



# 1st Performance Report of Elected Dutch Municipalities of BNG Bank Sustainability Bond of November 2020

December 2021

**HET** pon | telos



# **1st Performance Report of Elected Dutch Municipalities of BNG Bank Sustainability Bond of November 2020**

December 2021

Fenna Bijster, MSc.

Sanne Paenen, MSc.

Ruben Smeets, MSc.

Drs. John Dagevos

# Colophon

Commissioned by  
Bart van Dooren, Head of Capital Markets & Investor Relations  
bart.vandooren@bngbank.nl

Willem Littel, Senior Manager Capital Markets and Investor Relations  
willem.littel@bngbank.nl

René Goorden, Sector Specialist Housing,

## Author(s)

Fenna Bijster, MSc.  
Sanne Paenen, MSc.  
Ruben Smeets MSc.  
Drs. John Dagevos

T +31 13 535 15 35

## Publication number

205245

## Date

december 2021



## © 2021 Het PON & Telos

The copyright of this publication is held by Het PON & Telos. Reproduction of texts in whole or in part is permitted, provided the source is acknowledged. Reproduction and publication in any form other than this report is only permitted with the written permission of Het PON & Telos. Although this publication has been compiled with the greatest possible care, Het PON & Telos cannot accept any liability for any errors it may contain.

## More information

[www.hetpon-telos.nl](http://www.hetpon-telos.nl)

## Executive summary

November 2020, BNG Bank launched its seventh Sustainability Bond, a new USD 1 billion | 0.05%, 5-year benchmark. The bond is due November 2025. The Framework document for the BNG Bank Sustainability Bond 2020 was provided to BNG Bank by Telos -Tilburg University- on 24 November 2020, describing the selection process of best-in-class Dutch municipalities eligible for the bond.

An important quality indicator of the bond is the 'Use of proceeds reporting (UPR)'. BNG Bank intends to include in the UPR a yearly impact report, during the period 2021–2025, based on updated data for the sustainability scores of all Dutch municipalities. The update will give insight in the changes in sustainability scores of the group of 114 Elected Municipalities compared to the total group of 352 municipalities of the Netherlands. BNG Bank asked Telos -Tilburg University- to provide the yearly impact reports for this bond, based on its yearly National Monitor Sustainable Municipalities. This performance report is the first impact report of the 2020 Sustainability Bonds, covering the years 2020-2021.

The Elected Municipalities continued to outperform the total group of municipalities with 2.4 percentage points (54.5 vs 52.1), as listed in table 1. Both groups of municipalities show an improvement of the overall score with 0.6-07 percentage points. Largest improvements occurred this year for the ecological capital (1.3 percentage points for both groups). The economic capital increased slightly as well, with 0.6 and 0.9 percentage points, while the socio-cultural capital declined with 0.2 percentage points for the elected group, and stayed the same for the total group.

Table 1. Sustainability scores of 114 elected municipalities and of the total group of 352 Dutch municipalities in 2021 compared to 2020

Sustainability capital	Elected 2020	Total 2020	Elected 2021	Total 2021	Elected: Difference 2020-2021	Total: Difference 2020-2021
<b>Total</b>	<b>53.9</b>	<b>51.4</b>	<b>54.5</b>	<b>52.1</b>	<b>0.6</b>	<b>0.7</b>
Socio-cultural	53.5	51.5	53.3	51.5	-0.2	0.0
Ecological	54.6	51.4	55.9	52.7	1.3	1.3
Economic	53.5	51.3	54.1	52.2	0.6	0.9 <sup>1</sup>

The analysis shows that 88% of Elected Municipalities realized past year a stable or improved total sustainability score and a bit more than 90% of Elected Municipalities reduced or stabilized their CO<sub>2</sub>-emissions. A closer look at the CO<sub>2</sub> reductions shows that the group of Elected municipalities realized a reduction in CO<sub>2</sub> emissions; it decreased with 2.6%, while the other municipalities realized a reduction of -3.1%. It was expected that the elected group would perform better than the total group.

<sup>1</sup> The calculated differences can be 0.1 percentage point higher or lower due to rounding during the calculation. This is the case for all calculated differences in the report.

Scores of municipalities are rather dynamic from year to year, although major differences and advantages among municipalities are of a structural nature. In the reporting period Elected Municipalities Rheden, Winterswijk, Eindhoven and Leusden were able to improve their total sustainability score most with 2.6 to 2.9 percentage points. The largest reduction in sustainability score among Elected Municipalities was detected in Urk, Putten and Vlieland.

Comparison over the years 2020 and 2021 for the elected group, as shown in table 6.1, makes clear that the performance of several SDG's improved slightly or substantially (Goals 1, 7, 9, 11, 15 and 16) , but other showed a small fallback (Goals 3, 4, 8, 10, 12 and 13). The elected municipalities still outperforms the total group on all of the 14 measured goals, but the differences become smaller. On 7 of the 14 goals the total group showed a higher increase of smaller decline over the reported period than the elected group.

# Index

1	Introduction	1
2	Description of activities	2
2.1	Update of database	2
2.2	Assessment of performance of Elected Sustainable Municipalities	3
3	Outcome of updating exercise and comparison of 2020 and 2021	5
3.1	National Monitor Sustainable Municipalities 2021	5
3.2	General characteristics of Elected Municipalities for the BNG Bank Sustainability Bond 2020	5
3.3	General performance of Elected Municipalities compared to total group of Dutch Municipalities	6
3.4	Changes in stock scores of Elected and the total group of municipalities	7
4	Elected Municipalities showing largest improvement or reduction in sustainability score in 2020-2021 depending on city typology	9
4.1	Elected agricultural municipalities	9
4.2	Elected center municipalities	10
4.3	Elected green municipalities	10
4.4	Elected growth municipalities	11
4.5	Elected historic municipalities	12
4.6	Elected mid-sized municipalities	12
4.7	Elected New Town municipalities	13
4.8	Elected old industrial municipalities	14
4.9	Elected residential municipalities	14
4.10	Elected shrink municipalities	15
4.11	Elected small municipalities	16
4.12	Elected tourist municipalities	16
4.13	Elected work municipalities	17
4.14	Elected 100,000plus municipalities	18
4.15	Summary of score changes of Elected Municipalities and their typology	18
5	Overall outcome for Elected Municipalities including their CO2-emission scores in 2020-2021	20
5.1	General outcome of improving and regressing Elected Municipalities	20
5.2	CO2-emission score performance of Elected Municipalities	21
6	SDGs scores	23
6.1	Progress of the elected municipalities towards the SDGs	23
6.2	Differences between the elected and the total group of municipalities on the SDGs	24
7	Discussion and overview of outcome of assessment period 2020-2021	25

Annex A: Overview of the differences in total sustainability scores in 2020 and 2021 for all 114 Elected Municipalities	26
Annex B: Overview of the changes in CO2-emissions in 2018-2019 for all Elected Municipalities	29



# 1 Introduction

At the request of BNG Bank, Telos -Tilburg University, has provided a Framework document on 24 November 2020 to BNG Bank<sup>2</sup> that describes the sustainability criteria and selection process of best-in-class Dutch municipalities eligible for a BNG Bank Sustainability Bond 2020. Telos developed this framework based on its National Monitor of Sustainable Municipalities 2020, from which the 7<sup>th</sup> edition was presented in November 2020. The National Monitor of Sustainable Municipalities was produced for the first time in 2014 on behalf of the Dutch Ministry for Infrastructure and Environment.

November 24, 2020, BNG Bank launched its seventh Sustainability Bond, a new USD 1 billion, 5-year benchmark<sup>3</sup>. The bond is due November 24<sup>th</sup> 2025. An important quality indicator of these bonds is the 'Use of proceeds reporting (UPR)'. BNG Bank intends to include in the UPR a yearly impact report, during the period 2021 – 2025, based on updated data for the sustainability scores of all the 352 Dutch municipalities. The update will give insight in the changes in sustainability scores of the group of 114 Elected Municipalities. Besides this impact report, other aspects are relevant for UPR, such as types of investment projects, governance aspects in relation to the sustainability performance of municipalities, etc. These other aspects are not included in this assessment by Telos, because such data are not yet available in sufficient detail. BNG Bank has asked Telos to provide the yearly updating of the database over the years 2021-2025 and report on the annual changes in scores of the Elected Municipalities. This is the first of such reports on the 2020 bonds, covering the period 2020-2021. It describes how the performance is assessed, the general outcome of the comparison over the years 2020-2021, including the impact on CO2-emissions. Additionally, this reports gives insights in the development of the elected municipalities on the UN Sustainable Development Goals (SDGs).

---

<sup>2</sup> <https://www.bngbank.com/-/media/Project/CBB/BNG-Bank-COM/Documents/Sustainability-Framework-2020.pdf?la=en&rev=25c3308f8f824ddd91923f9c5b9e792d&hash=25CC7B4587058F7AABF537F45330AC39>

<sup>3</sup> <https://www.bngbank.com/funding/sustainability-bond>

## 2 Description of activities

### 2.1 Update of database

The main activity to be able to produce an impact report for 2021 on the municipalities elected for the BNG Bank sustainable municipalities bond of 2020 was to update the database for the sustainability assessment of Dutch municipalities used in the National Monitor Sustainable Municipalities 2021. The monitor is basically designed on the basis of the UN and EU concept of sustainable development, which implies that three dimensions of development are considered of equal importance: economic, socio-cultural and ecological. Each of these three 'capitals' are subdivided into themes, called 'stocks', which are operationalized by measuring 'indicators'. Indicator values are assessed against sustainability goals, as described in more detail in the National Monitor report. These sustainability goals have been designed independently from the later agreed UN Sustainable Development Goals (SDGs) or Global Goals in 2015. A detailed analysis of the comparability and differences by Telos, as described in the National Monitor of 2017<sup>4</sup>, has shown that these goals have a wide similarity.

The United Nations SDGs include a set of 17 Global Goals that cover, more categorized from a policy than from a scientific point of view, urgent tasks to be addressed by national governments, local authorities and private actors. A detailed analysis of the differences and overlaps between the triple P approach, used in this framework, and the 17 Goals of the SDGs shows that a large part of the indicators are the same but for some goals clear differences occur. Goal 14 on seas and oceans is for example not included because this is not relevant for municipalities. Governance issues, as implemented by partnerships, have explicitly not yet been included in the triple P approach, amongst others because of the different nature of this domain and because comparable data are difficult to collect. The basic structure of the triple P model will be kept as leading in this impact report, as it better represents a structure that can be founded and explored scientifically. Like in the 2020 framework report, the relevant indicators will also be used to assess the progress on the SDGs for the municipalities.

The updating activities include:

1. Motivation of new sustainability stocks, indicators and goals for indicators to meet new scientific insights and practical developments.
2. Generating most recent data for the indicators used in the National Monitor Sustainable Municipalities from open public sources or by acquiring them.

---

<sup>4</sup> Bastiaan Zoeteman, John Dagevos, Rens Mulder, Corné Wentink, Naomi Hoven, Christien Visser, 2017, Nationale Monitor Duurzame Gemeenten 2017, Document number 17.170, Telos, Tilburg University, 29 September; <http://www.telos.nl/publicaties/publicatiesrapporten/default.aspx#folder=894859>

3. Eventual reassessment of city typology (this was not needed in the recent version of the Monitor).
4. Harmonization with national monitoring activities by third parties on theme specific issues such as climate, mobility, health, etc.
5. Adjustment to the outcome of municipality rearrangements, which are continuously resulting in larger municipalities and a lower total number of municipalities.

The National Monitor Sustainable Municipalities 2020 discerned 14 city types. These 14 types have been used for the Framework of the BNG Bank Sustainability Bond of 2020 and are the basis for the performance report at hand.

## 2.2 Assessment of performance of Elected Sustainable Municipalities

Based on the updated Database, sustainability performance of 114 Elected Municipalities in 2020 will be evaluated and discussed. The group of Elected Municipalities, described in the Framework of the BNG Bank Sustainability Bond of October 2020, has been selected by identifying the 15 best scoring municipalities for each of 14 types of cities, such as ‘agricultural’, ‘old industrial’, ‘shrinking’, etc. municipalities. The 114 Elected Municipalities have been selected out of the total number of 355 municipalities in the Netherlands in 2020. Since 2021, rearrangements among the municipalities were made and there are now only 352 municipalities in the Netherlands. However, this has no influence on the group of elected municipalities.

Furthermore, the number of indicators was partially expanded due to new possibilities but also reduced due to lack of continued data collection, resulting in 138 indicators now, compared to 140 in 2020. Such changes had to be included in the comparison between 2021 and 2020. Where needed new data for 2020 were separately collected and calculated. The reader is referred to the Method report for the 2021 BNG Bank Sustainability bond<sup>5</sup>, for the details of the amendments made in the calculation of the sustainability scores and how comparability between the years 2020 and 2021 was ascertained.

This assessment includes:

1. A comparison of sustainability scores of Elected Municipalities with the total group of Dutch municipalities for 2020 and 2021.
2. A comparison of sustainability scores for Elected Municipalities between 2020 and 2021, including:
  - a. overall scores
  - b. capital scores, and a selection of:
  - c. stock scores and where useful
  - d. indicator scores.

---

<sup>5</sup> [www.hetpon-telos.nl/methodreport2021](http://www.hetpon-telos.nl/methodreport2021)

3. A list of Elected Municipalities, which show the largest improvement or reduction in overall score and in CO2 emissions.
4. An overview of the development on the Sustainable Development Goals (SDGs) of the elected municipalities between 2020 and 2021.

In the next chapters, the outcome of these activities is presented. Finally, the overall changes observed for reporting period 2020-2021 will be discussed.

### 3 Outcome of updating exercise and comparison of 2020 and 2021

#### 3.1 National Monitor Sustainable Municipalities 2021

In November 2021, Telos has completed the data collection for the National Monitor Sustainable Municipalities 2021. The major outcome is shown in table 3.1:

Table 3.1 Sustainability performance of the total group of Dutch municipalities in 2020-2021

Sustainability capital	2020	2021
Total	51.42	52.14
Socio-cultural	51.54	51.51
Ecological	51.43	52.72
Economic	51.29	52.20

Last year the average overall sustainability score improved from 51.42 to 52.14 percentage. This was due to improvements in two capitals. The ecological capital improved from 51.43 to 52.72 and the economic capital improved from 51.29 to 52.20. The socio-cultural capital declined slightly from 51.54 to 51.51 percentage.

#### 3.2 General characteristics of Elected Municipalities for the BNG Bank Sustainability Bond 2020

The group of Elected Municipalities represents the sum of highest scoring municipalities in each of the 14 types of municipalities considered. They are therefore not a representative sample of the total group of Dutch municipalities. This is illustrated in table 3.2, using municipality size as criterion.

Table 3.2 Distribution of municipality sizes in the Netherlands and in the group of Elected

Municipality size (number of inhabitants)	Total number of municipalities in the Netherlands	Total number of municipalities in elected group
Less than 50,000	264 (75%)	84 (73.7%)
50,000-100,000	56 (15.9%)	15 (13.2%)
More than 100,000	32 (9.1%)	15 (13.2%)

As table 3.2 shows, the size distribution of the elected group of municipalities differs from the average distribution in the country. The small and midsize municipalities are underrepresented, while the large municipalities are overrepresented in the elected group. In case the outcome for the elected group is compared with the total group of municipalities this has to be taken into account.

### 3.3 General performance of Elected Municipalities compared to total group of Dutch Municipalities

BNG Bank has chosen to allocate the proceeds of the Sustainability Bond to the best performing municipalities in their class as instrument for several reasons. These include:

- Highlighting the importance of sustainable development to municipalities,
- Enabling investors that want to see their capital used for investments in municipalities that have experience in improving sustainability, and
- Increasing awareness of successful strategies used in high scoring municipalities, etc.

It would be welcome, against this background, if the comparison between performance of the group of Elected Municipalities and the total group of Dutch municipalities would show that the Elected Municipalities outperform the others over the years. Yet, it may not be as simple as that. Best performing municipalities may not have as much opportunities left for further improvement as low performing municipalities, which can more easily improve their performance.

Table 3.3 gives a summary of the overall differences between 2020 and 2021 for the total group of Dutch municipalities and the group of Elected Municipalities. It shows the general trend, which is an improvement of the overall score with 0.6-0.7 percentage points, are quite similar in both groups.

Table 3.3 Sustainability performance of Elected Municipalities and of the total group of Dutch municipalities in 2020 compared to 2021 (percentage points)

Sustainability capital	Elected 2020	Total 2020	Elected 2021	Total 2021	Elected: Difference 2020-2021	Total: Difference 2020-2021
<b>Total</b>	<b>53.9</b>	<b>51.4</b>	<b>54.5</b>	<b>52.1</b>	<b>0.6</b>	<b>0.7</b>
Socio-cultural	53.5	51.5	53.3	51.5	-0.2	0.0
Ecological	54.6	51.4	55.9	52.7	1.3	1.3
Economic	53.5	51.3	54.1	52.2	0.6	0.9

The Elected Municipalities continued to outperform the total group of municipalities with 2.4 percentage points (54.5 vs 52.1), as listed in table 1. Largest improvements occurred this year for the ecological capital (1.3 percentage points for both groups), and the economic capital improved slightly with 0.6-0.9 percentage points for the elected and total group respectively. The socio-cultural

capital showed a decrease of 0.2 for the elected group and the same score as last year for the total group.

In the next paragraph, the more detailed stock scores are considered.

### 3.4 Changes in stock scores of Elected and the total group of municipalities

A closer look at the level of stocks, see table 3.4, shows that differences between the years show a similar pattern in both groups of municipalities.

Table 3.4 Differences in sustainability scores (percentage points) of stocks between 2020 and 2021 for the group of elected Municipalities and all Dutch municipalities

Sustainability stock	Difference 2020-2021 of 114 Elected Municipalities	Difference 2020-2021 of all 352 municipalities
<b>Socio-cultural</b>		
Arts & culture	-0.29	0.39
Economic participation	2.06	1.90
Education	1.07	1.59
Health	-0.59	-0.67
Housing	0.00	0.00
Lifestyle and health	-3.14	-3.05
Political Participation	-0.12	-0.21
Residential environment	-0.02	-0.03
Safety	-0.56	-0.22
Social participation	0.00	0.00
<b>Ecological</b>		
Air	1.60	1.59
Annoyance and External safety	0.03	0.04
Energy	2.64	2.72
Nature & landscape	0.00	0.00
Soil	5.12	4.06
Resources & waste	0.01	0.63
Water	0.00	0.00
<b>Economic</b>		
Competitiveness	2.97	3.43
Infrastructure & mobility	2.37	3.01
Knowledge	0.92	1.04
Labor	-2.12	-2.22
Spatial location conditions	-1.06	-0.71

### Socio-cultural stocks

Among socio-cultural stocks, differences between both groups of municipalities were small. Most striking is the improvement in 'economic participation' in the both groups of municipalities. The largest decline can be found for 'Lifestyle and health' and 'Health', which are possibly caused by the recent Covid19 pandemic.

### Ecological stocks

Also here, the group of Elected Municipalities shows a similar pattern as the total group of municipalities, with large improvements over the period 2020-2021 for the stocks of 'energy' and 'soil'. There is no stock with declines over the period 2020-2021 in this capital.

### Economic stocks

Elected Municipalities improved slightly worse as the total group of municipalities. The biggest improvement is found in 'Infrastructure & Mobility' and 'Competitiveness', while 'labor' shows a decline.



## 4 Elected Municipalities showing largest improvement or reduction in sustainability score in 2020-2021 depending on city typology

In this chapter, a closer examination of the improvements or reductions in total sustainability score of individual Elected Municipalities will be discussed. The assessment will be presented for each of the 14 types of municipalities that are discerned in the Framework for the BNG Bank Sustainability Bond of 2020: agricultural-, center-, green-, growth-, historic-, old industrial-, mid-sized-, New Town-, shrink-, small, residential, tourist, work- and 100,000plus municipalities. The list of best-in-class municipalities in each type of municipalities will be presented as described in the framework document. The scores for 2020 have in this assessment been corrected for additional indicators used in 2021 to make them comparable with the 2020 data. The results are therefore sometimes differing from those given in the 2020 Framework document.

### 4.1 Elected agricultural municipalities

Table 4.1 presents the 15 best-in-class municipalities of the agricultural type, their reconstructed 2020 scores and the 2021 scores for total sustainability. Three municipalities were performing less over the past year, while twelve municipalities improved their score. Raalte improved the most in the period 2020-2021. Overall, the score of the group of elected agricultural municipalities improved 0.6 percentage points since 2020.

Table 4.1 Improvements and reductions in total sustainability scores of elected agricultural municipalities over 2020-2021

Agricultural municipality	Sustainability score 2020	Sustainability score 2021	Difference
Raalte	53.6	55.0	1.4
Berkelland	54.3	55.5	1.2
Dinkelland	57.1	58.3	1.2
Tynaarlo	55.6	56.8	1.2
Midden-Delfland	56.6	57.7	1.1
Dalfsen	56.3	57.2	0.9
Hof van Twente	55.3	55.9	0.6
Boxmeer	53.7	54.3	0.6
Wierden	54.7	55.2	0.5
Wijk bij Duurstede	53.6	54.0	0.4
Zwartewaterland	54.8	55.1	0.3
Bunnik	53.5	53.8	0.3
Oost Gelre	54.7	54.6	-0.1

Tubbergen	55.3	55.1	-0.2
Staphorst	56.9	56.6	-0.3
<b>Average</b>	<b>55.1</b>	<b>55.7</b>	<b>0.6</b>

## 4.2 Elected center municipalities

As table 4.2 shows, one municipality did not improve its score the last year, which is Utrecht. Arnhem improved the most (1.2 percentage points), followed by Huizen.

Table 4.2 Improvements in total sustainability scores of elected center municipalities over 2020-2021

Center municipality	Sustainability score 2020	Sustainability score 2021	Difference
Arnhem	51.6	52.8	1.2
Huizen	53.7	54.7	1.0
Deventer	54.3	55.2	0.9
Katwijk	52.8	53.7	0.9
Zwolle	55.5	56.4	0.9
Hilversum	52.4	53.2	0.8
Nijmegen	54.2	55.0	0.8
Gooise Meren	52.5	53.3	0.8
Castricum	55.0	55.7	0.7
Groningen	54.2	54.8	0.6
Ede	53.2	53.7	0.5
Apeldoorn	54.5	54.9	0.4
Gouda	52.7	53.1	0.4
Delft	54.9	55.0	0.1
Utrecht	55.2	55.0	-0.2
<b>Average</b>	<b>53.8</b>	<b>54.4</b>	<b>0.7</b>

## 4.3 Elected green municipalities

Elected green municipalities on average improved only slightly with 0.5 percentage points. Three municipalities show a decrease in their sustainability score between 2020-2021, as shown in Table 4.3. Heeze-Leende improved the most with 2.7 percentage points.

Table 4.3 Improvements and reductions in total sustainability scores of elected green municipalities over 2020-2021

Green municipality	Sustainability score 2020	Sustainability score 2021	Difference
Heeze-Leende	54.8	57.5	2.7
Mook en Middelaar	54.2	56.4	2.2
Leusden	56.0	57.3	1.3
Nunspeet	54.7	56.0	1.3
Elburg	55.1	56.2	1.1
Noordwijk	55.4	56.1	0.7
Bladel	55.0	55.5	0.5
Waalre	55.3	55.7	0.4
Hilvarenbeek	55.6	56.0	0.4
Westerveld	54.3	54.4	0.1
Bloemendaal	57.6	57.6	0.0
Ommen	55.3	55.3	0.0
Terschelling	55.1	54.7	-0.4
Vlieland	55.9	54.6	-1.3
Putten	55.1	53.0	-2.1
<b>Average</b>	<b>55.3</b>	<b>55.8</b>	<b>0.5</b>

#### 4.4 Elected growth municipalities

The elected growth municipalities showed an improvement of 0.6 percentage point last year. One municipality (Urk) did not improve its score. Highest improvement was found for Heeze-Leende, Leusden, followed by Midden-Delfland and Oegstgeest.

Table 4.4 Improvements and reductions in total sustainability scores of elected growth municipalities over 2020-2021

Growth municipality	Sustainability score 2020	Sustainability score 2021	Difference
Heeze-Leende	54.8	57.5	2.7
Leusden	56.0	57.3	1.3
Midden-Delfland	56.6	57.7	1.1
Oegstgeest	55.7	56.8	1.1
Zeewolde	53.5	54.4	0.9
Nijmegen	54.2	55.0	0.8
Blaricum	54.8	55.5	0.7
Noordwijk	55.4	56.1	0.7
Houten	55.7	56.3	0.6
Bunnik	53.5	53.8	0.3
Woudenberg	56.0	56.1	0.1

Delft	54.9	55.0	0.1
Bloemendaal	57.6	57.6	0.0
Wageningen	56.6	56.6	0.0
Urk	54.7	52.7	-2.0
<b>Average</b>	<b>55.3</b>	<b>55.9</b>	<b>0.6</b>

#### 4.5 Elected historic municipalities

Three municipalities showed a decline in municipality score over the past year, which are Utrecht, Staphorst and Vlieland. Rheden, Arnhem and Zutphen improved the most over the reported period. The average score improved last year with 0.5 percentage points, as presented in Table 4.5.

Table 4.5 Improvements and reductions in total sustainability scores of elected historic municipalities over 2020-2021

Historic municipality	Sustainability score 2020	Sustainability score 2021	Difference
Rheden	52.5	53.8	1.3
Arnhem	51.6	52.8	1.2
Zutphen	54.8	55.8	1.0
Eijsden-Margraten	52.2	53.2	1.0
Hilversum	52.4	53.2	0.8
Ameland	55.1	55.9	0.8
Bronckhorst	55.7	56.4	0.7
Kampen	53.2	53.7	0.5
Leiden	52.5	53.0	0.5
Schiermonnikoog	54.0	54.4	0.4
Molenlanden	54.1	54.5	0.4
Delft	54.9	55.0	0.1
Utrecht	55.2	55.0	-0.2
Staphorst	56.9	56.6	-0.3
Vlieland	55.9	54.6	-1.3
<b>Average</b>	<b>54.1</b>	<b>54.5</b>	<b>0.5</b>

#### 4.6 Elected mid-sized municipalities

Table 4.6 shows that mid-sized municipalities improved sustainability score on average with 0.6 percentage points last year. All municipalities improved their score. Woerden and Amstelveen improved the most with 1.2 and 1.0 percentage points.

Table 4.6 Improvements and reductions in total sustainability scores of elected mid-sized municipalities over 2020-2021

Mid-sized municipality	Sustainability score 2020	Sustainability score 2021	Difference
Woerden	54.2	55.4	1.2
Amstelveen	53.8	54.8	1.0
Katwijk	52.8	53.7	0.9
Hilversum	52.4	53.2	0.8
Heerenveen	52.9	53.7	0.8
Gooise Meren	52.5	53.3	0.8
Hengelo	52.3	53.0	0.7
Westerkwartier	53.5	54.1	0.6
Houten	55.7	56.3	0.6
Kampen	53.2	53.7	0.5
Krimpenerwaard	54.6	55.0	0.4
Gouda	52.7	53.1	0.4
Altena	52.0	52.4	0.4
Pijnacker-Nootdorp	53.6	53.9	0.3
Barneveld	53.4	53.4	0.0
<b>Average</b>	<b>53.3</b>	<b>53.9</b>	<b>0.6</b>

#### 4.7 Elected New Town municipalities

Elected New Town municipalities improved on average their score with 0.4 percentage points (see table 4.7). Best and Midden-Delfland both improved their score with 1.4 and 1.1 percentage points since 2020.

Table 4.7 Improvements and reductions in total sustainability scores of elected New Town municipalities over 2020-2021

New Town municipality	Sustainability score 2020	Sustainability score 2021	Difference
Best	52.2	53.6	1.4
Midden-Delfland	56.6	57.7	1.1
Culemborg	53.6	54.6	1.0
Nijkerk	53.6	54.6	1.0
Zeewolde	53.5	54.4	0.9
Zwolle	55.5	56.4	0.9
Langedijk	53.1	53.8	0.7
Houten	55.7	56.3	0.6
Heumen	54.2	54.7	0.5
Pijnacker-Nootdorp	53.6	53.9	0.3
Woudenberg	56.0	56.1	0.1
Barneveld	53.4	53.4	0.0
Tubbergen	55.3	55.1	-0.2

Harderwijk	54.3	54.0	-0.3
Urk	54.7	52.7	-2.0
<b>Average</b>	<b>54.4</b>	<b>54.8</b>	<b>0.4</b>

#### 4.8 Elected old industrial municipalities

Elected old industrial municipalities scored on average 0.7 percentage points higher over the reporting period, as shown in Table 4.8. Landsmeer improved the most with 2.3 percentage points, followed by Hellendoorn. One municipality decreased in score over time with 2.1 percentage points, which is Putten.

Table 4.8 Improvements and reductions in total sustainability scores of elected old industrial municipalities over 2020-2021

Old industrial municipality	Sustainability score 2020	Sustainability score 2021	Difference
Landsmeer	50.8	53.1	2.3
Hellendoorn	53.3	54.8	1.5
Best	52.2	53.6	1.4
Valkenswaard	52.7	54.0	1.3
Oldenzaal	54.6	55.7	1.1
Losser	53.8	54.8	1.0
Culemborg	53.6	54.6	1.0
Oisterwijk	51.5	52.4	0.9
Bergeijk	55.3	56.1	0.8
Bladel	55.0	55.5	0.5
Wierden	54.7	55.2	0.5
Waalre	55.3	55.7	0.4
Haaksbergen	55.8	55.8	0.0
Rijssen-Holten	54.3	54.3	0.0
Putten	55.1	53.0	-2.1
<b>Average</b>	<b>53.9</b>	<b>54.6</b>	<b>0.7</b>

#### 4.9 Elected residential municipalities

Residential municipalities improved in sustainability score with 0.4 percentage points on average, as can be seen in Table 4.9. Mook en Middelaar increased the most with 2.2 percentage points since last year, followed by Waterland.

Table 4.9 Improvements and reductions in total sustainability scores of elected old industrial municipalities over 2020-2021

Residential municipality	Sustainability score 2020	Sustainability score 2021	Difference
Mook en Middelaar	54.2	56.4	2.2
Waterland	53.2	54.4	1.2
Eijsden-Margraten	52.2	53.2	1.0
Borne	54.0	55.0	1.0
Voorschoten	54.9	55.7	0.8
Castricum	55.0	55.7	0.7
Waalre	55.3	55.7	0.4
Wijk bij Duurstede	53.6	54.0	0.4
Voerendaal	52.6	53.0	0.4
Pijnacker-Nootdorp	53.6	53.9	0.3
Bloemendaal	57.6	57.6	0.0
Hendrik-Ido-Ambacht	53.1	53.1	0.0
Reusel-De Mierden	54.6	54.2	-0.4
Heemskerk	52.7	51.9	-0.8
Meerssen	52.7	50.8	-1.9
<b>Average</b>	<b>54.0</b>	<b>54.3</b>	<b>0.4</b>

#### 4.10 Elected shrink municipalities

As far as elected shrink municipalities are concerned, it is found that they improved 0.7 percentage points on average last year (see Table 4.10). Mook en Middelaar improved most with 2.2 percentage points, and two municipalities decreased in sustainability score.

Table 4.10 Improvements and reductions in total sustainability scores of elected shrink municipalities over 2020-2021

Shrink municipality	Sustainability score 2020	Sustainability score 2021	Difference
Mook en Middelaar	54.2	56.4	2.2
Bergen (L.)	50.1	51.6	1.5
Grave	52.1	53.5	1.4
Doesburg	50.7	52.0	1.3
Berkelland	54.3	55.5	1.2
Valkenburg aan de Geul	51.5	52.7	1.2
Roerdalen	49.3	50.5	1.2
Leudal	50.2	51.2	1.0
Ooststellingwerf	50.9	51.7	0.8
Bronckhorst	55.7	56.4	0.7
Noardeast-Fryslân	50.7	51.2	0.5
Gulpen-Wittem	50.5	50.7	0.2

Echt-Susteren	49.4	49.4	0.0
Bergen (NH.)	53.9	53.8	-0.1
Meerssen	52.7	50.8	-1.9
<b>Average</b>	<b>51.7</b>	<b>52.5</b>	<b>0.7</b>

#### 4.11 Elected small municipalities

The group of small municipalities has improved its score in 2021 by 0.7 percentage points, as shown in Table 4.11. Heeze-Leende leads this group by improving with 2.7 percentage points, followed by Mook en Middelaar and Leusden.

Table 4.11 Improvements and reductions in total sustainability scores of elected old industrial municipalities over 2020-2021

Small municipality	Sustainability score 2020	Sustainability score 2021	Difference
Heeze-Leende	54.8	57.5	2.7
Mook en Middelaar	54.2	56.4	2.2
Leusden	56.0	57.3	1.3
Dinkelland	57.1	58.3	1.2
Tynaarlo	55.6	56.8	1.2
Midden-Delfland	56.6	57.7	1.1
Lisse	54.1	55.2	1.1
Oegstgeest	55.7	56.8	1.1
Castricum	55.0	55.7	0.7
Hof van Twente	55.3	55.9	0.6
Bunnik	53.5	53.8	0.3
Bloemendaal	57.6	57.6	0.0
Wageningen	56.6	56.6	0.0
Noordenveld	55.1	54.8	-0.3
Putten	55.1	53.0	-2.1
<b>Average</b>	<b>55.5</b>	<b>56.2</b>	<b>0.7</b>

#### 4.12 Elected tourist municipalities

The sustainability score of the elected tourist type of municipalities has improved on average 0.3 percentage points (see Table 4.12). Four municipalities show a decrease in their sustainability score since 2020, and one municipality had the same score in 2021 as in 2020. Mook en Middelaar improved the most with 2.2 percentage points.



Table 4.12 Improvements and reductions in total sustainability scores of elected tourist municipalities over 2020-2021

Tourist municipality	Sustainability score 2020	Sustainability score 2021	Difference
Mook en Middelaar	54.2	56.4	2.2
Bergeijk	55.3	56.1	0.8
Ameland	55.1	55.9	0.8
Noordwijk	55.4	56.1	0.7
Groningen	54.2	54.8	0.6
Hilvarenbeek	55.6	56.0	0.4
Schiermonnikoog	54.0	54.4	0.4
Steenwijkerland	55.4	55.6	0.2
Westerveld	54.3	54.4	0.1
Veere	55.0	55.1	0.1
Bloemendaal	57.6	57.6	0.0
Bergen (NH.)	53.9	53.8	-0.1
Utrecht	55.2	55.0	-0.2
Terschelling	55.1	54.7	-0.4
Vlieland	55.9	54.6	-1.3
<b>Average</b>	<b>55.1</b>	<b>55.4</b>	<b>0.3</b>

### 4.13 Elected work municipalities

Elected work municipalities on average performed well the past year (plus 0.6 percentage point), as illustrated in table 4.13. Ermelo improved the most with 2.0 percentage points, followed by Nunspeet.

Table 4.13 Improvements and reductions in total sustainability scores of elected work municipalities over 2020-2021

Work municipality	Sustainability score 2020	Sustainability score 2021	Difference
Ermelo	53.4	55.4	2.0
Nunspeet	54.7	56.0	1.3
Oldenzaal	54.6	55.7	1.1
Deventer	54.3	55.2	0.9
Nijmegen	54.2	55.0	0.8
Noordwijk	55.4	56.1	0.7
Boxmeer	53.7	54.3	0.6
Bladel	55.0	55.5	0.5
Ede	53.2	53.7	0.5
Apeldoorn	54.5	54.9	0.4
Delft	54.9	55.0	0.1
Wageningen	56.6	56.6	0.0

Rijssen-Holten	54.3	54.3	0.0
Oost Gelre	54.7	54.6	-0.1
Utrecht	55.2	55.0	-0.2
<b>Average</b>	<b>54.6</b>	<b>55.2</b>	<b>0.6</b>

#### 4.14 Elected 100,000plus municipalities

The, for Dutch dimensions, relative large elected 100,000plus cities, on average improved their score with 0.6 percentage point. Eindhoven improved most, followed by Arnhem and Deventer.

Table 4.14 Improvements and reductions in total sustainability scores of elected 100,000plus over 2020-2021

100,000plus municipality	Sustainability score 2020	Sustainability score 2021	Difference
Eindhoven	52.7	54.2	1.5
Arnhem	51.6	52.8	1.2
Deventer	54.3	55.2	0.9
Zwolle	55.5	56.4	0.9
Amersfoort	54.2	55.1	0.9
Nijmegen	54.2	55.0	0.8
Groningen	54.2	54.8	0.6
Ede	53.2	53.7	0.5
Leiden	52.5	53.0	0.5
Enschede	51.1	51.6	0.5
Apeldoorn	54.5	54.9	0.4
Almere	52.7	53.1	0.4
Haarlem	52.4	52.7	0.3
Delft	54.9	55.0	0.1
Utrecht	55.2	55.0	-0.2
<b>Average</b>	<b>53.5</b>	<b>54.2</b>	<b>0.6</b>

#### 4.15 Summary of score changes of Elected Municipalities and their typology

Table 4.15 gives an overview of the average performance of the 14 groups of municipalities. The largest improvements in percentage points were found in former industrial municipalities, shrink municipalities, center municipalities and small municipalities. Highest sustainability scores were measured in small municipalities (56.2 percentage points) and lowest in municipalities (52.5 percentage points).

Table 4.15 Changes in total sustainability scores of 14 types of elected municipalities over 2020-2021

Type of municipality	Sustainability score 2020	Sustainability score 2021	Difference
Small municipalities	55.5	56.2	0.7
Mid-sized municipalities	53.3	53.9	0.6
100.000plus municipality	53.5	54.2	0.6
Agricultural municipality	55.1	55.7	0.6
Center municipality	53.8	54.4	0.7
Former industrial municipality	53.9	54.6	0.7
Green municipality	55.3	55.8	0.5
Growth municipalities	55.3	55.9	0.6
Historic municipalities	54.1	54.5	0.5
New Town municipality	54.4	54.8	0.4
Residential municipalities	54.0	54.3	0.4
Shrink municipality	51.7	52.5	0.7
Touristic municipalities	55.1	55.4	0.3
Work municipality	54.6	55.2	0.6

## 5 Overall outcome for Elected Municipalities including their CO2-emission scores in 2020-2021

This chapter presents a final overview of the performance of the Elected Municipalities, independent from their typology.

The green bonds were started by the World Bank to help promote the transition to a low carbon economy, in order to slow down further climate change. Considering this background, this chapter includes a description of the performance of the Elected Municipalities in relation to CO2-emissions. Although they are included as indicator in the ecological capital, this aspect will be highlighted as an element of special interest, being often the key factor for green bond and sustainability bond investors.

### 5.1 General outcome of improving and regressing Elected Municipalities

Among Elected Municipalities 88% had similar or higher sustainability scores in 2021 compared to 2020 (see also Annex 1).

Tables 5.1 and 5.2 show the elected Municipalities that showed the largest improvement or decrease in their sustainability score over time. The best performing municipality in this respect among Elected Municipalities is Rheden, followed by Winterswijk, Eindhoven and Leusden.

Table 5.1 Ten Elected Municipalities improving sustainability score most in the period 2020-2021

Elected municipality	Typology	Total score 2020	Total score 2021	Difference
Rheden	Historic	50.9	53.8	2.9
Winterswijk	Agricultural	54.3	57.0	2.7
Eindhoven	Large	51.6	54.2	2.6
Leusden	Small, Green, Growth	54.7	57.3	2.6
Oldenzaal	Former industrial, Work	53.2	55.7	2.5
Eemnes	Agricultural, New town	51.9	54.3	2.4
Doetinchem	Medium	50.9	53.3	2.4
Raalte	Agricultural	52.6	55.0	2.4
Landsmeer	Residential	50.9	53.1	2.2
Sint-Michielsgestel	Residential	53.0	55.2	2.2

The largest reduction in sustainability score among Elected Municipalities was detected in Urk, followed by Putten and Vlieland.

Table 5.2 Ten Elected Municipalities with largest declining sustainability score in the period 2020-2021

Municipality	Typology	Total score 2020	Total score 2021	Difference
Urk	Small, Growth, New town	54.5	52.7	-1.8
Putten	Former industrial	54.7	53.0	-1.7
Vlieland	Green, Historic, Tourist	55.5	54.6	-0.9
Waterland	Historic, Residential, Tourist	55.2	54.4	-0.8
Reusel-De Mierden	Residential	54.7	54.2	-0.5
Meerssen	Shrink	51.3	50.8	-0.5
Amsterdam	Large, Centre, Historic, Tourist, Work	51.4	51.1	-0.3
Kampen	Medium, Agricultural, Historic	54.0	53.7	-0.3
Waalre	Former industrial, Green, Residential	55.8	55.7	-0.1
Rozendaal	Small, Green, Growth, Residential	53.3	53.4	0.1

## 5.2 CO2-emission score performance of Elected Municipalities

Finally, the outcome of the CO2-emission assessment of Elected Municipalities will be discussed. This is one of the key transitions to which national governments have committed themselves in the framework of the UN Climate Change Convention and particularly since the 2015 Paris Agreement. But also individual municipalities have similar commitments, e.g. in the framework of the Covenant of Mayors to combat climate change. In the Netherlands the Association of Dutch Municipalities (VNG) has signed an agreement in 2013 with the national government and other parties to substantially reduce CO2-emissions the coming years. New agreements are underway.

Data on CO2 emissions are available for each municipality via the web-portal of the Dutch Emissions Authority . They calculate the CO2 emissions every five years, including the most recent two years. At this moment, data are available for 1990-2015 in a five-year interval, supplemented with the two most recent years in their database (2018 and 2019). In this impact report, the reduction over the two most recent years has been used.

A closer look at the CO2 reductions shows that the group of Elected Municipalities realized a reduction in CO2 emissions over de last year; the CO2 emissions decreased with 2.6%. This is good news, however the other municipalities realized a larger reduction of CO2 emissions of -3.1%. The outcome of this analysis is shown in table 5.3.

Table 5.3 CO2 reductions in different time periods of the Elected Municipalities and the total group of municipalities

Considered group of municipalities	1990-2019	2010-2019	2018-2019
Elected (114)	-34.1%	-29.0%	-2.6%
Others	11.1%	-9.2%	-3.1%
Total (352)	0.7%	-12.8%	-3.1%

The highest reduction was found Hilvarenbeek, followed by Ameland and Amsterdam. Table 5.4 shows that Brummen, Midden-Delfland and Putten noted the largest increase in CO2 emissions. CO2 emission changes for all municipalities over the last year are given in Annex 2.

Table 5.4 Ten Elected Municipalities with most and least reduction in CO2-emissions over the last year (equals measuring years 2018-2019)

Elected municipality	Emission change over measuring years 2018-2019	Elected municipality	Emission change over measuring years 2018-2019
Hilvarenbeek	-13.2	Brummen	7.1
Ameland	-11.9	Midden-Delfland	2.7
Amsterdam	-9.8	Putten	0.8
Utrecht (gemeente)	-7.4	Woerden	0.4
Reusel-De Mierden	-6.3	Katwijk	0.3
Groningen (gemeente)	-5.9	Aalsmeer	0.3
Nunspeet	-5.7	Leiden	0.1
Hattem	-5.6	Heerde	0.0
Tubbergen	-5.5	Kampen	-0.1
Barneveld	-5.3	Doetinchem	-0.6

## 6 SDGs scores

In the 2018 framework report, a method was introduced to measure the achievement of the 2015 UN Sustainable Development Goals (SDGs). Showing the impacts of societal activities in terms of their contribution to the SDGs, is recently becoming a must for many organizations and particularly for banks 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<sup>6</sup>.

An elaborated description of the methodology used to calculate the SDG scores can be found in the Method report 2021<sup>7</sup>. In essence it is based on aggregating elements of the sustainability scores in a way consistent with the definitions of the SDGs.

### 6.1 Progress of the elected municipalities towards the SDGs

Comparison over the years 2020 and 2021 for the elected group, as shown in table 6.1, makes clear that the performance of several SDG's improved slightly or substantially (Goals 1, 7, 9, 11, 15 and 16) , but other showed a small fallback (Goals 3, 4, 8, 10, 12 and 13).

In general, table 6.1 shows that the elected municipalities improved their performance between 2020 and 2021 for 6 of the 14 goals measured.

Table 6.1 SDG scores for elected (n=114) and all (n=352) municipalities 2020-2021

SDG	All municipalities (n=352)			Elected municipalities (n=114)		
	2020	2021	Difference 2020-2021	2020	2021	Difference 2020-2021
1. No Poverty	63.4	63.6	0.1	67.4	67.6	0.2
2. Zero Hunger	34.8	34.8	0.0	39.5	39.5	0.0
3. Good Health and Well-being	48.9	47.9	-1.0	50.0	48.9	-1.1
4. Quality Education	63.8	63.2	-0.5	65.9	65.1	-0.8
5. Gender Equality						
6. Clean Water and Sanitation	53.2	53.2	0.0	54.8	54.8	0.0
7. Affordable and Clean Energy	35.2	38.0	2.8	36.1	38.8	2.7

<sup>6</sup> [https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance\\_en](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en)

<sup>7</sup> [www.hetpon-telos.nl/methodreport2021](http://www.hetpon-telos.nl/methodreport2021)

8. Decent Work and Economic Growth	54.5	53.9	-0.6	56.0	55.2	-0.7
9. Industry, Innovation and Infrastructure	41.5	43.8	2.3	44.5	46.8	2.3
10. Reduced Inequalities	51.4	51.2	-0.2	53.4	53.2	-0.2
11. Sustainable Cities and Communities	50.5	51.1	0.6	52.8	52.9	0.1
12. Responsible Consumption and Production	55.4	56.3	0.8	58.4	58.3	-0.1
13. Climate Action	64.0	64.0	-0.1	69.5	69.4	-0.1
14. Life below Water						
15. Life on Land	46.5	50.5	4.1	50.1	55.2	5.1
16. Peace, Justice and Strong Institutions	52.4	52.8	0.4	55.6	55.9	0.2
17. Partnerships for the Goals						

As shown in table 6.1, 3 of the 17 SDGs could not be measured because of lack of data, or because they are not relevant for municipalities. These are nr. 5 (Gender equality), nr. 14 (Life below water) and nr.17 (Partnerships for the Goals).

## 6.2 Differences between the elected and the total group of municipalities on the SDGs

The elected municipalities still outperforms the total group on all of the 14 measured goals, but the differences become smaller. On 7 of the 14 goals the total group showed a higher increase or smaller decline over the reported period than the elected group.

There are, however, some differences in the development of the scores between the two groups. For example, the elected group scored 3.6 percentage points better on Goal 15 (Life on Land) in 2020, and this difference became larger over the past year, as the elected group improved with 5.1 percentage points, while the total group improved with 4.1 percentage points.

More information about the method of analyses on the SDGs can be found in the 2021 Method report for municipalities<sup>8</sup>.

<sup>8</sup> [www.hetpon-telos.nl/methodreport2021](http://www.hetpon-telos.nl/methodreport2021)



## 7 Discussion and overview of outcome of assessment period 2020–2021

The Elected Municipalities continued to outperform the total group of municipalities with 2.4 percentage points (54.5 vs 52.1), as listed in table 1. Both groups of municipalities show an improvement of the overall score with 0.6-07 percentage points. Largest improvements occurred this year for the ecological capital (1.3 percentage points for both groups). The economic capital increased slightly as well, with 0.6 and 0.9 percentage points, while the socio-cultural capital declined with 0.2 percentage points for the elected group, and stayed the same for the total group.

The analysis shows that 88% of Elected Municipalities realized past year a stable or improved total sustainability score and a bit more than 90% of Elected Municipalities reduced or stabilized their CO<sub>2</sub>-emissions. A closer look at the CO<sub>2</sub> reductions shows that the group of Elected municipalities realized a reduction in CO<sub>2</sub> emissions; it decreased with 2.6%, while the other municipalities realized a reduction of -3.1%. It was expected that the elected group would perform better than the total group.

Scores of municipalities are rather dynamic from year to year, although major differences and advantages among municipalities are of a structural nature. In the reporting period Elected Municipalities Rheden, Winterswijk, Eindhoven and Leusden were able to improve their total sustainability score most with 2.6 to 2.9 percentage points. The largest reduction in sustainability score among Elected Municipalities was detected in Urk, Putten and Vlieland.

Comparison over the years 2020 and 2021 for the elected group, as shown in table 6.1, makes clear that the performance of several SDG's improved slightly or substantially (Goals 1, 7, 9, 11, 15 and 16), but other showed a small fallback (Goals 3, 4, 8, 10, 12 and 13). The elected municipalities still outperforms the total group on all of the 14 measured goals, but the differences become smaller. On 7 of the 14 goals the total group showed a higher increase of smaller decline over the reported period than the elected group.

It is not always the best scoring municipality in a certain class that shows the biggest improvement of its score in the next year. The advantage of a high score on sustainability may turn into a (temporary) disadvantage under certain circumstances. Yet, the differences in position on a scoring list and the magnitude of improvement or fallback from year to year provide relevant incentives for municipalities to better understand their position, learn from each other, reduce vulnerabilities and develop new approaches to existing and new challenges. Impact reporting of Sustainability Bonds stimulates elected and other municipalities to invest proceeds from the bonds and other resources in most effective operational and innovative structural activities to improve sustainability.

## Annex A: Overview of the differences in total sustainability scores in 2020 and 2021 for all 114 Elected Municipalities

Municipality	Total sustainability score 2020	Total sustainability score 2021	Difference 2020-2021
Heeze-Leende	54.8	57.5	2.7
Landsmeer	50.8	53.1	2.3
Mook en Middelaar	54.2	56.4	2.2
Ermelo	53.4	55.4	2.0
Eindhoven	52.7	54.2	1.5
Hellendoorn	53.3	54.8	1.5
Bergen (L.)	50.1	51.6	1.5
Raalte	53.6	55.0	1.4
Best	52.2	53.6	1.4
Grave	52.1	53.5	1.4
Rheden	52.5	53.8	1.3
Leusden	56.0	57.3	1.3
Nunspeet	54.7	56.0	1.3
Doesburg	50.7	52.0	1.3
Valkenswaard	52.7	54.0	1.3
Berkelland	54.3	55.5	1.2
Roerdalen	49.3	50.5	1.2
Valkenburg aan de Geul	51.5	52.7	1.2
Arnhem	51.6	52.8	1.2
Woerden	54.2	55.4	1.2
Tynaarlo	55.6	56.8	1.2
Dinkelland	57.1	58.3	1.2
Waterland	53.2	54.4	1.2
Oldenzaal	54.6	55.7	1.1
Midden-Delfland	56.6	57.7	1.1
Lisse	54.1	55.2	1.1
Elburg	55.1	56.2	1.1
Oegstgeest	55.7	56.8	1.1
Eijsden-Margraten	52.2	53.2	1.0
Huizen	53.7	54.7	1.0
Losser	53.8	54.8	1.0
Leudal	50.2	51.2	1.0
Borne	54.0	55.0	1.0
Culemborg	53.6	54.6	1.0
Nijkerk	53.6	54.6	1.0
Amstelveen	53.8	54.8	1.0
Zutphen	54.8	55.8	1.0

Deventer	54.3	55.2	0.9
Dalfsen	56.3	57.2	0.9
Katwijk	52.8	53.7	0.9
Amersfoort	54.2	55.1	0.9
Oisterwijk	51.5	52.4	0.9
Zwolle	55.5	56.4	0.9
Zeewolde	53.5	54.4	0.9
Heerenveen	52.9	53.7	0.8
Hilversum	52.4	53.2	0.8
Voorschoten	54.9	55.7	0.8
Bergeijk	55.3	56.1	0.8
Ooststellingwerf	50.9	51.7	0.8
Nijmegen	54.2	55.0	0.8
Ameland	55.1	55.9	0.8
Gooise Meren	52.5	53.3	0.8
Castricum	55.0	55.7	0.7
Hengelo (O.)	52.3	53.0	0.7
Noordwijk	55.4	56.1	0.7
Blaricum	54.8	55.5	0.7
Bronckhorst	55.7	56.4	0.7
Langedijk	53.1	53.8	0.7
Westerkwartier	53.5	54.1	0.6
Hof van Twente	55.3	55.9	0.6
Houten	55.7	56.3	0.6
Groningen (gemeente)	54.2	54.8	0.6
Boxmeer	53.7	54.3	0.6
Wierden	54.7	55.2	0.5
Bladel	55.0	55.5	0.5
Leiden	52.5	53.0	0.5
Ede	53.2	53.7	0.5
Heumen	54.2	54.7	0.5
Kampen	53.2	53.7	0.5
Noardeast-Fryslân	50.7	51.2	0.5
Enschede	51.1	51.6	0.5
Waalre	55.3	55.7	0.4
Voerendaal	52.6	53.0	0.4
Gouda	52.7	53.1	0.4
Krimpenerwaard	54.6	55.0	0.4
Apeldoorn	54.5	54.9	0.4
Hilvarenbeek	55.6	56.0	0.4
Wijk bij Duurstede	53.6	54.0	0.4
Almere	52.7	53.1	0.4
Molenlanden	54.1	54.5	0.4

Schiermonnikoog	54.0	54.4	0.4
Altena	52.0	52.4	0.4
Haarlem	52.4	52.7	0.3
Zwartewaterland	54.8	55.1	0.3
Bunnik	53.5	53.8	0.3
Pijnacker-Nootdorp	53.6	53.9	0.3
Gulpen-Wittem	50.5	50.7	0.2
Steenwijkerland	55.4	55.6	0.2
Woudenberg	56.0	56.1	0.1
Westerveld	54.3	54.4	0.1
Delft	54.9	55.0	0.1
Veere	55.0	55.1	0.1
Haaksbergen	55.8	55.8	0.0
Bloemendaal	57.6	57.6	0.0
Hendrik-Ido-Ambacht	53.1	53.1	0.0
Rijssen-Holten	54.3	54.3	0.0
Wageningen	56.6	56.6	0.0
Barneveld	53.4	53.4	0.0
Echt-Susteren	49.4	49.4	0.0
Ommen	55.3	55.3	0.0
Oost Gelre	54.7	54.6	-0.1
Bergen (NH.)	53.9	53.8	-0.1
Tubbergen	55.3	55.1	-0.2
Utrecht (gemeente)	55.2	55.0	-0.2
Harderwijk	54.3	54.0	-0.3
Staphorst	56.9	56.6	-0.3
Noordenveld	55.1	54.8	-0.3
Terschelling	55.1	54.7	-0.4
Reusel-De Mierden	54.6	54.2	-0.4
Heemskerk	52.7	51.9	-0.8
Vlieland	55.9	54.6	-1.3
Meerssen	52.7	50.8	-1.9
Urk	54.7	52.7	-2.0
Putten	55.1	53.0	-2.1

## Annex B: Overview of the changes in CO2-emissions in 2018-2019 for all Elected Municipalities

Elected municipality	Typology	% Difference 2018-2019
Hilvarenbeek	Small, Green, Tourist	-13.2
Ameland	Small, Growth, Historic, Green, Tourist	-11.9
Utrecht (gemeente)	Large, Growth, Historic, Work, Centre, Tourist	-7.4
Ommen	Small, Green	-7.1
Zutphen	Small, Historic	-6.6
Reusel-De Mierden	Small, Residential, Green	-6.3
Groningen (gemeente)	Large, Growth, Work, Centre, Tourist	-5.9
Nunspeet	Small, Work, Green	-5.7
Tubbergen	Small, New town, Agricultural	-5.5
Barneveld	Medium, Growth, New town, Work, Green	-5.3
Bladel	Small, Growth, Work, Green, Former industrial	-5.2
Schiermonnikoog	Small, Historic, Green, Tourist	-5.1
Bergeijk	Small, Tourist, Former industrial	-5.1
Hof van Twente	Small, Agricultural	-5.1
Delft	Large, Growth, Historic, Work, Centre	-4.9
Noardeast-Frysl	Small, Shrink, Historic, Agricultural	-4.6
Rheden	Small, Historic, Green	-4.4
Haaksbergen	Small, Former industrial	-4.2
Gouda	Medium, Centre	-4.1
Ooststellingwerf	Small, Shrink	-4.1
Doesburg	Small, Shrink, Historic, Former industrial	-3.9
Ede	Large, Growth, Work, Green, Centre	-3.8
Raalte	Small, Agricultural	-3.8
Oost Gelre	Small, Work, Agricultural	-3.7
Best	Small, New town, Former industrial	-3.6
Roerdalen	Small, Shrink, Residential, Green, Tourist	-3.6
Veere	Small, Tourist	-3.5
Leudal	Small, Shrink, Centre	-3.5
Molenlanden	Small, Historic, Agricultural	-3.5
Berkelland	Small, Shrink, Agricultural	-3.4
Wijk bij Duurstede	Small, Residential, Agricultural	-3.3
Rijssen-Holten	Small, Work, Former industrial	-3.3
Hellendoorn	Small, Green, Former industrial	-3.2
Nijmegen	Large, Growth, Work, Centre	-3.2

Elburg	Small, Green	-3.2
Mook en Middelaar	Small, Shrink, Residential, Green, Tourist	-3.2
Lisse	Small	-3.2
Tynaarlo	Small, Agricultural	-3.1
Woudenberg	Small, Growth, New town	-3.1
Dalfsen	Small, Agricultural	-3.1
Noordenveld	Small	-3.0
Grave	Small, Shrink, Agricultural	-3.0
Heeze-Leende	Small, Growth, Green	-3.0
Heumen	Small, New town	-2.9
Dinkelland	Small, Agricultural	-2.9
Krimpenerwaard	Medium, Agricultural	-2.8
Wierden	Small, Agricultural, Former industrial	-2.8
Voorschoten	Small, Growth, Residential	-2.7
Waterland	Small, Historic, Residential, Tourist	-2.7
Boxmeer	Small, Work, Agricultural	-2.7
Heerenveen	Medium, Work, Agricultural	-2.7
Bloemendaal	Small, Growth, Residential, Green, Tourist	-2.7
Bronckhorst	Small, Shrink, Historic, Agricultural	-2.7
Wageningen	Small, Growth, Work	-2.7
Huizen	Small, Centre	-2.6
Landsmeer	Small, Growth, Tourist, Former industrial	-2.6
Amersfoort	Large, Growth, New town, Work	-2.6
Haarlem	Large, Growth, Historic, Centre, Tourist	-2.5
Terschelling	Small, Green, Tourist	-2.5
Altena	Medium	-2.5
Eijsden-Margraten	Small, Historic, Residential, Agricultural, Tourist	-2.5
Borne	Small, Growth, Residential, Former industrial	-2.4
Westerveld	Small, Green, Tourist	-2.4
Arnhem	Large, Growth, Historic, Work, Green, Centre, Tourist	-2.4
Bergen (NH.)	Small, Shrink, Green, Tourist	-2.4
Oisterwijk	Small, Former industrial	-2.4
Zwolle	Large, Growth, New town, Work, Centre	-2.4
Hilversum	Medium, Growth, Historic, Work, Green, Centre	-2.4
Urk	Small, Growth, New town	-2.3
Steenwijkerland	Small, Tourist	-2.3
Voerendaal	Small, Residential, Agricultural, Tourist, Former industrial	-2.3

Deventer	Large, Work, Centre	-2.2
Eindhoven	Large, Growth, Work, Centre, Former industrial	-2.2
Blaricum	Small, Growth	-2.2
Valkenburg aan de Geul	Small, Shrink, Tourist	-2.2
Almere	Large, Growth, New town, Centre	-2.2
Leusden	Small, Growth, Green	-2.1
Valkenswaard	Small, Green, Former industrial	-2.1
Castricum	Small, Residential, Centre	-2.1
Oegstgeest	Small, Growth	-2.1
Westerkwartier	Medium, Agricultural	-2.1
Waalre	Small, Growth, Residential, Green, Former industrial	-2.0
Staphorst	Small, Growth, Historic, Agricultural	-1.9
Meerssen	Small, Shrink, Residential, Tourist, Former industrial	-1.9
Oldenzaal	Small, Work, Former industrial	-1.9
Bunnik	Small, Growth, Agricultural	-1.8
Gulpen-Wittem	Small, Shrink, Historic, Agricultural, Tourist	-1.8
Culemborg	Small, Growth, New town, Former industrial	-1.8
Harderwijk	Small, Growth, New town, Work, Green	-1.8
Gooise Meren	Medium, Centre	-1.8
Heemskerk	Small, Residential, Green, Centre	-1.6
Noordwijk	Small, Growth, Work, Green, Tourist	-1.6
Vlieland	Small, Historic, Green, Tourist	-1.6
Hendrik-Ido-Ambacht	Small, Growth, New town, Residential	-1.5
Zeewolde	Small, Growth, New town	-1.5
Apeldoorn	Large, Growth, Work, Green, Centre	-1.4
Losser	Small, Former industrial	-1.4
Amstelveen	Medium, Growth, Work	-1.4
Nijkerk	Small, Growth, New town, Work	-1.3
Langedijk	Small, New town	-1.3
Houten	Medium, Growth, New town	-1.1
Ermelo	Small, Work, Green	-0.9
Kampen	Medium, Growth, Historic, Agricultural	-0.1
Bergen (L.)	Small, Shrink, Green, Tourist	0.1
Leiden	Large, Growth, Historic, Work, Centre, Tourist	0.1
Zwartewaterland	Small, Agricultural	0.3
Katwijk	Medium, Growth, Centre	0.3
Woerden	Medium, Growth, Work, Agricultural	0.4

Putten	Small, Green, Former industrial	0.8
Hengelo (O.)	Medium, Work, Former industrial	2.4
Midden-Delfland	Small, Growth, New town, Agricultural	2.7
Enschede	Large, Work, Centre, Former industrial	2.8
Echt-Susteren	Small, Shrink, Former industrial	3.8
Pijnacker-Nootdorp	Medium, Growth, New town, Residential	5.2

(Source: [www.emissieregistratie.nl](http://www.emissieregistratie.nl))



HET **pon | telos**

## About Het PON & Telos

### Improving social decision-making

Het PON & Telos is a social knowledge organisation at the heart of society. We consider it our mission to improve social decision-making. We do this by linking scientific knowledge to practical knowledge. In this process every voice counts! We collect, investigate, analyse, and interpret opinions and facts using stimulating approaches and innovative methods. In doing so, we are always focused on sustainable development: the harmonious connection between social, environmental and economic objectives. In this way we contribute to the quality of society at large, now and in the future.

With a multidisciplinary and creative team of nearly 30 research consultants, we work mainly for local and regional authorities in the Netherlands, but also for corporate bodies, banks, care and welfare institutions, funds, and social organisations. We work closely with civic organisations and other knowledge institutions and are an official partner of Tilburg University. We use our knowledge and insights to advise initiators, policy-makers and managers. This enables them to make informed choices and give a positive impulse to the society of tomorrow.

Stationsstraat 20c  
5038 ED Tilburg  
+31 (0)13 535 15 35  
info@hetpon-telos.nl  
hetpon-telos.nl