

BNG Bank Sustainability Bond for Dutch Best-in-Class Municipalities

Framework report 2020



telos brabant centre for sustainable development





Official Partner Tilburg University

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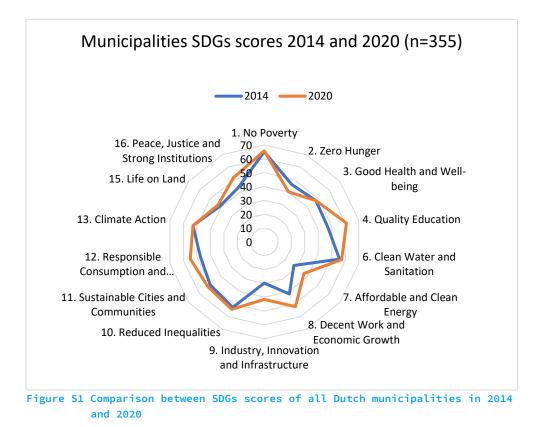
Executive summary

NV Bank Nederlandse Gemeenten (BNG Bank) asked Het PON & Telos (official partner 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 2020. 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).

Het PON & 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, Het PON & Telos has used in 2020 in principle the same methodology as the previous year. The Framework is based on a detailed comparison of all 355 Dutch municipalities using 140 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 differences in developmental challenges as a result of differences in e.g. size, historical background and geographical context. The Framework elects, out of the 355 Dutch municipalities, a list of 114 municipalities, which for the 14 types of municipalities involved are the top-15 best-in-class municipalities. These 114 municipalities are the Elected Municipalities for a BNG Bank Sustainability Bond 2020. This selection represents 32% of the total number of Dutch municipalities.

In this framework report, a method is presented to derive from the collected 3P-data scores on the SDG performance of Dutch municipalities. The method is based on the UN definition of the 17 core SDGs and the way these have been broken down into 169 sub-targets. By nature the SDGs are the result of a political process. That makes that the SDGs sometimes show overlap among each other and, from a scientific perspective, an illogical categorization. Such eventual inconsistences are not corrected, as the goals are designed by the UN as consciously as possible. However, these inconsistencies are causing difficulties (double counting) when aggregating the results per SDGs to one overall figure per year. But on the level of individual SDGs a comparison can be made as shown in figure S1.



For each of the relevant SDGs (14 of the 17 in total) a list of top-10 scoring municipalities is presented, as well as a list of 27 municipalities occurring more than once on such top-10 list. Figure S1 shows a steady improvement in SDGs performance for nearly all SDG's.

Finally, a structure for the yearly impact reports is presented.

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1 Scopes and objectives

This document describes the Framework for a 2020 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/ sustainabilitybond-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 Sustainability Bonds, is that there must be a clear definition of the relevant criteria. Het PON & Telos issues since 2014 annually a National monitor for sustainable municipalities, originally at the request of the Dutch Ministry of Infrastructure and Environment. This National monitor is based on a scientific framework for measuring sustainable development at municipal level.

The framework and the data used in the monitor to measure the performance of all Dutch municipalities provide together a sound base for the fulfillment of the requirements of BNG Bank in defining its criteria for the SB. The results of the national monitor are made publicly available on an annual basis at *http://www.sustainablecitiesbenchmark.eu/*. The National monitor covers all 355 Dutch municipalities and uses 140 indicators for measuring the economic, ecological and social-cultural aspects of sustainability. Furthermore, to make a fair comparison in performance, 14 types of municipalities are distinguished based on size (small, medium-sized and large) and more qualitative characteristics (agricultural, industrial, historical, tourist, etc.)

Telos (1999) and Het PON (1947) merged in January 2020 and go further as Het PON & Telos. Het PON & Telos is an independent research institute with a highly qualified academic staff, official partner of Tilburg University. It's specialized a.o. in operationalizing and monitoring sustainable development at local and regional level and takes an integrated and broad view on sustainability. This means that not only the environmental aspects of sustainability are monitored, but the economic and social aspects as well. Sustainability monitoring, as carried out by Het PON & Telos, can be seen as a form of 'public accounting'. The data used come from a great number (around 25) official and publicly available sources, such as Statistics Netherlands (CBS), the Netherlands

Environmental Assessment Agency (PBL), the National Institute for Public Health and the Environment (RIVM) and the Netherlands Institute for Social Research (SCP), and many others.

BNG Bank asked Het PON & Telos Spring 2020 to prepare a 2020 Framework for a 2020 sustainability bond. The basis for the framework should be the same as in 2019 (Zoeteman, Mulder & Dagevos, 2019), meaning that it also was requested to include an assessment of the performance of Dutch municipalities from the point of view of the UN Sustainable Development Goals (SDGs). The present framework provides in the first place an overview of elected municipalities based on their performance according to the triple P-sustainability method as used in earlier bonds of BNG Bank. In addition, the contribution of municipalities to the realization of the SDGs is also be shown. In 2018 on request of BNG Bank, Het PON & Telos has developed a special methodology to link and combine the standard 3P methodology with the SDG approach. This methodology will be used again for the 2020 framework. The result is that all municipalities obtain besides a 3P-score also a SDG score.

This report provides the Framework for BNG Bank's 2020 Sustainability Bond. Chapter 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. Chapter 3 presents the approach and methodology used to monitor sustainability at municipal level: the 3P approach. Chapter 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. Chapter 5 presents the results of the sustainability scores for each of the 14 types of municipalities. In chapter 6, the overall result is presented by means of a list of Elected Sustainable Municipalities. Chapter 7 present the methodology for measuring SDGs scores as well as the outcome. Subsequently, Chapter 8 discusses future performance reporting.

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, 2015. 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 defined and 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 from the 3P approach 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 Planning of the living environment (PBL). The Dutch government has given priority to sustainability and green growth (Regeerakkoord, 2017).

2.2.1 National perspective

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 Association of Dutch Municipalities (VNG), have agreed to implement the transition towards a CO2-neutral society by saving energy and introducing clean technologies and climate measures. Since 2017, the 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 in a joint effort of all stakeholders (Klimaatakkoord, 2018). These plans have been assessed summer 2018 by two national planning bureaus. 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

2.2.2 Municipal perspective

Tackling unemployment, improving the quality of social care, and working on municipal attractiveness were the priorities of municipal policy in 2014. In the municipal agreements formulated after the 2018 municipal elections, these three topics did not lose any significance for the municipal policy agenda, but two important topics have been added: more focus on residential housing and sustainability (climate policy). The concern for job security, has shifted towards a concern for suitable and affordable housing. Preferably in a healthy and sustainable living environment (Engbersen et al., 2018). Climate policy is not only a central theme for the current Rutte III government ("the greenest coalition agreement ever" stated by themselves), but also in the various present municipal agreements. Energy transition, natural gas-free neighborhoods, climate adaptation policy, the climate-neutral city, improvement of air quality, a fossil-free future are topics that can be read in almost any municipal agreement. Municipalities are striving for "a trend break" as e.g. Amsterdam is formulating it.

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. During its history 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, high density of economic activities (including intensive cattle raising) per km², 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 quite recently. Sub-aspects of sustainability monitoring, including climate and environmental issues, have been better developed. Separately, socio-economic developments have traditionally been measured and reported. However, an integrated environmental, economic and social monitoring was not systematically taking place (Zoeteman et al., 2015). Het PON & Telos was the first in the Netherlands to monitor sustainable development at regional and local level in an integrated way. Until 2010 only for individual regions and municipalities. With the improvement of data availability it became possible to develop a benchmark monitor including all Dutch municipalities. Since 2014 Het PON & Telos issues annually a National monitor for sustainable municipalities, describing and comparing the performance of all 355 Dutch municipalities. The 2020 7th version will be released end October 2020.

A longer pursued broad monitoring instrument at European urban level is the Urban Audit, carried out by EUROSTAT (2016) 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, 2018. The OECD (2015 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 Measuring sustainability at municipal level: the 3P approach

Using the present framework we annually can provide an overview of the (development of) municipal sustainability. A "photo" is made of the "state of sustainability" of all Dutch municipalities at a point in time (in this case 2020) and gives information whether municipalities are successful in achieving important long-term sustainability goals. By doing this over several years, insight is also gained into trends and whether there are differences in developments between (different types of) municipalities.

The road to achieving the long term sustainability goals is a different one for each municipality, often paved with many bumps. That is why the photo shows the results of all 355 Dutch municipalities. On the one hand to provide a clear picture of what individual municipalities could focus on, and on the other hand to learn from each other's developments and strengths / weaknesses.

In order to make sustainability measurable, a clear definition is required to begin with. Het PON & Telos defines sustainability broadly: "Sustainable development is a development that meets the needs of the current generation, without compromising the ability of future generations to meet their own needs". In our view, sustainability is much more than environmental issues or energy. It is about developing the three components (capitals) of sustainability in balance: ecological capital, socio-cultural capital and economic capital. In balance, because the three capitals are allowed to grow, preferably together, but in any case not at the expense of another capital. In our monitoring in general and so in this present framework, we draw up that balance.

We do this, in a scientifically responsible and transparent manner, across the full width of the three capitals. In total, divided over the three capitals, we review 22 overarching socalled stocks. Stocks such as nature and landscape, social participation and competitiveness. For each of these stocks long-term goals have been identified based on scientific theories, longtime experience and in consultation with various municipalities in the Netherlands. This year, based on new (societal) developments and (scientific) insights, the goals have been examined more closely and partly reformulated. With the aid of 140 indicators, which have been carefully selected using scientific criteria, the realization of the long-term goals linked to the stocks is mapped.

TELOS SUSTAINABILITY MONITOR METHOD

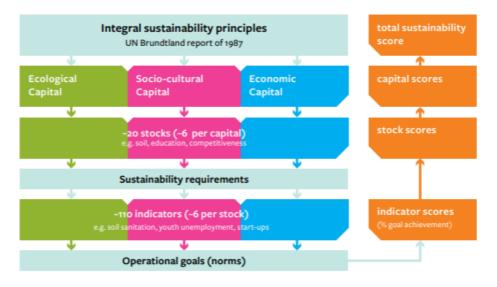


Figure 1. Overview of the Telos Sustainability Monitor Method

3.1 Sustainable development and the coronavirus

Sustainable development is not always in our hands. Sometimes there are autonomous developments or major system shocks over which we have little or no influence, but which do appeal to the resilience of and have an effect on the living environment of communities in society. The origin and development of the coronavirus is an example of such a system shock. A shock that has made even the most ingrained habits no longer self-evident. The world is (for a moment) turned upside down. From a sustainability perspective, it is important that we respond sensibly to developments and learn from our vulnerabilities and strengths. And that we do not lose sight of the long-term sustainability goals.

This Framework report of Sustainable Municipalities can be regarded as a zero or baseline measurement just before the corona crisis. How were municipalities performing at that time? And, looking forward to the first impact report in 2021, how resilient will the different capitals and stocks be? Where are the risks and vulnerabilities? Are the Netherlands in general and Dutch municipalities more specific able to deal with the impact of the Corona crisis? And where are the opportunities to achieve sustainability gains?

Every year we reflect upon the framework we use for mapping sustainable development to new (scientific) insights in the field of sustainability. This year, too, we looked into this mirror and made a number of necessary changes. In doing so, we immediately put our words from above into action: what can we learn from the Corona crisis about our society so far, and what does this mean for the way we look upon and measure sustainable development? Reflecting on these questions, we concluded that two major changes to our measurement system were necessary.

First, we divided the original "health" stock into two stocks: "health care" and "health and lifestyle". This crisis shows in a very confronting way that both these themes are important for sustainable development in their own distinctive way. The present crisis shows once and again how important but also how vulnerable the health care sector in the broad meaning of the word is. The health care sector was hit in the first half of 2020 in the Netherlands and is being hit again when writing this framework report. The demand for care increased exponentially, and the care system initially proved not or hardly not to be flexible enough to deal with this crisis. Care personnel was overcharged due to the overload of patients infected with the corona virus, and regular care was postponed due to an imminent shortage of beds and materials. Where the care system describes how we organize our demand for health care, healthy lifestyle rather describes the prevention side in the context of sustainable development. Worldwide, there is an increasing focus on preventive health (care) and the effects of lifestyle on good health. In addition, scientific studies regarding the impact of the corona virus show that people with an unhealthy lifestyle are more susceptible to the virus, and also experience a more problematic sickness.

A second change we made in our measurement system regards the original stock "housing and living environment". This stock has been split into two separate stocks, "housing" and "living environment". Recent literature underlines the importance of having a pleasant, healthy and affordable home as an important condition for people's well-being. Due to the corona virus, we're forced to stay more in and around our own house. The availability and accessibility of good housing is even more than in the past an increasingly important condition for being able to function as a citizen. The living environment has also come to be seen in a slightly different light due to the crisis. The living environment is about having the right facilities at hand but is also about an environment that is healthy and safe too. So having the right facilities for basic necessities of life in the neighborhood has gained in importance. But at the same time the first results of research on the relation between the corona crisis and the quality of the living environment indicate that people living in poorer living conditions (e.g. bad air quality) are more at risk.

All the other changes and a description of the methodology can be find in annex A.

4 Eligibility/Sustainability criteria

Triple P-sustainability criteria for selecting municipalities have been defined in this Framework in the same broad manner as in the Framework for the 2019 Bond.

Municipalities have quite different sustainability challenges. From the beginning, Het PON & Telos recognized disadvantages of ranking municipalities using a standard set of sustainability goals, without taking into account e.g. different historical and geographical backgrounds. Therefore Het PON & Telos designed an approach that compensates to a certain extent for the limitations of simply ranking municipalities using only their sustainability score and not considering the differences in background.

This 'compensation' approach is operationalized by using Municipal typologies. A city type embodies a set of typical characteristics or features of a group of cities. These characteristics have far-reaching consequences for the sustainability performance of these cities and therefore have impact on a number of sustainability indicators used in the measurement system. Some cities have to deal given their industrial history with a high environmental pollution level, others with a relative high proportion of the population working in low wage jobs, some have to deal with a shrinking population others with a housing stock that is relatively new. The level of education of the population plays a role, the diversity of economic sectors, and so on. Like in 2019 and previous years, 14 types of municipalities are distinguished. Three are based on city size: small, middle-sized and large municipalities, and 11 are based on more qualitative characteristics: 'Agricultural', 'Center', 'Former industrial', 'Green', 'Growth', 'Historic', 'New Town', 'Residential', 'Shrink', 'Tourist' and 'Work' cities.

CHARACTERISTIC	TYPOLOGY	DEFINITION	COUNT
Size	Small municipalities	Municipalities with less than 50,000 inhabitants	267
	Medium size municipalities	Municipalities with between 50,000 and 100,000 inhabitants	56
	Large municipalities	Municipalities with over 100,000 inhabitants	32
Demographic development	Growth municipalities	Municipalities with a growth rate of inhabitants larger than 5% over the last 10 years	111
	Shrinking municipalities	Municipalities with a growth rate of inhabitants smaller than -2% over the last 10 years	38
Housing stock	New towns	>35% of the housing stock was built after 1990	42
	Historic municipalities	>8% of the housing stock was built before 1905, and the municipality has at least one protected historical area	41
Employment opportunities	Residential municipalities	Municipalities with an employment function	35
	Work municipalities	Municipalities with an employment function >100, and with more than 14,000 jobs	77
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	64

Table 4.1 Characteristics and definitions for the 2020 typologies

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 2019 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 different criteria.

5 Eligible Municipalities

Based on the 14 types of municipalities mentioned in section 4, the best-ranking 15 municipalities in 2020 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 2020	SCORE
1	Bloemendaal	58.1
2	Wageningen	58.0
3	Leusden	56.7
4	Midden-Delfland	56.3
5	Hof van Twente	56.1
6	Putten	56.0
7	Noordenveld	55.9
8	Oegstgeest	55.9
9	Dinkelland	55.8
10	Mook en Middelaar	55.7
11	Tynaarlo	55.6
12	Castricum	55.6
13	Bunnik	55.5
14	Lisse	55.5
15	Heeze-Leende	55.4

	MID-SIZED MUNICIPALITIES 2020	SCORE
1	Houten	56.3
2	Woerden	54.1
3	Barneveld	53.9
4	Kampen	53.8
5	Hilversum	53.6
6	Pijnacker-Nootdorp	53.5
7	Krimpenerwaard	53.5
8	Gooise Meren	53.4
9	Amstelveen	53.0
10	Katwijk	52.9
11	Gouda	52.7
12	Westerkwartier	52.6
13	Heerenveen	52.4
14	Hengelo (O.)	52.4
15	Altena	52.3

	LARGE MUNICIPALITIES 2020	SCORE
1	Nijmegen	55.1
2	Delft	55.1
3	Deventer	54.7
4	Utrecht (gemeente)	54.4
5	Ede	54.4
6	Apeldoorn	54.2
7	Zwolle	54.1
8	Groningen (gemeente)	53.8
9	Arnhem	53.4
10	Amersfoort	52.8
11	Eindhoven	52.6
12	Leiden	52.4
13	Almere	52.3
14	Haarlem	52.1
15	Enschede	51.8

5.2 Qualitative types elected

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

	AGRICULTURAL MUNICIPALITIES 2020	SCORE
1	Midden-Delfland	56.3
2	Hof van Twente	56.1
3	Dinkelland	55.8
4	Tynaarlo	55.6
5	Bunnik	55.5
6	Dalfsen	55.2
7	Staphorst	54.8
8	Oost Gelre	54.8
9	Berkelland	54.6
10	Raalte	54.6
11	Wierden	54.5
12	Wijk bij Duurstede	54.4
13	Boxmeer	54.4
14	Zwartewaterland	54.4
15	Tubbergen	54.3

	CENTER MUNICIPA LITIES 2020	SCORE
1	Castricum	55.6
2	Nijmegen	55.1
3	Delft	55.1
4	Huizen	54.9
5	Deventer	54.7
6	Utrecht (gemeente)	54.4
7	Ede	54.4
8	Apeldoorn	54.2
9	Zwolle	54.1
10	Groningen (gemeente)	53.8
11	Hilversum	53.6
12	Gooise Meren	53.4
13	Arnhem	53.4
14	Katwijk	52.9
15	Gouda	52.7

	FORMER INDUSTRIAL MUNICIPALITIES 2020	SCORE
1	Putten	56.0
2	Bladel	54.9
3	Haaksbergen	54.9
4	Waalre	54.8
5	Rijssen-Holten	54.8
6	Oldenzaal	54.7
7	Bergeijk	54.6
8	Wierden	54.5
9	Hellendoorn	54.5
10	Losser	54.4
11	Culemborg	53.6
12	Valkenswaard	53.6
13	Best	53.5
14	Oisterwijk	53.3
15	Landsmeer	53.2

	GREEN MUNICIPA LITIES 2020	SCORE
1	Bloemendaal	58.1
2	Leusden	56.7
3	Putten	56.0
4	Mook en Middelaar	55.7
5	Heeze-Leende	55.4
6	Vlieland	55.4
7	Ommen	55.3
8	Hilvarenbeek	55.2
9	Elburg	55.1
10	Noordwijk	55.0
11	Nunspeet	55.0
12	Terschelling	55.0
13	Bladel	54.9
14	Waalre	54.8
15	Westerveld	54.8

	GROWTH MUNICIPA LITIES 2020	SCORE
1	Bloemendaal	58.1
2	Wageningen	58.0
3	Leusden	56.7
4	Houten	56.3
5	Midden-Delfland	56.3
6	Oegstgeest	55.9
7	Bunnik	55.5
8	Heeze-Leende	55.4
9	Woudenberg	55.3
10	Urk	55.2
11	Nijmegen	55.1
12	Blaricum	55.1
13	Delft	55.1
14	Noordwijk	55.0
15	Zeewolde	54.9

	HISTORIC MUNICIPA LITIES 2020	SCORE
1	Vlieland	55.4
2	Delft	55.1
3	Staphorst	54.8
4	Utrecht (gemeente)	54.4
5	Ameland	54.3
6	Bronckhorst	54.3
7	Schiermonnikoog	53.9
8	Rheden	53.9
9	Kampen	53.8
10	Hilversum	53.6
11	Molenlanden	53.5
12	Zutphen	53.5
13	Arnhem	53.4
14	Eijsden-Margraten	53.2
15	Leiden	52.4

	NEW TOWN MUNICIPALITIES 2020	SCORE
1	Houten	56.3
2	Midden-Delfland	56.3
3	Woudenberg	55.3
4	Urk	55.2
5	Heumen	55.0
6	Zeewolde	54.9
7	Tubbergen	54.3
8	Harderwijk	54.2
9	Zwolle	54.1
10	Barneveld	53.9
11	Culemborg	53.6
12	Best	53.5
13	Pijnacker-Nootdorp	53.5
14	Langedijk	53.4
15	Nijkerk	53.1

	RESIDENTIAL MUNICIPALITIES 2020	SCORE
1	Bloemendaal	58.1
2	Mook en Middelaar	55.7
3	Castricum	55.6
4	Waalre	54.8
5	Reusel-De Mierden	54.6
6	Wijk bij Duurstede	54.4
7	Voorschoten	54.0
8	Pijnacker-Nootdorp	53.5
9	Eijsden-Margraten	53.2
10	Meerssen	52.5
11	Borne	52.5
12	Hendrik-Ido-Ambacht	52.4
13	Heemskerk	52.2
14	Waterland	51.6
15	Voerendaal	51.5

	SHRINK MUNICIPALITIES 2020	SCORE
1	Mook en Middelaar	55.7
2	Berkelland	54.6
3	Bergen (NH.)	54.5
4	Bronckhorst	54.3
5	Meerssen	52.5
6	Leudal	51.5
7	Grave	51.3
8	Ooststellingwerf	50.9
9	Bergen (L.)	50.6
10	Valkenburg aan de Geul	50.6
11	Gulpen-Wittem	50.4
12	Echt-Susteren	50.2
13	Doesburg	49.9
14	Noardeast-Frysland	49.2
15	Roerdalen	49.0

	TOURIST MUNICIPALITIES 2020	SCORE
1	Bloemendaal	58.1
2	Mook en Middelaar	55.7
3	Vlieland	55.4
4	Hilvarenbeek	55.2
5	Noordwijk	55.0
6	Terschelling	55.0
7	Westerveld	54.8
8	Bergeijk	54.6
9	Bergen (NH.)	54.5
10	Utrecht (gemeente)	54.4
11	Ameland	54.3
12	Steenwijkerland	54.2
13	Schiermonnikoog	53.9
14	Groningen (gemeente)	53.8
15	Veere	53.4

	WORK MUNICIPALITIES 2020	SCORE
1	Wageningen	58.0
2	Nijmegen	55.1
3	Delft	55.1
4	Noordwijk	55.0
5	Nunspeet	55.0
6	Bladel	54.9
7	Rijssen-Holten	54.8
8	Oost Gelre	54.8
9	Oldenzaal	54.7
10	Deventer	54.7
11	Ermelo	54.6
12	Utrecht (gemeente)	54.4
13	Boxmeer	54.4
14	Ede	54.4
15	Apeldoorn	54.2

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 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.

NO.	ELECTED BEST-IN-CLASSNUMBER OFMUNICIPALITYELECTIONS		TOTAL SUSTAINABILITY SCORE	
1	Almere	1	52.3	
2	Altena	1	52.3	
3	Ameland	2	54.3	
4	Amersfoort	1	52.8	
5	Amstelveen	1	53.0	
6	Apeldoorn	3	54.2	
7	Arnhem	3	53.4	
8	Barneveld	2	53.9	
9	Bergeijk	2	54.6	
10	Bergen (L.)	1	50.6	
11	Bergen (NH.)	2	54.5	
12	Berkelland	2	54.6	
13	Best	2	53.5	
14	Bladel	3	54.9	
15	Blaricum	1	55.1	
16	Bloemendaal	5	58.1	
17	Borne	1	52.5	
18	Boxmeer	2	54.4	
19	Bronckhorst	2	54.3	
20	Bunnik	3	55.5	
21	Castricum	3	55.6	
22	Culemborg	2	53.6	
23	Dalfsen	1	55.2	
24	Delft	5	55.1	
25	Deventer	3	54.7	
26	Dinkelland	2	55.8	
27	Doesburg	1	49.9	

Table 6.1 List of 114 Elected Sustainable Municipalities for the 2020 BNG Bank Sustainability Bond in alphabetical order (also see Annex B for a score-based ranking)

28	Echt-Susteren	1	50.2
29	Ede	3	54.4
30	Eijsden-Margraten	2	53.2
31	Eindhoven	1	52.6
32	Elburg	1	55.1
33	Enschede	1	51.8
34	Ermelo	1	54.6
35	Gooise Meren	2	53.4
36	Gouda	2	52.7
37	Grave	1	51.3
38	Groningen (gemeente)	3	53.8
39	Gulpen-Wittem	1	50.4
40		1	54.9
40	Haaksbergen Haarlem		
41		1	52.1 54.2
	Harderwijk	1	
43	Heemskerk	1	52.2
44	Heerenveen	1	52.4
45	Heeze-Leende	3	55.4
46	Hellendoorn	1	54.5
47	Hendrik-Ido-Ambacht	1	52.4
48	Hengelo (O.)	1	52.4
49	Heumen	1	55.0
50	Hilvarenbeek	2	55.2
51	Hilversum	3	53.6
52	Hof van Twente	2	56.1
53	Houten	3	56.3
54	Huizen	1	54.9
55	Kampen	2	53.8
56	Katwijk	2	52.9
57	Krimpenerwaard	1	53.5
58	Landsmeer	1	53.2
59	Langedijk	1	53.4
60	Leiden	2	52.4
61	Leudal	1	51.5
62	Leusden	3	56.7
63	Lisse	1	55.5
64	Losser	1	54.4
65	Meerssen	2	52.5
66	Midden-Delfland	4	56.3
67	Molenlanden	1	53.5
68	Mook en Middelaar	5	55.7
69	Nijkerk	1	53.1
70	Nijmegen	4	55.1
71	Noardeast-Frysl	1	49.2
72	Noordenveld	1	55.9

73	Noordwijk	4	55.0
74	Nunspeet	2	55.0
75	Oegstgeest	2	55.9
76	Oisterwijk	1	53.3
77	Oldenzaal	2	54.7
78	Ommen	1	55.3
79	Oost Gelre	2	54.8
80	Ooststellingwerf	1	50.9
81	Pijnacker-Nootdorp	3	53.5
82	Putten	3	56.0
83	Raalte	1	54.6
84	Reusel-De Mierden	1	54.6
85	Rheden	1	53.9
86	Rijssen-Holten	2	54.8
87	Roerdalen	1	49.0
88	Schiermonnikoog	2	53.9
89	Staphorst	2	54.8
90	Steenwijkerland	1	54.2
91	Terschelling	2	55.0
92	Tubbergen	2	54.3
93	Tynaarlo	2	55.6
94	Urk	2	55.2
95	Utrecht (gemeente)	5	54.4
96	Valkenburg aan de Geul	1	50.6
97	Valkenswaard	1	53.6
98	Veere	1	53.4
99	Vlieland	3	55.4
100	Voerendaal	1	51.5
101	Voorschoten	1	54.0
102	Waalre	3	54.8
103	Wageningen	3	58.0
104	Waterland	1	51.6
105	Westerkwartier	1	52.6
106	Westerveld	2	54.8
107	Wierden	2	54.5
108	Wijk bij Duurstede	2	54.4
109	Woerden	1	54.1
110	Woudenberg	2	55.3
111	Zeewolde	2	54.9
112	Zutphen	1	53.5
113	Zwartewaterland	1	54.4
114	Zwolle	3	54.1

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 Het PON & Telos developed for this Framework report, and the second part summarizes the outcome. A somewhat comparable approach Het PON & 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 140 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 Annex C. 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 SDGs are meant to inspire national governments and are not primarily designed to monitor actions of e.g. municipalities.

Yet, Het PON & 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.

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

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 2020.

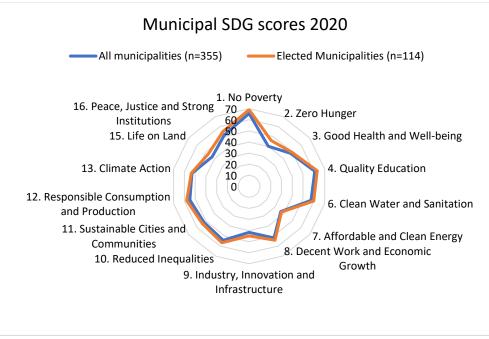


Figure 7.1 Average scores for the 14 SDGs in reporting year 2020

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), goal 2 (zero hunger), goal 15 (life on land), goal 10 (reduced inequalities) and goal 9 (Industry, Innovation and Infrastructure) the difference between the groups is in favor of the elected municipalities.

In Annex C, the 10 best scoring municipalities for each of the relevant SDGs are given. The scores present the calculated score for the specific SDG in 2020, based on the indicator scores used in the triple P assessment as listed in Annex C.

As mentioned earlier, the SDG scores per goal have not been aggregated to one ultimate total SDG score as to avoid double counting. Table 7.2, demonstrates that all 14 Goals have improved or were stable in score over the past 6 years, except for zero hunger.

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ALL MUNICIPALITIES (N=355) ELECTED MUNICIPALITIES					LITIES	
				(N=114)		
SDG	2014	2020	Difference 2014-2020	2014	2020	Difference 2014-2020
1. No Poverty	65.1	65.8	0.7	68.2	69.3	1.1
2. Zero Hunger	45.9	40.1	-5.8	50.6	45.9	-4.6
3. Good Health and Well- being	47.7	47.9	0.2	49.4	49.3	-0.1
4. Quality Education	47.2	60.9	13.7	50.3	63.1	12.9
5. Gender Equality						
6. Clean Water and Sanitation	55.8	57.3	1.6	58.9	59.9	1.0
7. Affordable and Clean Energy	27.4	36.7	9.3	28.0	37.4	9.4
8. Decent Work and Economic Growth	41.9	51.9	10.1	43.9	54.1	10.2
9. Industry, Innovation and Infrastructure	29.8	41.6	11.9	31.8	44.9	13.1
10. Reduced Inequalities	52.6	54.1	1.5	54.8	56.6	1.8
11. Sustainable Cities and Communities	49.9	52.1	2.2	51.1	54.0	2.9
12. Responsible Consumption and Production	47.4	54.9	7.6	48.7	57.9	9.2
13. Climate Action	52.9	52.9	0.0	53.5	53.5	0.0
14. Life below Water						
15. Life on Land	41.2	42.8	1.6	45.6	47.1	1.4
16. Peace, Justice and Strong Institutions	43.5	51.5	8.0	46.1	54.8	8.7
17. Partnerships for the Goals						

Table 7.2 Overview of the SDGs scores of Dutch municipalities over the period 2014-2020

Highest improvements occurred for Goals 4 (Quality of education), 8 (Decent Work and Economic Growth), 7 (Affordable and Clean Energy), 12 (Responsible Consumption and Production) and 9 (Industry, Innovation and Infrastructure).

The absence of progress for Goal 13: Climate Action, is due to the type of indicators used: Flooding, and Urban heat islands. The other low improvement of 0.2%points and even a decrease of 0.1 for the elected group was found for Goal 3 (good health and wellbeing), which is mostly due to an unhealthier lifestyle.

7.2.1 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.

In total 11 municipalities occur 3 times or more on top-10 lists for individual SDGs and16 municipalities occur 2 times on such top-10 lists. In total 27 municipalities are belonging to the group occurring more than once on the SDG top-10 lists. Among these 27 municipalities occurring most frequently on top-10 lists, 21 do also belong to the best-in-class selection for the sustainability bond.

Table 7.3 Overview of best scoring Dutch municipalities occurring most frequently in top-10 lists of individual SDGs in 2020

NO.	NAME	NUMBER OF TOP- 10 LIST OCCURE NCES	SDGS INVOLVED	RANKING NO BASED ON TOTAL SUSTAINABILITY SCORE OF SELECTED MUNICIPALITIES
				(ANNEX A)
1	Bloemendaal	5	2. Zero Hunger 4. Quality Education, 6. Clean water and Sanitation, 10. Reduced Inequalities, 15. Life on Land	1
2	Rozendaal	5	1. No Poverty, 2. Zero Hunger, 3. Good Health and Well-being, 10. Reduced Inequalities, 16. Peace, Justice and Strong Institutions	Not in selection
3	Gooise Meren	4	2. Zero Hunger, ,4. Quality Education, 6. Clean water and Sanitation, 8. Decent Work and Economic Growth	78
4	Heemstede	4	2. Zero Hunger, 4. Quality Education, 6. Clean water and Sanitation, 15. Life on Land	Not in selection
5	Renswoude	4	1. No Poverty, 3. Good Health and Well-being, 10. Reduced Inequalities, 16. Peace, Justice and Strong Institutions	Not in selection
6	Ameland	3	1. No Poverty 13. Climate Action, 15. Life on Land	57
7	Bunnik	3	8. Decent Work and Economic Growth, 9. Industry, Innovation and Infrastructure, 10. Reduced Inequalities	14
8	Oegstgeest	3	2. Zero Hunger, 4. Quality Education, 6. Clean Water and Sanitation	9
9	Schiermonnikoog	3	1. No Poverty, 13. Climate Action, 15. Life on Land	65
10	Terschelling	3	1. No Poverty, 13. Climate Action, 15. Life on Land	30
11	Vlieland	3	1. No Poverty, 13. Climate Action, 15. Life on Land	17
12	Almere	2	7. Affordable and Clean Energy, 9. Industry, Innovation and Infrastructure	98
13	Amersfoort	2	8. Decent Work and Economic Growth, 9. Industry, Innovation and Infrastructure	88
14	Amsterdam	2	7. Affordable and Clean Energy, 8. Decent Work and Economic Growth	Not in selection
15	Beemster	2	10. Reduced Inequalities, 13. Climate Action,	Not in selection
16	Bergen (NH.)	2	2. Zero Hunger, 15. Life on Land	48
17	Best	2	8. Decent Work and Economic Growth, 9. Industry, Innovation and Infrastructure	74
18	Blaricum	2	1. No Poverty, 2. Zero Hunger	25
19	Deventer	2	9. Industry, Innovation and Infrastructure, 11. Sustainable Cities and Communities	41
20	Houten	2	3. Good Health and Well-being, 8. Decent Work and Economic Growth	4
21	Laren (NH.)	2	2. Zero Hunger, 4. Quality Education	Not in selection
22	Midden-Delfland	2	3. Good Health and Well-being, 10. Reduced Inequalities	5
23	Oldenzaal	2	4. Quality Education, 9. Industry, Innovation and Infrastructure	40
24	Reusel-De Mierden	2	1. No Poverty, 12. Responsible Consumption and Production	45
25	Staphorst	2	12. Responsible Consumption and Production, 16. Peace, Justice and Strong Institutions	35
26	Tubbergen	2	1. No Poverty, 16. Peace, Justice and Strong Institutions.	56
27	Veere	2	1. No Poverty, 3. Good Health and Well-being	80

8 Performance reporting

Het PON & Telos will prepare for BNG Bank annually a performance or impact report to investors. This report will give an update on the sustainable development of the 114 elected municipalities for the 2020 BNG Bank sustainability bond, showing:

- The sustainanility performance of the group of Elected Municipalities compared to the previous year(s);
- a list of Elected Municipalities with the largest improvement or reduction in overall score and an indication of the main causes for these developments;
- the 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 on issues of special interest as CO2-emissions.

In order to improve the sustainability score, municipalities can use the framework developed for the Sustainability Bond to monitor their sustainability performance, and to see where their score can be improved. The underlying data of the sustainability framework gives insights into all underlying themes and stocks described in this report.

Het PON & Telos publishes the sustainable development of individual municipalities yearly in the National Monitor Sustainable Municipalities report (Nationale Monitor Duurzame Gemeenten). The latest version of this report can be consulted at www.telos.nl, or at www.duurzamesteden.nl.

These reports and tools can also be used for learning purposes, by benchmarking own performance with performance of municipalities with a similar typology, by applying proven sustainability practices.

9 References

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Annex A. The Telos Method of measuring sustainability

The methodology developed by Het PON & 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.

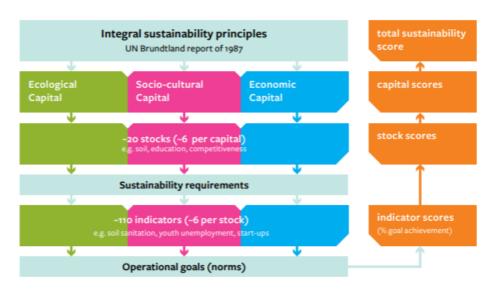
The three P's are conceptualized as the socio-cultural capital (people), the ecological capital (planet) and the economic capital (profit). The different aspects of which a capital is composed, are described by stocks (themes). For example, the socio-cultural capital is composed of stocks such as 'Social and Economic Participation', 'Arts and Culture' and 'Healthcare'. 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 22 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 140 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.



Overview of the Telos Sustainability Monitor Method TELOS SUSTAINABILITY MONITOR METHOD

Quantitative data for the 140 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.**

The three capitals, the 22 themes and the 140 indicators used for quantitative sustainability monitoring of Dutch municipalities

SOCIO-CULTU	JRAL CAPITAL
Social participation	Social cohesion
	Social contacts
	Loneliness
	General trust
	Volunteers
	Informal care giving
	Being active in society
Delitical participation	Political engagement
Political participation	Turnout local elections
	Turnout national elections
	Turnout European elections
	Turnout provincial elections
	Political trust
Economic participation	Long-term unemployment
	Poor households
	Social welfare benefits
	Financial assets households
Arts and culture	Distance Arts & Cinema's
	Distance to Museum
	National monuments Municipal monuments
	Protected sights
	Cultural employment
	Cultural landscape
	Festivals
Healthcare	Mental health costs
	Regular health costs
	Life expectancy
	Assessment of own health
	Chronic illness
	Hospital quality
	Distance to general practitioner Distance to public hospital
	Medicine use
Lifestyle and health	Alcohol abuse
	Drugs use
	Smoking
	Obesity
	Insufficient movement
	Movement friendly environment
Education	Distance to primary school
	Distance to secondary school
	Real-time to diploma
	School dropouts
	Education level population
Safety	Violent crimes
	Property crimes Confused people
	Vandalism
	Youth crimes
	Police response time
	Road safety
	Child abuse
Residential environment	Feelings of insecurity Satisfaction with living environment
	Sausiaction with living environment

	Satisfaction with local shops and services
	Distance to daily services tendency to move
	,
	Noise annoyance by neighbors Noise Annoyance by traffic
Housing	Migration
	Satisfaction with dwelling
	Affordable housing
	Affordable rental housing
	Vacancy houses
	Transaction speed
ECOLOGIC	AL 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 external safety	Noise intensity
Annoyance and external safety	Light intensity
	Risk contour
	Floods
	Flooding
	Earthquakes Urban heat islands
Nature and landsons	
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
	renewable energy
Resources and waste	Total household waste
	Household general micro waste
	Household general macro waste
	Separation general macro waste
	Separation general micro waste
ECONOI	MIC CAPITAL
Competitiveness	Gross regional product per capita
	Share of startups

Share of bankruptcies Share of fast-growing enterprisesLaborEmployment function Human resources exploitation Unemployment Incapacity for work Rejuvenation labor force Youth employment Demographic pressureKnowledgeShare of highly educated people Share of knowledge workers Capacity (applied) scientific education
Labor Employment function Human resources exploitation Unemployment Incapacity for work Rejuvenation labor force Youth employment Demographic pressure Knowledge Share of highly educated people Share of knowledge workers Capacity (applied) scientific education
Human resources exploitation Unemployment Incapacity for work Rejuvenation labor force Youth employment Demographic pressure Knowledge Share of highly educated people Share of knowledge workers Capacity (applied) scientific education
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Rejuvenation labor force Youth employment Demographic pressure Knowledge Share of highly educated people Share of knowledge workers Capacity (applied) scientific education
Youth employment Demographic pressure Knowledge Share of highly educated people Share of knowledge workers Capacity (applied) scientific education
Demographic pressure Knowledge Share of highly educated people Share of knowledge workers Share of knowledge workers Capacity (applied) scientific education
Knowledge Share of highly educated people Share of knowledge workers Capacity (applied) scientific education
Share of knowledge workers Capacity (applied) scientific education
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
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
Access to business parks
Cycling climate

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 Het PON & Telos keeps the instrument as up-to-date as possible. This year the set of stocks is also evaluated.

Compared to 2019, the following stocks were changed:

- The stock residential environment has been divided into two stocks residential environment and housing.
- The stock health has been divided into two stocks. Health care and Lifestyle and health.
- The stock annoyance and calamities is changed into the stock annoyance and external safety

Compared to 2019, the following indicators were changed, added or removed:

- 'Donor registrations' was removed from the social participation stock.
- 'The Gini-index (income inequality)' was removed from the economic participation stock.
- 'Turnout European elections' was added to the political participation stock.
- 'Turnout provincial elections' was added to the political participation stock.
- 'Number of festivals' was added to the arts and culture stock
- 'Cultural landscape' was added to the arts and culture stock

• 'Regular health costs per inhabitant' was added to the health stock

• 'Movement friendly environment' was added to the lifestyle and health stock

- The indicator risky behavior was divided into four indicators. 'alcohol abuse', 'smoking'
- 'drugs use' and 'obesity'. These indicators were added to the lifestyle and health stock.
- 'youth unemployment' was moved from the education stock to the labor stock.
- 'Accessibility of business parks' was moved from the spatial conditions for businesses stock and to the infrastructure and mobility stock
- 'Noise annoyance by neighbors' was moved from the stock annoyance and external safety to the stock residential environment.

• 'Noise annoyance by traffic' was moved from the stock annoyance and external safety to the stock residential environment.

- 'transaction speed' was added to the housing stock.
- 'Household general micro waste' was added to the stock resources and waste.
- 'Household general macro waste' was added to the stock resources and waste.
- 'Separation general macro waste' was added to the stock resources and waste.
- 'Separation general micro waste' was added to the stock resources and waste.
- 'Household general waste' was removed from the stock resources and waste.
- 'Organic waste' was removed from the stock resources and waste.
- 'Paper and cardboard waste' was removed from the stock resources and waste.
- 'Packaging glass' was removed from the stock resources and waste.
- 'Plastics' was removed from the stock resources and waste.
- 'Final examination mark' was removed from the stock education.
- 'Renewable energy' was added to the stock energy.
- 'Share of employment in economic top sectors was removed from the stock
- competitiveness
- 'Ageing labor force' was removed from the stock labor
- 'Demographic pressure' was added to the stock labor
- 'Cycling climate' was added to the stock infrastructure and mobility

Annex B. Elected Sustainable score Municipalities 2020 ranked by their sustainability score

NO.	ELECTED BEST-IN-CLASS MUNICIPALITY	NUMBER OF ELECTIONS	Socio- cultural capital score	Ecological capital score	Economic capital score	TOTAL SUSTAINABILITY SCORE
1	Bloemendaal	5	58.2	64.4	51.6	58.1
2	Wageningen	3	53.9	56.0	64.2	58.0
3	Leusden	3	55.2	57.5	57.4	56.7
4	Houten	3	57.8	53.6	57.6	56.3
5	Midden-Delfland	4	61.4	49.9	57.7	56.3
6	Hof van Twente	2	56.1	56.8	55.4	56.1
7	Putten	3	53.8	58.7	55.4	56.0
8	Noordenveld	1	55.3	58.3	54.2	55.9
9	Oegstgeest	2	55.8	54.5	57.3	55.9
10	Dinkelland	2	57.2	56.8	53.3	55.7
11	Mook en Middelaar	5	54.1	61.9	51.2	55.7
12	Tynaarlo	2	55.9	57.5	53.5	55.6
13	Castricum	3	55.7	57.9	53.3	55.6
14	Bunnik	3	59.2	46.7	60.7	55.5
15	Lisse	1	53.9	57.3	55.2	55.5
16	Heeze-Leende	3	54.8	56.6	54.9	55.4
17	Vlieland	3	55.5	59.0	51.7	55.4
18	Woudenberg	2	56.0	54.2	55.7	55.3
19	Ommen	1	56.3	58.3	51.1	55.3
20	Hilvarenbeek	2	57.2	55.4	53.1	55.2
21	Urk	2	57.5	53.6	54.5	55.2
22	Dalfsen	1	54.2	57.2	54.1	55.2
23	Elburg	1	54.1	56.6	54.7	55.1
24	Nijmegen	4	47.5	55.2	62.5	55.1
25	Blaricum	1	53.6	58.6	52.9	55.1
26	Delft	5	49.6	51.7	63.8	55.1
27	Noordwijk	4	50.6	57.4	57.1	55.0
28	Nunspeet	2	55.0	57.9	52.1	55.0
29	Heumen	1	54.1	58.2	52.7	55.0
30	Terschelling	2	53.4	61.4	50.1	55.0
31	Huizen	1	50.5	59.6	54.7	54.9
32	Zeewolde	2	52.5	55.9	56.4	54.9

33	Bladel	3	54.1	53.5	57.1	54.9
34	Haaksbergen	1	53.0	54.4	57.1	54.8
35	Staphorst	2	55.3	55.4	53.8	54.8
36	Waalre	3	56.1	57.4	50.9	54.8
37	Rijssen-Holten	2	58.3	50.5	55.6	54.8
38	Westerveld	2	51.4	61.5	51.5	54.8
39	Oost Gelre	2	55.7	52.1	56.5	54.8
40	Oldenzaal	2	53.0	53.8	57.3	54.7
41	Deventer	3	49.7	54.7	59.5	54.7
42	Berkelland	2	57.3	52.5	54.1	54.6
43	Ermelo	1	54.3	58.3	51.4	54.6
44	Raalte	1	54.3	55.3	54.3	54.6
45	Reusel-De Mierden	1	55.1	59.0	49.8	54.6
46	Bergeijk	2	53.8	60.3	49.6	54.6
47	Wierden	2	56.2	51.5	55.9	54.5
48	Bergen (NH.)	2	52.5	62.5	48.6	54.5
49	Hellendoorn	1	55.8	52.8	54.8	54.5
50	Wijk bij Duurstede	2	56.1	53.5	53.7	54.4
51	Losser	1	52.4	59.8	51.1	54.4
52	Utrecht (gemeente)	5	49.8	48.9	64.5	54.4
53	Boxmeer	2	54.3	50.9	58.0	54.4
54	Zwartewaterland	1	54.0	55.6	53.6	54.4
55	Ede	3	51.2	54.4	57.6	54.4
56	Tubbergen	2	55.8	53.9	53.3	54.3
57	Ameland	2	56.1	58.9	47.8	54.3
58	Bronckhorst	2	55.1	56.8	50.9	54.3
59	Apeldoorn	3	48.2	57.6	56.9	54.2
60	Steenwijkerland	1	48.1	64.6	49.8	54.2
61	Harderwijk	1	52.2	50.5	59.8	54.2
62	Woerden	1	56.6	49.9	55.9	54.1
63	Zwolle	3	48.0	54.6	59.6	54.1
64	Voorschoten	1	54.9	53.5	53.7	54.0
65	Schiermonnikoog	2	53.0	59.7	49.0	53.9
66	Barneveld	2	53.9	51.5	56.3	53.9
67	Rheden	1	48.8	57.3	55.5	53.9
68	Groningen (gemeente)	3	47.7	50.2	63.6	53.8
69	Kampen	2	55.3	53.5	52.5	53.8
70	Culemborg	2	52.3	54.0	54.6	53.6
71	Valkenswaard	1	51.2	57.2	52.4	53.6

72						
	Hilversum	3	49.3	57.2	54.2	53.6
73	Molenlanden	1	54.5	52.0	54.1	53.5
74	Best	2	54.6	48.7	57.1	53.5
75	Pijnacker-Nootdorp	3	56.1	50.7	53.7	53.5
76	Krimpenerwaard	1	53.6	57.1	49.6	53.5
77	Zutphen	1	50.3	56.9	53.1	53.4
78	Gooise Meren	2	54.9	57.3	48.2	53.4
79	Langedijk	1	57.7	49.0	53.5	53.4
80	Veere	1	55.9	55.5	48.8	53.4
81	Arnhem	3	47.2	52.1	60.8	53.4
82	Oisterwijk	1	52.3	51.7	55.8	53.2
83	Eijsden-Margraten	2	48.9	55.7	55.1	53.2
84	Landsmeer	1	49.1	58.6	51.8	53.2
85	Nijkerk	1	55.6	51.6	52.1	53.1
86	Amstelveen	1	49.0	49.8	60.1	53.0
87	Katwijk	2	53.7	52.6	52.4	52.9
88	Amersfoort	1	50.7	46.6	61.1	52.8
89	Gouda	2	50.3	52.4	55.3	52.7
90	Eindhoven	1	45.8	50.4	61.7	52.6
91	Westerkwartier	1	50.5	53.8	53.5	52.6
92	Meerssen	2	47.5	59.0	51.0	52.5
93	Borne	1	55.8	47.5	54.2	52.5
94	Hendrik-Ido-Ambacht	1	51.5	52.4	53.4	52.4
95	Heerenveen	1	49.8	52.5	54.9	52.4
96	Hengelo (O.)	1	47.8	50.4	58.9	52.4
97	Leiden	2	48.8	46.9	61.5	52.4
98	Almere	1	42.7	57.5	56.8	52.3
99	Altena	1	53.7	54.8	48.4	52.3
100	Heemskerk	1	50.1	56.1	50.4	52.2
101	Haarlem	1	48.6	49.9	57.7	52.1
102	Enschede	1	43.7	52.3	59.4	51.8
103	Waterland	1	54.8	52.8	47.2	51.6
104	Voerendaal	1	50.4	53.4	50.8	51.5
105	Leudal	1	50.2	53.4	50.9	51.5
106						
	Grave	1	50.1	55.4	48.3	51.3
107	Ooststellingwerf	1	49.0	55.7	47.9	50.9
108	Bergen (L.)	1	47.7	57.5	46.6	50.6
109	Valkenburg aan de Geul	1	44.5	59.1	48.1	50.6

110	Gulpen-Wittem	1	45.7	60.7	44.8	50.4
111	Echt-Susteren	1	44.4	53.0	53.2	50.2
112	Doesburg	1	46.8	54.3	48.6	49.9
113	Noardeast-Frysl	1	46.4	54.4	47.0	49.2
114	Roerdalen	1	49.4	57.8	39.7	49.0

Annex C. SDGs: methodology & outcome

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	Obesity
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) Obesity Alcohol Drugs Smoking behavior Mental health costs Regular health costs
4	Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Distance to primary school Distance to secondary school 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 Employment function Human resources exploitation Unemployment

Overview of the 17 SDGs and available indicators to measure them

			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	Emission of carbon-dioxide (CO2)
		sustainable industrialization and foster innovation	Glass-fiber internet connections
			Share of knowledge workers Access to main roads and
			highways Recharging stations for electric
			vehicles High- and medium-tech
			employment
10	Reduced	Reduce inequality within and	Loneliness
	Inequalities	among countries	Political engagement Financial assets households
			Migration
			Social welfare benefits
			Poor households
11	Sustainable Cities	Make cities and human	National monuments
	and Communities	settlements inclusive, safe, resilient and sustainable	Affordable housing
			Affordable rental housing Natural landscapes
			Access to train station
			Access to public busses
			Risk contour
			Concentration of particulate
			matter (PM2.5) Tendency to move
			Household general micro waste
			Household general macro waste Cycling climate
12	Responsible	Ensure sustainable consumption	Household general micro waste
	Consumption and Production	and production patterns	Household general macro waste Separation general macro waste
			Separation general micro waste
13	Climate Action	Take urgent action to combat	Flooding
14	Life below Water	climate change and its impacts	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	Nitrogen deposition
		sustainable use of terrestrial ecosystems, sustainably manage	Natural landscapes
		forests, combat desertification,	Biodiversity
		and halt and reverse land degradation and halt biodiversity	
		loss	
16	Peace, Justice and	Promote peaceful and inclusive	Turnout local elections
	Strong Institutions	societies for sustainable development, provide access to	Turnout national elections
		justice for all and build effective,	Turnout European elections
		accountable and inclusive	Turnout provincial elections Violent crimes
		institutions at all levels	Property crimes

			Vandalism Child protection 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

Best scoring municipalities for 14 SDGs in 2020

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 2020, based on the indicator scores used in the triple P assessment as listed in Annex C.

RANK	NAME	1. NO POVERTY
1	Rozendaal	94.7
2	Terschelling	90.8
3	Ameland	88.5
4	Renswoude	88.4
5	Reusel-De Mierden	85.3
6	Vlieland	85.3
7	Schiermonnikoog	84.6
8	Tubbergen	83.3
9	Blaricum	83.2
10	Veere	82.8

RANK	NAME	2. ZERO HUNGER
1	Rozendaal	81.3
2	Bloemendaal	78.1
3	Gooise Meren	75.0
4	Bergen (NH.)	75.0
5	Oegstgeest	75.0
6	Blaricum	75.0
7	Amstelveen	68.8
8	Waalre	68.8
9	Castricum	68.8
10	Uitgeest	68.8
10	Nuenen, Gerwen en Nederwetten	68.8
10	Eersel	68.8
10	Heemstede	68.8
10	Laren (NH.)	68.8

RANK	NAME	3. GOOD HEALTH AND WELL-BEING
1	Midden-Delfland	62.7
2	Rozendaal	62.5
3	Kapelle	61.8
4	Pijnacker-Nootdorp	61.6
5	Bodegraven-Reeuwijk	59.8
6	Urk	59.4
7	Houten	59.3
8	Renswoude	59.0
9	Veere	58.9
10	Lansingerland	58.7

RANK	NAME	4. QUALITY EDUCATION
1	Oegstgeest	77.7
2	Laren (NH.)	76.4
3	Oldenzaal	74.3
4	Bloemendaal	73.8
5	Geertruidenberg	73.3
6	Heiloo	72.9
7	Borne	72.7
8	Gooise Meren	72.6
9	Heemstede	72.5
10	Haaksbergen	72.3

RANK	NAME	6. CLEAN WATER AND SANITATION
1	Oegstgeest	83.3
2	Heemstede	83.3
3	Lisse	83.3
4	Weesp	83.3
5	Hillegom	83.3
6	Noordwijk	83.3
7	Valkenburg aan de Geul	83.3
8	Westerveld	83.3
9	Bloemendaal	79.2
10	Gooise Meren	77.8
10	Papendrecht	77.8
10	Velsen	77.8

RANK	NAME	7. AFFORDABLE AND CLEAN ENERGY
1	Nieuwegein	67.0
2	Capelle aan den IJssel	60.1
3	Duiven	60.0
4	Purmerend	58.2
5	Almere	56.6
6	Tilburg	55.6
7	Nijmegen	54.8
8	Amsterdam	54.5
9	Zwolle	54.4
10	Zoetermeer	54.0

RANK	NAME	8. DECENT WORK AND ECONOMIC GROWTH
1	Ouder-Amstel	71.7
2	Amsterdam	68.1
3	Bunnik	66.7
4	Utrecht (gemeente)	65.2
5	Gooise Meren	65.1
6	Houten	64.6
7	Landsmeer	64.5
8	Son en Breugel	64.2
9	Best	64.1
10	Amersfoort	64.0

RANK	NAME	9. INDUSTRY, INNOVATION AND INFRASTRUCTURE
1	Bunnik	66.1
2	Oldenzaal	65.2
3	Veenendaal	63.8
4	Teylingen	63.2
5	Amersfoort	62.1
6	Almere	61.4
7	Uithoorn	60.8
8	Best	60.7
9	Soest	60.7
10	Deventer	60.4

RANK	NAME	10. REDUCED INEQUALITIES
1	Rozendaal	81.4
2	Bloemendaal	73.1
3	Beemster	72.3
4	Edam-Volendam	71.8
5	Renswoude	71.5
6	Midden-Delfland	71.1
7	Bunnik	70.6
8	Zoeterwoude	70.4
9	Woudenberg	70.2
10	Haaren	70.2

RANK	NAME	11. SUSTAINABLE CITIES AND COMMUNITIES
1	Deventer	68.4
2	Landgraaf	67.8
3	Zutphen	66.8
4	Vaals	66.2
5	Kerkrade	66.0
6	Hengelo (O.)	65.4
7	Berg en Dal	64.7
8	Maastricht	64.6
9	Steenwijkerland	64.6
10	Winterswijk	64.1

RANK	NAME	12. RESPONSIBLE CONSUMPTION AND PRODUCTION
1	Horst aan de Maas	90.7
2	Reusel-De Mierden	89.2
3	Cuijk	87.6
4	Boekel	87.6
5	Staphorst	87.4
6	Sint Anthonis	86.5
7	Boxmeer	86.5
8	Olst-Wijhe	86.5
9	Ommen	86.4
10	Grave	85.5

RANK	NAME	13. CLIMATE ACTION
1	Ameland	100.0
2	Vlieland	100.0
3	Schiermonnikoog	100.0
4	Hollands Kroon	91.8
5	Waterland	91.5
6	Beemster	91.2
7	Texel	90.7
8	Terschelling	89.0
9	Bergen (L.)	87.3
10	Westerwolde	86.6

RANK	NAME	15. LIFE ON LAND
1	Bloemendaal	81.7
2	Zandvoort	80.6
3	Schiermonnikoog	78.6
4	Vlieland	77.1
5	Terschelling	76.5
6	Wassenaar	76.0
7	Bergen (NH.)	72.9
8	Heemstede	71.7
9	Westvoorne	69.7
10	Ameland	69.0

RANK	NAME	16. PEACE, JUSTICE AND STRONG INSTITUTIONS
1	Staphorst	74.8
2	Rozendaal	69.9
3	Rijssen-Holten	69.6
4	Tubbergen	68.3
5	Dalfsen	67.8
6	Zwartewaterland	67.7
7	Renswoude	67.4
8	Hattem	67.4
9	Wierden	66.9
10	De Wolden	66.6



telos brabant centre for sustainable development





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