5th Performance Report of Elected Dutch Municipalities of BNG Bank Sustainability Bond of November 2017

November 2022

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Executive summary

November 9, 2017, BNG Bank launched its fourth Sustainability Bond, a new EUR 750 million, 7-year benchmark. The Framework document for the BNG Bank Sustainability Bond 2017 was provided to BNG Bank by Het PON &Telos on 6 October 2017, 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 2018–2024, 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 107 Elected Municipalities compared to the total group of 344 municipalities of the Netherlands. BNG Bank asked Het PON & Telos to provide the yearly impact reports for this bond, based on its yearly National Monitor Sustainable Municipalities. This performance report is the fifth impact report of the 2017 Sustainability Bond, covering the years 2017-2022.

The end result is that the Elected Municipalities continued to outperform the other group of municipalities with 2.2 percentage points (52.8 vs 50.6). Scores over the period 2017-2022 improved for all three capitals in a similar way. Largest improvements occurred this year for the economic capital (4.7-5.2 percentage points), while those for the socio-cultural and ecological capitals were relatively smaller.

Table S.1 Sustainability scores of 107 elected municipalities and of the total group of 344 Dutch municipalities in 2022 compared to 2017

Sustainability capital	Elected 2017	Total 2017	Elected 2022	Total 2022	Elected: Difference 2017-2022	Total: Difference 2017-2022
Total	50.1	47.8	52.8	50.6	2.7	2.7[1]
Socio-cultural	52.4	49.5	53.4	50.6	1.1	1.1
Ecological	49.2	47.5	51.5	49.4	2.3	1.9
Economic	48.8	46.5	53.5	51.7	4.7	5.2

Among Elected Municipalities 98% had similar or higher sustainability scores in 2022 compared to 2017. 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 Woudenberg followed by Leusden improved the most. Reductions in sustainability score among Elected Municipalities were only detected in Kapelle and Oostzaan.

The highest CO2 reduction was found in Amsterdam, Leiden and Haarlem. Table 5.4 shows that Ameland, Schiermonnikoog and Zoeterwoude noted the largest increase in CO2 emissions.

[1] 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.

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1 Introduction

At the request of BNG Bank Het PON & Telos has provided a Framework document to BNG Bank[2] on 6 October 2017 that describes the sustainability criteria and selection process of best-in-class Dutch municipalities eligible for a BNG Bank Sustainability Bond 2017. Het PON &Telos developed this framework on its National Monitor of Sustainable Municipalities 2017, which was produced for the first time in 2014 on behalf of the Dutch Ministry for Infrastructure and Environment. November 9, 2017, BNG Bank launched its fourth Sustainability Bond, a new EUR 750 million, 7-year benchmark[3]. 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 2018 – 2024, based on updated data for the sustainability scores of all 344 Dutch municipalities. The update will give insight in the changes in sustainability scores of the group of 107 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 Het PON & Telos, because such data are not yet available in sufficient detail. BNG Bank has asked Het PON & Telos to provide the yearly updating of the Database over the years 2018-2024 and report on the annual changes in scores of the Elected Municipalities. This is the fifth of such reports on the 2017 bond covering the period 2017-2022. It describes how the performance is assessed, the general outcome of the comparison over the years 2017-2022, including the impact on CO2-emissions.

[2] https://www.bngbank.com/Documents/Investors/Sustainability%20Framework%202117.pdf

[3] 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 2022 on the municipalities elected for the BNG Bank sustainable municipalities bond of 2017 was to update data for the sustainability assessment of Dutch municipalities used in the National Monitor Sustainable Municipalities 2017. 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: socio-cultural, ecological and economic. 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 Het PON &Telos, as described in the National Monitor of 2017[4], has shown that these goals have a wide similarity. It should be born in mind that the UN SDGs are mainly developed for nation states and also include global commons such as oceans which are not relevant at the municipal level. Moreover, SDGs have more a political than a scientific frame. The latter was more at the basis of the Triple P (People, Prosperity and Planet) approach used in the UN Brundtland Commission report of 1987 and used by Het PON & Telos in its National Monitor.

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.
3. Harmonization with national monitoring activities by third parties on theme specific issues such as climate, mobility, health, etc.
4. 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 2017 discerned 14 city types. These 14 types have been used for the Framework of the BNG Bank Sustainability Bond of 2017 and are the basis for the performance report at hand.

[4] 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

2.2 Assessment of performance of Elected Sustainable Municipalities

Based on the updated database, sustainability performance of 115 Elected Municipalities in 2017 will be evaluated and discussed. The group of Elected Municipalities, described in the Framework of the BNG Bank Sustainability Bond of October 2017, 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 115 Elected Municipalities have been selected out of the total number of 388 municipalities in the Netherlands in 2017. Since 2017, the number of municipalities decreased due to rearrangements among the municipalities. There are only 344 municipalities left in 2022. This influenced the selection of 115 municipalities for the bond of 2017 as well. The municipalities of Schinnen, Winsum, Strijen, Geldermalsen, Zuidhorn, Grave, Langedijk and Weesp are no longer independent entities. They are therefore no longer taken in consideration in this performance report. That means that the group of elected municipalities now consists of 107 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 139 indicators now, compared to 109 in 2017. Such changes had to be included in the comparison between 2022 and 2017. Where needed new data for 2017 were separately collected and calculated. The reader is referred to Annex 1 of the National Monitor 2017 report and to the Sustainability bonds Method report 2022[5], for the details of the amendments made in the calculation of the sustainability scores and how comparability between the years 2022 and 2017 was ascertained.

This assessment includes:

1. A comparison of sustainability scores of Elected Municipalities with the total group of Dutch municipalities for 2022 and 2017.
2. A comparison of sustainability scores for Elected Municipalities between 2022 and 2017, including:
    a. overall scores
    b. capital scores, and a selection of:
    c. stock scores and where useful
    d. indicator scores.
3. A list of Elected Municipalities, which show the largest improvement or reduction in overall score and an indication of the main causes for these results.

In the next chapters, the outcome of these activities is presented. Finally, the overall changes observed for reporting period 2017-2022 will be discussed.

[5] www.hetpon-telos.nl/methodreport2022

3 Outcome of updating exercise and comparison of 2022 and 2017 results

In October 2022, Het PON & Telos has completed collecting the data for the Sustainability bond 2022. The major outcome is shown in table 3.1:

Table 3.1 Sustainability performance of the total group of Dutch municipalities in 2017-2022

Sustainability capital	2017	2018	2019	2020	2021	2022
Total	47.82	48.34	48.95	49.24	50.40	50.56
Socio-cultural	49.48	49.72	50.25	50.30	50.96	50.58
Ecological	47.48	47.92	47.65	47.94	49.57	49.42
Economic	46.48	47.40	48.93	49.49	50.67	51.69

The average overall sustainability score improved slightly from 47.82% to 50.56%. The economic capital improved the most over the period 2017-2022, from 46.48% to 51.69%. The socio-cultural capital improved from 49.46% to 50.58% and the ecological capital improved from 47.48% to 49.42%.

3.1 General characteristics of Elected Municipalities for the BNG Bank Sustainability Bond 2017

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	254 (73.8%)	76 (71.0%)
50,000-100,000	58 (16.9%)	16 (15.0%)
More than 100,000	32 (9.3%)	15 (14.0%)

As table 3.2 shows, the size distribution of the elected group of municipalities differs from the average distribution in the country. The small municipalities are underrepresented and the large municipalities are overrepresented in de 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.

3.2 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 Sustainability performance of Elected Municipalities and of the total group of Dutch municipalities in 2017 compared to 2022 (percentage points)

Sustainability capital	Elected 2017	Total 2017	Elected 2022	Total 2022	Elected: Difference 2017-2022	Total: Difference 2017-2022
Total	50.1	47.8	52.8	50.6	2.7	2.7
Socio-cultural	52.4	49.5	53.4	50.6	1.1	1.1
Ecological	49.2	47.5	51.5	49.4	2.3	1.9
Economic	48.8	46.5	53.5	51.7	4.7	5.2

Table 3.3 gives a summary of the overall differences between 2017 and 2022 for the total group of Dutch municipalities and the group of Elected Municipalities. The end result is that the Elected Municipalities continue to outperform the other group of municipalities, with 2.2 percentage points (52.8 vs 50.6). Scores over the period 2017-2022 improved for all three capitals in a similar way. Largest improvements occurred this year for the economic capital (4.7-5.2 percentage points), with the total group improving a bit more than the elected group.

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

3.3 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 (%points) of stocks between 2017 and 2022 for the group of elected Municipalities and all Dutch municipalities

Sustainability stock	Difference 2017-2022 of 107 Elected Municipalities	Difference 2017-2022 of all 344 municipalities
Socio-cultural		
Arts & culture	0.6	0.5
Economic participation	1.3	1.5
Education	-1.6	-2.0
Health	1.9	0.6
Housing	2.1	5.4
Lifestyle and Health	2.8	2.0
Political Participation	4.4	3.2
Residential environment	-2.7	-1.8
Safety	4.0	3.9
Social participation	-1.9	-2.3
Ecological		
Air	2.2	1.9
Annoyance and External safety	-1.2	-1.0
Energy	8.3	8.3
Nature & landscape	0.0	0.0
Soil	0.4	-1.2
Resources & waste	1.0	0.9
Water	5.3	4.5
Economic		
Competitiveness	7.0	7.7
Infrastructure & mobility	5.8	5.5
Knowledge	3.8	4.1
Labor	9.5	10.1
Spatial location conditions	-2.6	-1.4

Socio-cultural stocks

Among socio-cultural stocks, differences between both groups of municipalities were small. Most striking is the improvement in 'Housing', 'Political participation' and 'Safety' in both groups of municipalities. The declines in 'Health', 'Social participation' and 'Education' are not what can be expected in thriving times.

Ecological stocks

Also here, the group of Elected Municipalities shows a similar pattern as the total group of municipalities, with biggest improvements over the period 2017-2022 for the stocks of 'Energy' and 'Resources and Waste'. These are the two priorities of the

national government: climate change and circular economy. The decline of ‘Annoyance and external safety’ in both groups is a point of interest.

Economic stocks

Also here, the group of Elected Municipalities shows a similar pattern as the total group of municipalities, with biggest improvements over the period 2017-2022 for the stock of ‘Labor’ and ‘Competitiveness’. ‘Spatial location conditions’ is the only stock within the economic capital that decreased, for both groups.

4 Elected Municipalities showing largest improvement or reduction in sustainability score in 2017-2022 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 2017: 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 2017 have in this assessment been corrected for additional indicators used in 2022 to make them comparable with the 2022 data. The results are therefore sometimes differing from those given in the 2017 Framework document.

4.1 Elected agricultural municipalities

Table 4.1 presents the 15 best-in-class municipalities of the agricultural type, their reconstructed 2017 scores and the 2022 scores for total sustainability. All municipalities perform better over the last 4 years. Overall, the score of the group of elected agricultural municipalities improved 2.9 percentage points since 2017.

Table 4.1 Improvements and reductions in total sustainability scores of elected agricultural municipalities over 2017-2022

Agricultural municipality	Sustainability score 2017	Sustainability score 2022	Difference
Wierden	49.9	54.3	4.4
Dinkelland	51.4	55.7	4.3
Renswoude	48.8	52.8	4.0
Aalten	48.6	52.5	3.9
Bronckhorst	51.8	55.2	3.4
Oudewater	46.4	49.8	3.4
Voorst	50.4	53.7	3.3
Bunnik	49.8	53.0	3.2
Montfoort	48.3	51.3	3.0
Dalfsen	52.3	54.8	2.5
Olst-Wijhe	50.0	52.2	2.2
Zoeterwoude	50.5	52.3	1.8
Boekel	48.3	49.8	1.5
Midden-Delfland	53.8	55.1	1.3

Eijsden-Margraten	49.3	50.2	0.9
Average	50.0	52.8	2.9

4.2 Elected center municipalities

As table 4.2 shows, all 15 elected municipalities improved their total sustainability score over the last years. Most improved are Eindhoven and Ede.

Table 4.2 Improvements in total sustainability scores of elected center municipalities over 2017-2022

Center municipality	Sustainability score 2017	Sustainability score 2022	Difference
Eindhoven	49.5	53.7	4.2
Ede	49.8	53.8	4.0
Utrecht	51.0	54.5	3.5
Leiden	50.4	53.2	2.8
Haarlem	49.1	51.8	2.7
Apeldoorn	51.0	53.5	2.5
Hilversum	49.2	51.5	2.3
Delft	51.9	54.1	2.2
Castricum	52.2	54.2	2.0
Groningen	51.1	53.0	1.9
Middelburg	47.6	49.4	1.8
Katwijk	51.4	53.1	1.7
Westland	48.8	50.3	1.5
Huizen	50.3	51.7	1.4
Gooise Meren	50.9	51.4	0.5
Average	50.3	52.6	2.3

4.3 Elected green municipalities

Elected green municipalities improved on average 3.2 percentage points last five years. Leusden improved the most with 4.9 percentage points, followed by Noordwijk with 4.7 percentage points.

Table 4.3 Improvements and reductions in total sustainability scores of elected green municipalities over 2017-2022

Green municipality	Sustainability score 2017	Sustainability score 2022	Difference
Leusden	51.3	56.2	4.9
Noordwijk	51.2	55.9	4.7
Baarn	49.1	53.7	4.6

Utrechtse Heuvelrug	47.8	52.1	4.3
Bloemendaal	51.0	55.3	4.3
Heeze-Leende	52.5	56.5	4.0
Mook en Middelaar	51.5	55.2	3.7
Bergen (NH.)	49.5	52.3	2.8
Rozendaal	51.1	53.8	2.7
Ermelo	51.2	53.6	2.4
Waalre	53.6	55.9	2.3
Nunspeet	52.1	54.3	2.2
Laren	48.7	50.7	2.0
Putten	50.3	51.7	1.4
Wassenaar	51.4	52.8	1.4
Average	50.8	54.0	3.2

4.4 Elected growth municipalities

The elected growth municipalities showed an improvement of 2.4 percentage points over the last years. All municipalities improved their score, except from Kapelle which slightly decreased in score. Highest improvement was found at Woudenberg.

Table 4.4 Improvements and reductions in total sustainability scores of elected growth municipalities over 2017-2022

Growth municipality	Sustainability score 2017	Sustainability score 2022	Difference
Woudenberg	49.1	54.3	5.2
Renswoude	48.8	52.8	4.0
Oegstgeest	51.6	55.3	3.7
Wageningen	52.9	56.5	3.6
Houten	52.5	55.9	3.4
Bunnik	49.8	53.0	3.2
Nijkerk	50.4	53.4	3.0
Dalfsen	52.3	54.8	2.5
Voorschoten	52.5	54.5	2.0
Putten	50.3	51.7	1.4
Midden-Delfland	53.8	55.1	1.3
Kampen	50.9	51.9	1.0
Scherpenzeel	49.8	50.5	0.7
Blaricum	52.9	53.3	0.4
Kapelle	49.2	49.1	-0.1
Average	51.1	53.5	2.4

4.5 Elected historic municipalities

Vlieland improved their sustainability scores the most since 2017, with 4.5 percentage points. The average score shows an improvement of 2.6 percentage points, as presented in Table 4.5.

Table 4.5 Improvements and reductions in total sustainability scores of elected historic municipalities over 2017-2022

Historic municipality	Sustainability score 2017	Sustainability score 2022	Difference
Vlieland	51.7	56.2	4.5
Lopik	48.8	52.8	4.0
Utrecht	51.0	54.5	3.5
Bronckhorst	51.8	55.2	3.4
Oudewater	46.4	49.8	3.4
Schiermonnikoog	48.5	51.9	3.4
Ameland	50.7	53.7	3.0
Staphorst	51.6	54.3	2.7
Delft	51.9	54.1	2.2
Middelburg	47.6	49.4	1.8
Kampen	50.9	51.9	1.0
Eijsden-Margraten	49.3	50.2	0.9
Waterland	50.0	50.6	0.6
Average	50.0	52.7	2.6

4.6 Elected mid-sized municipalities

Table 4.6 shows that mid-sized municipalities improved their sustainability score on average with 2.4 percentage points the last five years. Veenendaal improved its score most.

Table 4.6 Improvements and reductions in total sustainability scores of elected mid-sized municipalities over 2017-2022

Mid-sized municipality	Sustainability score 2017	Sustainability score 2022	Difference
Veenendaal	47.4	51.6	4.2
Barneveld	50.2	53.6	3.4
Woerden	51.0	54.4	3.4
Meierijstad	47.5	50.8	3.3
Zeist	47.9	51.0	3.1
Lansingerland	47.1	50.1	3.0
Pijnacker-Nootdorp	50.3	53.0	2.7

Stichtse Vecht	48.4	50.9	2.5
Krimpenerwaard	50.1	52.6	2.5
Hilversum	49.2	51.5	2.3
Leidschendam-Voorburg	47.4	49.3	1.9
Katwijk	51.4	53.1	1.7
Amstelveen	51.3	52.5	1.2
Kampen	50.9	51.9	1.0
Gooise Meren	50.9	51.4	0.5
Average	49.4	51.8	2.4

4.7 Elected New Town municipalities

Elected New Town municipalities improved their score on average with 2.5 percentage points (see table 4.7). Woudenberg was on top of the list of improvement. Oostzaan slightly decreased in score, with 0.7 percentage points.

Table 4.7 Improvements and reductions in total sustainability scores of elected New Town municipalities over 2017-2022

New Town municipality	Sustainability score 2017	Sustainability score 2022	Difference
Woudenberg	49.1	54.3	5.2
Renswoude	48.8	52.8	4.0
Oegstgeest	51.6	55.3	3.7
Best	49.7	53.4	3.7
Teylingen	52.4	55.9	3.5
Houten	52.5	55.9	3.4
Nijkerk	50.4	53.4	3.0
Nuenen, Gerwen en Nederwetten	52.1	54.6	2.5
Wijk bij Duurstede	50.6	52.8	2.2
Heumen	51.7	53.7	2.0
Boekel	48.3	49.8	1.5
Midden-Delfland	53.8	55.1	1.3
Uitgeest	47.9	48.2	0.3
Oostzaan	51.4	50.7	-0.7
Average	50.7	53.3	2.5

4.8 Elected old industrial municipalities

Elected old industrial municipalities scored on average 2.7 percentage points higher over the reporting period, as shown in Table 4.8. Culemborg has improved the most in the last five years, followed by Wierden.

Table 4.8 Improvements and reductions in total sustainability scores of elected old industrial municipalities over 2017-2022

Old industrial municipality	Sustainability score 2017	Sustainability score 2022	Difference
Culemborg	50.0	54.6	4.6
Wierden	49.9	54.3	4.4
Hattem	50.8	55.0	4.2
Rijssen-Holten	50.3	54.2	3.9
Best	49.7	53.4	3.7
Voerendaal	46.6	49.9	3.3
Hellendoorn	49.6	52.7	3.1
Nuenen, Gerwen en Nederwetten	52.1	54.6	2.5
Haaksbergen	51.9	54.4	2.5
Waalre	53.6	55.9	2.3
Bladel	50.7	52.9	2.2
Putten	50.3	51.7	1.4
Reusel-De Mierden	51.5	52.4	0.9
Oostzaan	51.4	50.7	-0.7
Average	50.6	53.3	2.7

4.9 Elected residential municipalities

Residential municipalities are a well performing elected group of municipalities when comparing the scores in 2017 with those of 2022, resulting in an average increased score of 2.3 percentage points (Table 4.9).

Table 4.9 Improvements and reductions in total sustainability scores of elected old industrial municipalities over 2017-2022

Residential municipality	Sustainability score 2017	Sustainability score 2022	Difference
Wierden	49.9	54.3	4.4
Bloemendaal	51.0	55.3	4.3
Buren	47.4	51.6	4.2
Rozendaal	51.1	53.8	2.7
Sint-Michielsgestel	49.3	51.7	2.4
Waalre	53.6	55.9	2.3
Wijk bij Duurstede	50.6	52.8	2.2

Voorschoten	52.5	54.5	2.0
Castricum	52.2	54.2	2.0
Heumen	51.7	53.7	2.0
Eijsden-Margraten	49.3	50.2	0.9
Waterland	50.0	50.6	0.6
Uitgeest	47.9	48.2	0.3
Average	50.5	52.8	2.3

4.10 Elected shrink municipalities

As far as elected shrink municipalities are concerned, it is found that they improved 3.0 percentage points on average the last five years (see Table 4.10). Vlieland showed the biggest improvement, followed by Mook en Middelaar.

Table 4.10 Improvements and reductions in total sustainability scores of elected shrink municipalities over 2017-2022

Shrink municipality	Sustainability score 2017	Sustainability score 2022	Difference
Vlieland	51.7	56.2	4.5
Mook en Middelaar	51.5	55.2	3.7
Gulpen-Wittem	45.6	49.1	3.5
Bronckhorst	51.8	55.2	3.4
Voerendaal	46.6	49.9	3.3
Dantumadiel	47.5	50.8	3.3
Bergen (NH.)	49.5	52.3	2.8
Berkelland	50.4	53.0	2.6
Meerssen	47.7	50.1	2.4
Leudal	47.8	50.0	2.2
Valkenburg aan de Geul	47.8	49.6	1.8
Average	48.9	51.9	3.0

4.11 Elected small municipalities

The group of small municipalities has improved its score in 2022 by 2.7 percentage points compared to 2017. Woudenberg is here on top of the list of improvement.

Table 4.11 Improvements and reductions in total sustainability scores of elected old industrial municipalities over 2017-2022

Small municipality	Sustainability score 2017	Sustainability score 2022	Difference
Woudenberg	49.1	54.3	5.2

Bloemendaal	51.0	55.3	4.3
Hattem	50.8	55.0	4.2
Oegstgeest	51.6	55.3	3.7
Wageningen	52.9	56.5	3.6
Voorst	50.4	53.7	3.3
Bunnik	49.8	53.0	3.2
Montfoort	48.3	51.3	3.0
Rozendaal	51.1	53.8	2.7
Dalfsen	52.3	54.8	2.5
Vught	51.9	54.1	2.2
Veere	50.8	52.5	1.7
Midden-Delfland	53.8	55.1	1.3
Blaricum	52.9	53.3	0.4
Kapelle	49.2	49.1	-0.1
Average	51.1	53.8	2.7

4.12 Elected tourist municipalities

The sustainability score of the elected tourist type of municipalities has improved on average 2.5 percentage point, Oostzaan has decreased by 0.7 percentage point as can be seen in Table 4.12.

Table 4.12 Improvements and reductions in total sustainability scores of elected tourist municipalities over 2017-2022

Tourist municipality	Sustainability score 2017	Sustainability score 2022	Difference
Noordwijk	51.2	55.9	4.7
Vlieland	51.7	56.2	4.5
Bloemendaal	51.0	55.3	4.3
Mook en Middelaar	51.5	55.2	3.7
Schiermonnikoog	48.5	51.9	3.4
Voerendaal	46.6	49.9	3.3
Ameland	50.7	53.7	3.0
Bergen (NH.)	49.5	52.3	2.8
Terschelling	51.2	53.6	2.4
Hilvarenbeek	52.4	54.5	2.1
Veere	50.8	52.5	1.7
Wassenaar	51.4	52.8	1.4
Eijsden-Margraten	49.3	50.2	0.9
Waterland	50.0	50.6	0.6
Oostzaan	51.4	50.7	-0.7

Average	50.5	53.0	2.5

4.13 Elected work municipalities

Elected work municipalities performed on average well the past years (plus 3.1 percentage point), as illustrated in table 4.13. All municipalities improved its scores. Noordwijk improved its score the most (4.7 percentage points)

Table 4.13 Improvements and reductions in total sustainability scores of elected work municipalities over 2017-2022

Work municipality	Sustainability score 2017	Sustainability score 2022	Difference
Noordwijk	51.2	55.9	4.7
Amersfoort	49.7	54.4	4.7
Best	49.7	53.4	3.7
Wageningen	52.9	56.5	3.6
Utrecht	51.0	54.5	3.5
Barneveld	50.2	53.6	3.4
Zeist	47.9	51.0	3.1
Goes	49.2	52.1	2.9
Leiden	50.4	53.2	2.8
Son en Breugel	49.9	52.6	2.7
Apeldoorn	51.0	53.5	2.5
Ermelo	51.2	53.6	2.4
Westland	48.8	50.3	1.5
Amstelveen	51.3	52.5	1.2
Average	50.3	53.4	3.1

4.14 Elected 100,000plus municipalities

The, for Dutch dimensions, relative large elected 100,000plus cities show on average a high improvement (2.7 percentage points) in score from 2017 to 2022. Center- and work type of municipalities often show a similar development as the 100,000 plus cities. Amsterdam showed the smallest improved in sustainability score since 2017, Amersfoort improved the most.

Table 4.14 Improvements and reductions in total sustainability scores of elected 100,000plus over 2017-2022

100,000 plus municipality	Sustainability score 2017	Sustainability score 2022	Difference
Amersfoort	49.7	54.4	4.7

Eindhoven	49.5	53.7	4.2
Ede	49.8	53.8	4.0
Zwolle	51.2	55.0	3.8
Utrecht	51.0	54.5	3.5
Nijmegen	51.0	54.0	3.0
Leiden	50.4	53.2	2.8
Haarlem	49.1	51.8	2.7
Apeldoorn	51.0	53.5	2.5
Delft	51.9	54.1	2.2
Arnhem	49.0	51.0	2.0
Groningen	51.1	53.0	1.9
Breda	49.0	50.7	1.7
Westland	48.8	50.3	1.5
Amsterdam	49.8	50.3	0.5
Average	50.2	52.9	2.7

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. Highest improvements in percentage points were found in shrink municipalities. High sustainability scores were measured in green municipalities (54.0 percentage points) and lowest in mid-sized municipalities (51.8 percentage points).

Table 4.15 Changes in total sustainability scores of 14 types of elected municipalities over 2017-2022

Type of municipality	Sustainability score 2017	Sustainability score 2022	Difference
Small municipalities	51.1	53.8	2.7
Mid-sized municipalities	49.4	51.8	2.4
100.000plus municipality	50.2	52.9	2.7
Agricultural municipality	50.0	52.8	2.9
Center municipality	50.3	52.6	2.3
Former industrial municipality	50.6	53.3	2.7
Green municipality	50.8	54.0	3.2
Growth municipalities	51.1	53.5	2.4
Historic municipalities	50.0	52.7	2.6
New Town municipality	50.7	53.3	2.5
Residential municipalities	50.5	52.8	2.3
Shrink municipality	48.9	51.9	3.0

Touristic municipalities	50.5	53.0	2.5
Work municipality	50.3	53.4	3.1

5 Overall outcome for Elected Municipalities including their CO2-emission scores in 2017-2022

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 99% had similar or higher sustainability scores in 2022 compared to 2017 (see also Annex A).

Tables 5.1 and 5.2 show Elected Municipalities which changed their sustainability score most or least favorably. The best performing municipality in this respect among Elected Municipalities is Woudenberg, followed by Leusden, Amersfoort and Noordwijk.

Table 5.1 Ten Elected Municipalities improving sustainability score most in the period 2017-2022

Elected municipality	Typology 2017	Total score 2017	Total score 2022	Difference
Woudenberg	Large, Centre, Growth, Historic, Tourist, Work	49.1	54.3	5.2
Leusden	Large, Centre, Growth, Historic, Work	51.3	56.2	4.9
Amersfoort	Large, Centre, Growth, Historic	49.7	54.4	4.7
Noordwijk	Small, Growth, Work	51.2	55.9	4.7
Culemborg	Small, Green, Shrink, Tourist	50	54.6	4.6
Baarn	Small, Green, Tourist	49.1	53.7	4.6
Vlieland	Large, Centre, Growth, Work	51.7	56.2	4.5
Wierden	Medium, Growth, Tourist, Work	49.9	54.3	4.4
Utrechtse Heuvelrug	Medium	47.8	52.1	4.3
Dinkelland	Small, Former industrial	51.4	55.7	4.3

Table 5.2 Ten Elected Municipalities with the least progress on sustainability score in the period 2017-2022

Municipality	Typology 2017	Total score 2017	Total score 2022	Difference
Oostzaan	Small, Historic, Tourist	51.4	50.7	-0.7
Kapelle	Small, Historic, Residential, Tourist	49.2	49.1	-0.1
Uitgeest	Small, Agricultural	47.9	48.2	0.3
Blaricum	Small, Tourist	52.9	53.3	0.4
Gooise Meren	Small, Former industrial, New town, Tourist	50.9	51.4	0.5
Amsterdam	Small, Growth	49.8	50.3	0.5
Waterland	Small, Green, Residential	50	50.6	0.6
Scherpenzeel	Small, Agricultural	49.8	50.5	0.7
Reusel-De Mierden	Small, Agricultural, Residential	51.5	52.4	0.9
Eijsden-Margraten	Small, Agricultural, Residential, Shrink	49.3	50.2	0.9

Reductions in sustainability score among Elected Municipalities were only detected in Oostzaan and Kapelle.

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. In 2019, the climate agreement has been signed by the national government to ascertain that the ambitious goals are being reached.

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 (2019 and 2020). In this impact report, the reduction over the two most recent years has been used. This impact report uses a different approach than applied in the other impact reports for earlier bonds by showing the direct emission data instead of calculated sustainability score for CO2 emissions, to give a more detailed picture.

A closer look at the CO2 reductions shows that the group of Elected Municipalities realized a reduction in CO2 emissions; the CO2 emissions decreased with 13.5% from 2019-2020. 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	2010-2020	2019-2020
Elected (107)	-29,7%	-32,5%	-13,5%
Others	2,1%	-13,9%	-4,5%
Total (344)	-5,3%	-17,8%	-6,2%

The highest reduction was found in Amsterdam, Leiden, Haarlem and Wageningen. Table 5.4 shows that Ameland and Schiermonnikoog noted the largest increase in CO2 emissions. CO2 emission changes for all municipalities over the last year are given in Annex B.

Table 5.4 Ten Elected Municipalities with most and least reduction in CO2-emissions over 2019-2020

Elected Municipality	Emission change over measuring years 2019-2020		Elected municipality	Emission change over measuring years 2019-2020
Amsterdam	-36.4		Ameland	18.9
Leiden	-18.0		Schiermonnikoog	18.8
Haarlem	-17.2		Zoeterwoude	10.2
Wageningen	-15.7		Hilvarenbeek	10.0
Bergen (NH.)	-15.4		Oostzaan	8.0
Wassenaar	-15.2		Scherpenzeel	8.0
Breda	-15.0		Rozendaal	6.7
Amstelveen	-14.7		Olst-Wijhe	5.0
Leidschendam-Voorburg	-14.7		Buren	4.2
Rijssen-Holten	-14.3		Dantumadiel	4.1

6 Discussion and overview of outcome of assessment period 2017-2022

The end result is that the Elected Municipalities continued to outperform the other group of municipalities with 2.2 percentage points (52.8 vs 50.6). Scores over the period 2017-2022 improved for all three capitals in a similar way. Largest improvements occurred this year for the economic capital (4.7-5.2 percentage points), while those for the socio-cultural and ecological capitals were relatively smaller.

Among Elected Municipalities 99% had similar or higher sustainability scores in 2022 compared to 2017. 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 Woudenberg followed by Leusden improved the most. Reductions in sustainability score among Elected Municipalities were only detected in Kapelle and Oostzaan.

A closer look at the CO2 reductions shows that the group of Elected Municipalities realized a reduction in CO2 emissions; the CO2 emissions decreased with 13.5% from 2019-2020. The outcome of this analysis is shown in table 5.3. The highest reduction was found in Amsterdam, Leiden, Haarlem and Wageningen. Table 5.4 shows that Ameland and Schiermonnikoog noted the largest increase in CO2 emissions.

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 2017 and 2022 for all 107 Elected Municipalities

Municipality	Total sustainability score 2017	Total sustainability score 2022	Difference 2017-2022
Woudenberg	49.1	54.3	5.2
Leusden	51.3	56.2	4.9
Amersfoort	49.7	54.4	4.7
Noordwijk	51.2	55.9	4.7
Culemborg	50	54.6	4.6
Baarn	49.1	53.7	4.6
Vlieland	51.7	56.2	4.5
Wierden	49.9	54.3	4.4
Utrechtse Heuvelrug	47.8	52.1	4.3
Dinkelland	51.4	55.7	4.3
Bloemendaal	51	55.3	4.3
Buren	47.4	51.6	4.2
Hattem	50.8	55	4.2
Veenendaal	47.4	51.6	4.2
Eindhoven	49.5	53.7	4.2
Ede	49.8	53.8	4
Lopik	48.8	52.8	4
Renswoude	48.8	52.8	4
Heeze-Leende	52.5	56.5	4
Rijssen-Holten	50.3	54.2	3.9
Aalten	48.6	52.5	3.9
Zwolle	51.2	55	3.8
Mook en Middelaar	51.5	55.2	3.7
Oegstgeest	51.6	55.3	3.7
Best	49.7	53.4	3.7
Wageningen	52.9	56.5	3.6
Utrecht	51	54.5	3.5
Teylingen	52.4	55.9	3.5
Gulpen-Wittem	45.6	49.1	3.5
Bronckhorst	51.8	55.2	3.4
Schiermonnikoog	48.5	51.9	3.4
Barneveld	50.2	53.6	3.4
Houten	52.5	55.9	3.4
Oudewater	46.4	49.8	3.4
Woerden	51	54.4	3.4

Voorst	50.4	53.7	3.3
Voerendaal	46.6	49.9	3.3
Dantumadiel	47.5	50.8	3.3
Meierijstad	47.5	50.8	3.3
Bunnik	49.8	53	3.2
Hellendoorn	49.6	52.7	3.1
Zeist	47.9	51	3.1
Ameland	50.7	53.7	3
Nijkerk	50.4	53.4	3
Nijmegen	51	54	3
Montfoort	48.3	51.3	3
Lansingerland	47.1	50.1	3
Goes	49.2	52.1	2.9
Leiden	50.4	53.2	2.8
Bergen (NH.)	49.5	52.3	2.8
Son en Breugel	49.9	52.6	2.7
Pijnacker-Nootdorp	50.3	53	2.7
Staphorst	51.6	54.3	2.7
Rozendaal	51.1	53.8	2.7
Haarlem	49.1	51.8	2.7
Berkelland	50.4	53	2.6
Dalfsen	52.3	54.8	2.5
Haaksbergen	51.9	54.4	2.5
Apeldoorn	51	53.5	2.5
Nuenen, Gerwen en Nederwetten	52.1	54.6	2.5
Stichtse Vecht	48.4	50.9	2.5
Krimpenerwaard	50.1	52.6	2.5
Sint-Michielsgestel	49.3	51.7	2.4
Terschelling	51.2	53.6	2.4
Ermelo	51.2	53.6	2.4
Meerssen	47.7	50.1	2.4
Hilversum	49.2	51.5	2.3
Waalre	53.6	55.9	2.3
Delft	51.9	54.1	2.2
Vught	51.9	54.1	2.2
Leudal	47.8	50	2.2
Olst-Wijhe	50	52.2	2.2
Nunspeet	52.1	54.3	2.2
Wijk bij Duurstede	50.6	52.8	2.2
Bladel	50.7	52.9	2.2
Hilvarenbeek	52.4	54.5	2.1
Arnhem	49	51	2

Heumen	51.7	53.7	2
Castricum	52.2	54.2	2
Laren	48.7	50.7	2
Voorschoten	52.5	54.5	2
Groningen	51.1	53	1.9
Leidschendam-Voorburg	47.4	49.3	1.9
Valkenburg aan de Geul	47.8	49.6	1.8
Zoeterwoude	50.5	52.3	1.8
Middelburg	47.6	49.4	1.8
Katwijk	51.4	53.1	1.7
Veere	50.8	52.5	1.7
Breda	49	50.7	1.7
Boekel	48.3	49.8	1.5
Westland	48.8	50.3	1.5
Putten	50.3	51.7	1.4
Huizen	50.3	51.7	1.4
Wassenaar	51.4	52.8	1.4
Midden-Delfland	53.8	55.1	1.3
Amstelveen	51.3	52.5	1.2
Kampen	50.9	51.9	1
Eijsden-Margraten	49.3	50.2	0.9
Reusel-De Mierden	51.5	52.4	0.9
Scherpenzeel	49.8	50.5	0.7
Waterland	50	50.6	0.6
Amsterdam	49.8	50.3	0.5
Gooise Meren	50.9	51.4	0.5
Blaricum	52.9	53.3	0.4
Uitgeest	47.9	48.2	0.3
Kapelle	49.2	49.1	-0.1
Oostzaan	51.4	50.7	-0.7

Annex B: Overview of the changes in CO2-emissions in 2019-2020 for all Elected Municipalities

Elected municipality	Typology	% Difference 2018-2019
Amsterdam	Large, Centre, Growth, Historic, Tourist, Work	-36.4
Leiden	Large, Centre, Growth, Historic, Work	-18.0
Haarlem	Large, Centre, Growth, Historic	-17.2
Wageningen	Small, Growth, Work	-15.7
Bergen (NH.)	Small, Green, Shrink, Tourist	-15.4
Wassenaar	Small, Green, Tourist	-15.2
Breda	Large, Centre, Growth, Work	-15.0
Amstelveen	Medium, Growth, Tourist, Work	-14.7
Leidschendam-Voorburg	Medium	-14.7
Rijssen-Holten	Small, Former industrial	-14.3
Hilversum	Medium, Centre, Green, Growth, Work	-14.3
Baarn	Small, Green	-14.0
Zeist	Medium, Green, Work	-13.7
Nijmegen	Large, Centre, Growth, Tourist, Work	-13.2
Woerden	Medium, Agricultural, Growth, New town	-12.2
Utrechtse Heuvelrug	Small, Green	-11.9
Putten	Small, Former industrial, Green, Growth	-11.4
Voorschoten	Small, Growth, Residential	-11.2
Groningen	Large, Centre, Growth, Tourist, Work	-10.9
Amersfoort	Large, Growth, New town, Work	-10.5
Veenendaal	Medium, Former industrial, New town	-10.3
Katwijk	Medium, Centre, Growth	-10.1
Valkenburg aan de Geul	Small, Shrink, Tourist	-9.9
Woudenberg	Small, Growth, New town	-9.7
Huizen	Small, Centre, Residential	-9.5
Noordwijk	Small, Green, Tourist, Work	-9.4
Wijk bij Duurstede	Small, New town, Residential	-8.8
Zwolle	Large, Centre, Growth, New town, Work	-8.8
Nuenen, Gerwen en Nederwetten	Small, Former industrial, New town	-8.5
Eindhoven	Large, Centre, Former industrial, Growth, Work	-8.4
Arnhem	Large, Centre, Green, Growth, Tourist, Work	-8.3
Castricum	Small, Centre, Residential	-8.3
Leusden	Small, Green	-7.9
Ede	Large, Centre, Green, Growth, New town	-7.6
Apeldoorn	Large, Centre, Green, Work	-7.3
Barneveld	Medium, Green, Growth, New town, Work	-7.3

Stichtse Vecht	Medium	-7.2
Delft	Large, Centre, Growth, Historic	-7.0
Culemborg	Small, Former industrial, New town	-6.9
Nunspeet	Small, Green	-6.6
Voerendaal	Small, Agricultural, Former industrial, Residential, Shrink, Tourist	-6.1
Waterland	Small, Historic, Residential, Tourist	-5.9
Meerssen	Small, Former industrial, Residential, Shrink, Tourist	-5.9
Middelburg	Small, Centre, Historic, Tourist	-5.9
Hellendoorn	Small, Former industrial	-5.9
Teylingen	Small, New town	-5.8
Dinkelland	Small, Agricultural	-5.7
Ermelo	Small, Green, Work	-5.6
Vught	Small	-5.5
Aalten	Small, Agricultural	-5.1
Eijsden-Margraten	Small, Agricultural, Historic, Residential, Tourist	-5.0
Heeze-Leende	Small, Green	-4.7
Leudal	Small, Centre, Shrink, Tourist	-4.5
Terschelling	Small, Tourist	-4.4
Waalre	Small, Former industrial, Green, Residential	-4.4
Son en Breugel	Small, Growth, Work	-4.3
Gulpen-Wittem	Small, Agricultural, Historic, Residential, Shrink, Tourist	-4.3
Montfoort	Small, Agricultural	-4.2
Westland	Large, Centre, Growth, New town, Work	-4.2
Best	Small, Former industrial, New town, Work	-4.1
Bladel	Small, Former industrial, Growth	-4.1
Uitgeest	Small, Growth, New town, Residential	-4.0
Kampen	Medium, Growth, Historic	-3.9
Meierijstad	Medium, Work	-3.8
Oegstgeest	Small, Growth, New town	-3.7
Bunnik	Small, Agricultural, Growth	-3.6
Utrecht	Large, Centre, Growth, Historic, Tourist, Work	-3.2
Goes	Small, Work	-3.1
Bloemendaal	Small, Green, Residential, Tourist	-2.9
Voorst	Small, Agricultural	-2.6
Wierden	Small, Agricultural, Former industrial, Residential	-2.5
Laren	Small, Green	-2.4
Vlieland	Small, Historic, Shrink, Tourist	-2.4
Renswoude	Small, Agricultural, Growth, New town	-2.3
Oudewater	Small, Agricultural, Historic	-2.0
Lopik	Small, Agricultural, Historic	-1.8
Nijkerk	Small, Growth, New town	-1.6

Veere	Small, Tourist	-1.5
Heumen	Small, New town, Residential	-1.4
Staphorst	Small, Agricultural, Historic	-1.4
Dalfsen	Small, Agricultural, Growth	-1.3
Boekel	Small, Agricultural, Growth, New town	-1.2
Pijnacker-Nootdorp	Medium, Growth, New town, Residential	-1.2
Lansingerland	Medium, Growth, New town	-1.1
Gooise Meren	Medium, Centre	-1.1
Midden-Delfland	Small, Agricultural, Growth, New town	-1.0
Houten	Small, Growth, New town	-1.0
Bronckhorst	Small, Agricultural, Historic, Shrink	-0.6
Berkelland	Small, Agricultural, Shrink	-0.5
Sint-Michielsgestel	Small, Residential	0.1
Krimpenerwaard	Medium, Agricultural	0.2
Blaricum	Small, Growth	0.5
Kapelle	Small, Growth	1.9
Haaksbergen	Small, Former industrial	1.9
Mook en Middelaar	Small, Green, Residential, Shrink, Tourist	2.6
Reusel-De Mierden	Small, Former industrial, Residential	3.0
Hattem	Small, Former industrial	3.2
Dantumadiel	Small, Agricultural, Residential, Shrink	4.1
Buren	Small, Agricultural, Residential	4.2
Olst-Wijhe	Small, Agricultural	5.0
Rozendaal	Small, Green, Residential	6.7
Scherpenzeel	Small, Growth	8.0
Oostzaan	Small, Former industrial, New town, Tourist	8.0
Hilvarenbeek	Small, Tourist	10.0
Zoeterwoude	Small, Agricultural	10.2
Schiermonnikoog	Small, Historic, Residential, Tourist	18.8
Ameland	Small, Historic, Tourist	18.9

(Source: www.emissieregistratie.nl)

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About Het PON & Telos

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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.

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