	Not in selection
15	Schiermonnikoog	2	1. No Poverty, 15. Life on Land	9
16	Beemster	2	2. Zero Hunger, 13. Climate Action	Not in selection
17	Son en Breugel	2	2. Zero Hunger, 8. Decent Work and Economic Growth	Not in selection
18	Bunschoten	2	3. Good Health and Well-being, 10. Reduced Inequalities	Not in selection
19	Heiloo	2	2. Zero Hunger, 4. Quality Education	Not in selection
20	Koggenland	2	10. Reduced Inequalities, 13. Climate Action	Not in selection
21	Heemstede	2	6. Clean Water and Sanitation, 15. Life on Land	Not in selection
22	Castricum	2	2. Zero Hunger, 3. Good Health and Well-being	27
23	Reusel-De Mierden	2	1. No Poverty, 10. Reduced Inequalities	98

NO.	NAME	NUMBER OF TOP-10 LIST OCCUR-RENCES	SDGS INVOLVED	RANKING NO BASED ON TOTAL SUSTAINABILITY SCORE OF SELECTED MUNICIPALITES (ANNEX A)
24	Houten	2	2. Zero Hunger, 3. Good Health and Well-being	3
25	Uithoorn	2	8. Decent Work and Economic Growth, 9. Industry, Innovation and Infrastructure	Not in selection
26	Hendrik-Ido-Am-bacht	2	6. Clean Water and Sanitation, 9. Industry, Innovation and Infrastructure	92
27	Best	2	8. Decent Work and Economic Growth, 9. Industry, Innovation and Infrastructure	93
28	Valkenburg aan de Geul	2	6. Clean Water and Sanitation, 11. Sustainable Cities and Communities	78
29	Vaals	2	6. Clean Water and Sanitation, 11. Sustainable Cities and Communities	Not in selection
30	Terschelling	2	13. Climate Action, 15. Life on Land	60
31	Grave	2	4. Quality Education, 12. Responsible Consumption and Production	Not in selection
32	Gooise Meren	2	4. Quality Education, 8. Decent Work and Economic Growth	69
33	Almere	2	7. Affordable and Clean Energy, 9. Industry, Innovation and Infrastructure	93
34	Amsterdam	2	7. Affordable and Clean Energy, 8. Decent Work and Economic Growth	52

In total 8 municipalities are found which occur 3 times or more on top-10 lists for individual SDGs. Another 25 municipalities occur 2 times on such top-10 lists. In total 34 municipalities are belonging to the group occurring more than once on the SDG top-10 lists. Among these 34 municipalities occurring most frequently on top-10 lists, 19 do also belong to the best-in-class selection.

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 114 Elected Municipalities for the 2019 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 CO_2-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 economic, 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.

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Annexes

A Elected Sustainable Municipalities 2019 ranked by their sustainability score

NO.	ELECTED BEST-IN-CLASS MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2019
1	Wageningen	56.7
2	Noordenveld	55.9
3	Houten	55.9
4	Bloemendaal	55.6
5	Dalfsen	55.6
6	Ameland	55.5
7	Mook en Middelaar	55.5
8	Leusden	55.5
9	Schiermonnikoog	55.3
10	Tynaarlo	55.3
11	Rozendaal	55.2
12	Urk	55.1
13	Heumen	54.9
14	Midden-Delfland	54.8
15	Bunnik	54.7
16	Heeze-Leende	54.7
17	Hof van Twente	54.7
18	Voorschoten	54.7
19	Vlieland	54.6
20	Waalre	54.6
21	Delft	54.5
22	Nijmegen	54.5
23	Wijk bij Duurstede	54.5
24	Zwolle	54.5
25	Waterland	54.4
26	Dinkelland	54.3
27	Castricum	54.3
28	Oldenzaal	54.3
29	Nunspeet	54.2
30	Deventer	54.2
31	Ermelo	54.2
32	Bergeijk	54.1
33	Groningen (gemeente)	54.1

NO.	ELECTED BEST-IN-CLASS MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2019
34	Kampen	54.0
35	Soest	54.0
36	Utrecht (gemeente)	53.9
37	Eemnes	53.9
38	Winterswijk	53.9
39	Culemborg	53.9
40	Voorst	53.8
41	Oost Gelre	53.8
42	Hellendoorn	53.7
43	Heerde	53.7
44	Hilversum	53.6
45	Steenwijkerland	53.6
46	Leiden	53.6
47	Lochem	53.5
48	Raalte	53.5
49	Putten	53.4
50	Staphorst	53.4
51	Rijssen-Holten	53.4
52	Amsterdam	53.3
53	Losser	53.3
54	Molenlanden	53.2
55	Woerden	53.2
56	Bergen (NH.)	53.1
57	Rheden	53.1
58	Ouder-Amstel	53.1
59	Tubbergen	53.1
60	Terschelling	53.1
61	Haaksbergen	53.1
62	Eijsden-Margraten	53.0
63	Berkelland	53.0
64	Hattem	52.8
65	Westerveld	52.8
66	Hilvarenbeek	52.7
67	Ede	52.7
68	Bronckhorst	52.7
69	Gooise Meren	52.7
70	Bladel	52.6
71	Sint-Michielsgestel	52.5
72	Apeldoorn	52.5
73	Amstelveen	52.4
74	Woudenberg	52.4
75	Haarlem	52.4
76	Huizen	52.3

NO.	ELECTED BEST-IN-CLASS MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2019
77	Borne	52.3
78	Valkenburg aan de Geul	52.2
79	Overbetuwe	52.2
80	Oisterwijk	52.2
81	Brummen	52.1
82	Wierden	52.1
83	Amersfoort	52.1
84	Zeewolde	52.1
85	Nijkerk	52.1
86	Heerenveen	52.1
87	Arnhem	52.0
88	IJsselstein	52.0
89	Harderwijk	52.0
90	Katwijk	51.9
91	Aalsmeer	51.7
92	Hendrik-Ido-Ambacht	51.7
93	Almere	51.7
94	Best	51.7
95	Assen	51.7
96	Doetinchem	51.7
97	Krimpenerwaard	51.6
98	Reusel-De Mierden	51.5
99	Westerkwartier	51.5
100	Barneveld	51.5
101	Landsmeer	51.5
102	Gouda	51.5
103	Stichtse Vecht	51.5
104	Eindhoven	51.1
105	Meerssen	51.0
106	's-Hertogenbosch	50.8
107	Stein (L.)	50.4
108	Voerendaal	50.3
109	Gulpen-Wittem	50.3
110	Leudal	49.7
111	Laren (NH.)	49.3
112	Beekdaelen	49.2
113	Westervoort	49.1
114	Roerdalen	49.0