3rd Performance Report of Elected Dutch Municipalities of BNG Bank Sustainability Bond of November 2017

telos brabants centrum voor duurzame ontwikkeling

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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 Telos -Tilburg University- 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 110 Elected Municipalities compared to the total group of 355 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 third impact report of the 2017 Sustainability Bond, covering the years 2017-2020.

The end result is that the Elected Municipalities continued to outperform the other group of municipalities with 2.1 percentage points (53.3 vs 51.2). Scores over the period 2017-2020 improved for all three capitals in a similar way. Largest improvements occurred this year for the economic capital (3.7-4.3 percentage points), while those for the ecological capital were relatively small (0.9-0.8%). The socio-cultural capital improved in both groups 1.5-1.7 percentage points.

Table S.1 Sustainability scores of 110 elected municipalities and of the total group of 355 Dutch municipalities in 2020 compared to 2017

Sustainability capital	Elected 2017	Total 2017	Elected 2020	Total 2020	Elected: Difference 2017-2020	Total: Difference 2017-2020
Total	51.3	49.0	53.3	51.2	2.0	2.2
Socio-cultural	51.5	48.6	53.0	50.3	1.5	1.7
Ecologic	52.5	50.7	53.4	51.5	0.9	0.8
Economic	49.9	47.7	53.6	52.0	3.7	4.3

Among Elected Municipalities 96% had similar or higher sustainability scores in 2020 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 Dinkelland improved most.
The largest reduction in sustainability score occurred in Amsterdam, followed by Amstelveen, Waterland and Zoeterwoude.

The highest reduction was found in Ameland, Barneveld and Reusel-de Mierden. Table 5.4 shows that Hilvarenbeek and Berkelland noted the largest increase in CO2 emissions.

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1 Introduction

At the request of BNG Bank, Telos -Tilburg University-, has provided a Framework document to BNG Bank[1] 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. 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[2]. 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 then 355 Dutch municipalities. The update will give insight in the changes in sustainability scores of the group of 110 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 2018-2024 and report on the annual changes in scores of the Elected Municipalities. This is the third of such reports on the 2017 bond covering the period 2017-2020. It describes how the performance is assessed, the general outcome of the comparison over the years 2017-2020, including the impact on CO2-emissions.

[1] https://www.bngbank.com/Documents/Investors/Sustainability%20Framework%202017.pdf
[2] 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 2020 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 Telos, as described in the National Monitor of 2017[3], 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 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.

[3] 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. Similar as in 2019, there are only 355 municipalities in 2020. This influenced the selection of 115 municipalities for the bond of 2017 as well. The municipalities of Schinnen, Winsum, Strijen, Geldermalsen, and Zuidhorn 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 110 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 140 indicators now compared to 132 last year and 109 in 2017. Such changes had to be included in the comparison between 2020 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 Framework report for the 2020 BNG Bank Sustainability bond[4], for the details of the amendments made in the calculation of the sustainability scores and how comparability between the years 2020 and 2017 was ascertained.

This assessment includes:

1. A comparison of sustainability scores of Elected Municipalities with the total group of Dutch municipalities for 2020 and 2017.
2. A comparison of sustainability scores for Elected Municipalities between 2020 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 2017-2020 will be discussed.

[4] Mulder, R., Paenen, S., Bijster, F., & Dagevos, J. (2020). BNG Bank sustainability bond for Dutch best-in-class municipalities. document nr 205275, October, Het PON & Telos, www.telos.nl

3 Outcome of updating exercise and comparison of 2020 and 2017 results

In October 2020, Telos has completed its National Monitor Sustainable Municipalities 2020. The major outcome is shown in table 3.1:

Table 3.1 Sustainability performance of the total group of Dutch municipalities in 2017-2020

Sustainability capital	2017	2018	2019	2020
Total	49.02	50.05	50.83	51.25
Socio-cultural	48.59	49.68	50.13	50.27
Ecological	50.74	51.11	51.28	51.50
Economic	47.73	49.36	51.08	51.97

Last year the average overall sustainability score improved from 50.83 till 51.25%. This was due to improvements of all three capitals. The ecological capital improved only marginally the past year from 51.28 till 51.50. The socio-cultural capital also improved only marginally from 50.13 to 50.27%. And economic capital increased most from 51.08 till 51.97. These data show that the economic recession, still visible in early years, is clearly over. Due to the corona crisis we expect a decrease in the next years.

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	267 (77.7%)	79 (71.82%)
50,000-100,000	56 (15.8%)	16 (14.55%)
More than 100,000	32 (9.0%)	15 (13.63%)

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 2020 (percentage points)

Sustainability capital	Elected 2017	Total 2017	Elected 2020	Total 2020	Elected: Difference 2017-2020	Total: Difference 2017-2020
Total	51.3	49.0	53.3	51.2	2.0	2.2
Socio-cultural	51.5	48.6	53.0	50.3	1.5	1.7
Ecological	52.5	50.7	53.4	51.5	0.9	0.8
Economic	49.9	47.7	53.6	52.0	3.7	4.3

Table 3.3 gives a summary of the overall differences between 20175 and 2020 for the total group of Dutch municipalities and the group of Elected Municipalities. It shows that general trends are similar in both groups. Scores over the period 2017-2020 improved for all three capitals in a similar way. Largest improvements occurred this year for the economic capital (3.7-4.3 percentage points), while those for the ecological capital were relatively small (0.9-0.8%). The socio-cultural capital improved in both groups 1.5-1.7 percentage points.

The end result is that the Elected Municipalities continued to outperform the other group of municipalities with 2.1 percentage points (53.3 vs 51.2).

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 2020 for the group of elected Municipalities and all Dutch municipalities

Sustainability stock	Difference 2017-2020 of 110 Elected Municipalities	Difference 2017-2020 of all 355 municipalities
Socio-cultural		
Arts & culture	0.07	-0.03
Economic participation	3.45	4.15
Education	-1.65	-1.47
Health	-1.30	-1.00

Housing	4.13	5.01
Lifestyle and Health	3.10	3.03
Political Participation	2.38	1.87
Residential environment	-0.53	-0.29
Safety	2.84	2.53
Social participation	3.14	2.97
Ecological		
Air	0.51	0.40
Annoyance and External safety	-0.55	-0.40
Energy	4.57	4.53
Nature & landscape	0.00	0.00
Soil	-2.97	-3.37
Resources & waste	2.80	2.53
Water	1.75	1.58
Economic		
Competitiveness	6.23	6.36
Infrastructure & mobility	2.75	2.84
Knowledge	2.75	3.68
Labor	8.19	8.78
Spatial location conditions	-1.45	-0.46

Socio-cultural stocks

Among socio-cultural stocks, differences between both groups of municipalities were small. Most striking is the improvement in 'Housing', 'Economic Participation' and 'Lifestyle and Health in the both groups of municipalities. The decline in both groups of 'Health' and 'Education' is not what can be expected in a thriving time.

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 2017-2020 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 'Soil' 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 2017-2020 for the stock of 'labor'.

4 Elected Municipalities showing largest improvement or reduction in sustainability score in 2017-2020 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 2020 to make them comparable with the 2020 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 2020 scores for total sustainability. One municipalities was performing less over the past three years and fourteen better. Dinkelland was improving most in the period 2017-2020.

Overall, the score of the group of elected agricultural municipalities improved 2.4 percentage points since 2017.

Table 4.1 Improvements and reductions in total sustainability scores of elected agricultural municipalities over 2017-2020

Agricultural municipality	Sustainability score 2017	Sustainability score 2020	Difference
Dinkelland	51.5	55.8	4.3
Wierden	50.5	54.5	4.0
Bunnik	52.4	55.5	3.2
Oudewater	47.5	50.5	3.1
Montfoort	49.1	52.1	3.0
Aalten	51.1	54.0	3.0
Bronckhorst	51.5	54.3	2.7
Dalfsen	52.7	55.2	2.5
Midden-Delfland	54.1	56.3	2.2
Olst-Wijhe	51.1	53.1	2.0
Renswoude	49.5	51.5	2.0

Boekel	49.0	50.9	1.9
Voorst	52.6	54.3	1.7
Eijsden-Margraten	52.2	53.2	1.0
Zoeterwoude	50.7	50.5	-0.2
Average	51.0	53.5	2.4

Figure 4.1 Natuurgebied Bergvennen in de gemeente Dinkelland, Nederland (Photo: Wouter Hagens)

4.2 Elected center municipalities

As table 4.2 shows, all 15 elected municipalities improved their total sustainability score the last year. Most improved are Huizen and Castricum.

Table 4.2 Improvements in total sustainability scores of elected center municipalities over 2017-2020

Center municipality	Sustainability score 2017	Sustainability score 2020	Difference
Huizen	51.4	54.9	3.5
Castricum	52.5	55.6	3.1
Ede	51.5	54.4	2.8
Apeldoorn	51.4	54.2	2.8
Eindhoven	50.0	52.6	2.7
Delft	52.4	55.1	2.6
Westland	48.7	50.9	2.2
Middelburg (Z.)	49.0	51.2	2.2
Katwijk	51.2	52.9	1.7
Hilversum	51.9	53.6	1.7

Utrecht (gemeente)	52.9	54.4	1.6
Haarlem	50.8	52.1	1.2
Leiden	51.5	52.4	0.9
Gooise Meren	52.6	53.4	0.9
Groningen (gemeente)	53.2	53.8	0.6
Average	51.4	53.4	2.0

4.3 Elected green municipalities

Elected green municipalities improved on average 2.2 percentage points last three years. Putten improved the most with 3.6 percentage points followed by Leusden.

Table 4.3 Improvements and reductions in total sustainability scores of elected green municipalities over 2017-2020

Green municipality	Sustainability score 2017	Sustainability score 2020	Difference
Putten	52.4	56.0	3.6
Leusden	53.4	56.7	3.3
Noordwijk	51.8	55.0	3.3
Baarn	50.1	53.0	2.8
Heeze-Leende	52.6	55.4	2.8
Bloemendaal	55.3	58.1	2.7
Utrechtse Heuvelrug	50.7	53.1	2.5
Bergen (NH.)	52.2	54.5	2.4
Mook en Middelaar	53.4	55.7	2.3
Laren (NH.)	48.5	50.2	1.7
Nunspeet	53.6	55.0	1.4
Rozendaal	49.9	51.2	1.3
Wassenaar	52.0	53.1	1.1
Waalre	54.0	54.8	0.9
Ermelo	53.8	54.6	0.8
Average	52.2	54.4	2.2

Figure 4.2 Nieuwe Kerk (Neue Kirche) in Putten, Niederlande (Photo: Losch)

4.4 Elected growth municipalities

The elected growth municipalities showed an improvement of 2.5 percentage points over the last years. All municipalities improved their score. Highest improvement was found at Woudenberg.

Table 4.4 Improvements and reductions in total sustainability scores of elected growth municipalities over 2017-2020

Growth municipality	Sustainability score 2017	Sustainability score 2020	Difference
Woudenberg	50.3	55.3	5.1
Wageningen	54.1	58.0	3.9
Putten	52.4	56.0	3.6
Oegstgeest	52.6	55.9	3.3
Bunnik	52.4	55.5	3.2
Dalfsen	52.7	55.2	2.5
Scherpenzeel	47.0	49.3	2.3
Midden-Delfland	54.1	56.3	2.2
Kampen	51.6	53.8	2.2
Renswoude	49.5	51.5	2.0
Voorschoten	52.1	54.0	1.9
Houten	54.6	56.3	1.8
Kapelle	51.2	52.6	1.4
Nijkerk	52.3	53.1	0.8
Blaricum	54.4	55.1	0.7
Average	52.1	54.5	2.5

4.5 Elected historic municipalities

Weesp and Oudewater improved their sustainability scores the most since 2017, with more than 3.0 percentage points. The average score shows an improvement of 1.9 percentage points, as presented in Table 4.5.

Table 4.5 Improvements and reductions in total sustainability scores of elected historic municipalities over 2017-2020

Historic municipality	Sustainability score 2017	Sustainability score 2020	Difference
Weesp	48.9	52.2	3.3
Oudewater	47.5	50.5	3.1
Staphorst	52.0	54.8	2.8
Lopik	49.3	52.1	2.8
Bronckhorst	51.5	54.3	2.7
Delft	52.4	55.1	2.6
Kampen	51.6	53.8	2.2
Middelburg (Z.)	49.0	51.2	2.2
Utrecht (gemeente)	52.9	54.4	1.6
Eijsden-Margraten	52.2	53.2	1.0
Ameland	53.5	54.3	0.7
Vlieland	54.7	55.4	0.7
Schiermonnikoog	53.3	53.9	0.6
Waterland	51.9	51.6	-0.3
Average	51.5	53.3	1.9

4.6 Elected mid-sized municipalities

Table 4.6 shows that mid-sized municipalities improved their sustainability score on average with 1.5 percentage points the last three years. Kampen improved its score most.

Table 4.6 Improvements and reductions in total sustainability scores of elected mid-sized municipalities over 2017-2020

Mid-sized municipality	Sustainability score 2017	Sustainability score 2020	Difference
Kampen	51.6	53.8	2.2
Veenendaal	47.9	50.0	2.1
Woerden	52.1	54.1	2.0
Barneveld	51.9	53.9	1.9

Krimpenerwaard	51.5	53.5	1.9
Lansingerland	48.9	50.7	1.8
Pijnacker-Nootdorp	51.6	53.5	1.8
Katwijk	51.2	52.9	1.7
Hilversum	51.9	53.6	1.7
Meierijstad	49.2	50.4	1.1
Leidschendam-Voorburg	48.5	49.5	1.0
Zeist	49.6	50.5	1.0
Stichtse Vecht	49.8	50.7	0.9
Gooise Meren	52.6	53.4	0.9
Amstelveen	53.4	53.0	-0.4
Average	50.8	52.2	1.5

4.7 Elected New Town municipalities

Elected New Town municipalities improved their score on average with 2.2 percentage points (see table 4.7). Woudenberg was here on top of the list of improvement.

Table 4.7 Improvements and reductions in total sustainability scores of elected New Town municipalities over 2017-2020

New Town municipality	Sustainability score 2017	Sustainability score 2020	Difference
Woudenberg	50.3	55.3	5.1
Teylingen	51.8	55.3	3.5
Best	50.1	53.5	3.4
Oegstgeest	52.6	55.9	3.3
Langedijk	51.1	53.4	2.3
Midden-Delfland	54.1	56.3	2.2
Heumen	53.0	55.0	2.0
Renswoude	49.5	51.5	2.0
Boekel	49.0	50.9	1.9
Houten	54.6	56.3	1.8
Wijk bij Duurstede	52.7	54.4	1.7
Nuenen, Gerwen en Nederwetten	51.2	52.9	1.7
Uitgeest	47.5	48.5	1.0
Nijkerk	52.3	53.1	0.8
Oostzaan	51.3	51.9	0.6
Average	51.4	53.6	2.2

Figure 4.3 Woudenberg (Photo: Friesburg)

4.8 Elected old industrial municipalities

Elected old industrial municipalities scored on average 2.6 percentage points higher over the reporting period, as shown in Table 4.8. Rijssen-Holten has improved the most in the last three years.

Table 4.8 Improvements and reductions in total sustainability scores of elected old industrial municipalities over 2017-2020

Old industrial municipality	Sustainability score 2017	Sustainability score 2020	Difference
Rijssen-Holten	50.7	54.8	4.1
Wierden	50.5	54.5	4.0
Voerendaal	47.7	51.5	3.9
Putten	52.4	56.0	3.6
Culemborg	50.1	53.6	3.5
Best	50.1	53.5	3.4
Weesp	48.9	52.2	3.3
Bladel	52.2	54.9	2.7
Haaksbergen	52.2	54.9	2.6

Reusel-De Mierden	52.3	54.6	2.3
Hellendoorn	52.3	54.5	2.2
Nuenen, Gerwen en Nederwetten	51.2	52.9	1.7
Hattem	51.0	52.0	1.0
Waalre	54.0	54.8	0.9
Oostzaan	51.3	51.9	0.6
Average	51.1	53.8	2.6

4.9 Elected residential municipalities

Residential municipalities are a well performing elected group of municipalities when comparing the scores in 2017 with those of 2020, resulting in an average increased score of 1.9 percentage points (Table 4.9).

Table 4.9 Improvements and reductions in total sustainability scores of elected old industrial municipalities over 2017-2020

Residential municipality	Sustainability score 2017	Sustainability score 2020	Difference
Wierden	50.5	54.5	4.0
Castricum	52.5	55.6	3.1
Bloemendaal	55.3	58.1	2.7
Sint-Michielsgestel	51.7	54.2	2.5
Langedijk	51.1	53.4	2.3
Mook en Middelaar	53.4	55.7	2.3
Heumen	53.0	55.0	2.0
Voorschoten	52.1	54.0	1.9
Wijk bij Duurstede	52.7	54.4	1.7
Rozendaal	49.9	51.2	1.3
Eijsden-Margraten	52.2	53.2	1.0
Uitgeest	47.5	48.5	1.0
Waalre	54.0	54.8	0.9
Waterland	51.9	51.6	-0.3
Average	52.0	53.9	1.9

4.10 Elected shrink municipalities

As far as elected shrink municipalities are concerned, it is found that they improved 2.0 percentage points on average the last three years (see Table 4.10).

Table 4.10 Improvements and reductions in total sustainability scores of elected shrink municipalities over 2017-2020

Shrink municipality	Sustainability score 2017	Sustainability score 2020	Difference
Voerendaal	47.7	51.5	3.9
Meerssen	49.4	52.5	3.1
Bronckhorst	51.5	54.3	2.7
Berkelland	52.0	54.6	2.6
Bergen (NH.)	52.2	54.5	2.4
Leudal	49.2	51.5	2.3
Mook en Middelaar	53.4	55.7	2.3
Grave	49.7	51.3	1.5
Valkenburg aan de Geul	49.3	50.6	1.3
Gulpen-Wittem	49.5	50.4	0.9
Vlieland	54.7	55.4	0.7
Dantumadiel	49.3	49.9	0.6
Average	50.6	52.7	2.0

4.11 Elected small municipalities

The group of small municipalities has improved its score in 2020 by 2.3 percentage points. 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 2017-2020

Small municipality	Sustainability score 2017	Sustainability score 2020	Difference
Woudenberg	50.3	55.3	5.1
Wageningen	54.1	58.0	3.9
Oegstgeest	52.6	55.9	3.3
Bunnik	52.4	55.5	3.2
Montfoort	49.1	52.1	3.0
Bloemendaal	55.3	58.1	2.7
Dalfsen	52.7	55.2	2.5
Midden-Delfland	54.1	56.3	2.2
Vught	52.7	54.7	2.1

Voorst	52.6	54.3	1.7
Kapelle	51.2	52.6	1.4
Veere	52.0	53.4	1.3
Rozendaal	49.9	51.2	1.3
Hattem	51.0	52.0	1.0
Blaricum	54.4	55.1	0.7
Average	52.3	54.6	2.3

Figure 4.4 Little bridge, Wageningen (Photo: Pimvantend)

4.12 Elected tourist municipalities

The sustainability score of the elected tourist type of municipalities has improved on average 1.6 percentage point,see Table 4.12).

Table 4.12 Improvements and reductions in total sustainability scores of elected tourist municipalities over 2017-2020

Tourist municipality	Sustainability score 2017	Sustainability score 2020	Difference
Voerendaal	47.7	51.5	3.9
Noordwijk	51.8	55.0	3.3
Bloemendaal	55.3	58.1	2.7
Bergen (NH.)	52.2	54.5	2.4

Mook en Middelaar	53.4	55.7	2.3
Hilvarenbeek	53.4	55.2	1.8
Veere	52.0	53.4	1.3
Terschelling	53.7	55.0	1.3
Wassenaar	52.0	53.1	1.1
Eijsden-Margraten	52.2	53.2	1.0
Ameland	53.5	54.3	0.7
Vlieland	54.7	55.4	0.7
Oostzaan	51.3	51.9	0.6
Schiermonnikoog	53.3	53.9	0.6
Waterland	51.9	51.6	-0.3
Average	52.6	54.1	1.6

4.13 Elected work municipalities

Elected work municipalities performed on average well the past years (plus 1.9 percentage point), as illustrated in table 4.13. All municipalities improved its scores except for Amstelveen. Wageningen improved its score the most (3.9 percentage points)

Table 4.13 Improvements and reductions in total sustainability scores of elected work municipalities over 2017-2020

Work municipality	Sustainability score 2017	Sustainability score 2020	Difference
Wageningen	54.1	58.0	3.9
Best	50.1	53.5	3.4
Noordwijk	51.8	55.0	3.3
Apeldoorn	51.4	54.2	2.8
Amersfoort	50.4	52.8	2.4
Son en Breugel	49.5	51.8	2.3
Westland	48.7	50.9	2.2
Barneveld	51.9	53.9	1.9
Utrecht (gemeente)	52.9	54.4	1.6
Zeist	49.6	50.5	1.0
Leiden	51.5	52.4	0.9
Ermelo	53.8	54.6	0.8
Goes	51.4	51.6	0.1
Amstelveen	53.4	53.0	-0.4
Average	51.5	53.3	1.9

4.14 Elected 100,000plus municipalities

The, for Dutch dimensions, relative large elected 100,000plus cities show on average a high improvement (1.9 percentage points) in score from 2017 to 2020. Center- and work type of municipalities often show a similar development as the 100,000plus cities. One large municipalities showed a reduction in sustainability score since 2017; Amsterdam. Ede improved most.

Table 4.14 Improvements and reductions in total sustainability scores of elected 100,000plus over 2017-2020

100,000plus municipality	Sustainability score 2017	Sustainability score 2020	Difference
Ede	51.5	54.4	2.8
Apeldoorn	51.4	54.2	2.8
Zwolle	51.3	54.1	2.8
Eindhoven	50.0	52.6	2.7
Nijmegen	52.5	55.1	2.6
Delft	52.4	55.1	2.6
Amersfoort	50.4	52.8	2.4
Breda	48.3	50.7	2.4
Westland	48.7	50.9	2.2
Arnhem	51.5	53.4	1.9
Utrecht (gemeente)	52.9	54.4	1.6
Haarlem	50.8	52.1	1.2
Leiden	51.5	52.4	0.9
Groningen (gemeente)	53.2	53.8	0.6
Amsterdam	51.6	50.7	-0.9
Average	51.2	53.1	1.9

Figure 4.5 Grote Markt, Breda (Photo: G. Lanting)

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 former industrial municipalities. Highest sustainability scores were measured in small municipalities (54.6 percentage points) and lowest in mid-sized municipalities (52.2 percentage points).

Table 4.15 Changes in total sustainability scores of 14 types of elected municipalities over 2017-2020

Type of municipality	Sustainability score 2017	Sustainability score 2019	Difference
Small municipalities	52.3	54.6	2.3
Mid-sized municipalities	50.8	52.2	1.5
100.000plus municipality	51.2	53.1	1.9
Agricultural municipality	51.0	53.5	2.4
Center municipality	51.4	53.4	2.0
Former industrial municipality	51.1	53.8	2.6
Green municipality	52.2	54.4	2.2

Growth municipalities	52.1	54.5	2.5
Historic municipalities	51.5	53.3	1.9
New Town municipality	51.4	53.6	2.2
Residential municipalities	52.0	53.9	1.9
Shrink municipality	50.6	52.7	2.0
Touristic municipalities	52.6	54.1	1.6
Work municipality	51.5	53.3	1.9

5 Overall outcome for Elected Municipalities including their CO2-emission scores in 2017-2020

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 96% had similar or higher sustainability scores in 2020 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 Dinkelland.

Table 5.1 Ten Elected Municipalities improving sustainability score most in the period 2017-2020

Elected municipality	Typology 2017	Total score 2017	Total score 2020	Difference
Woudenberg	Small, Growth, New town	50.3	55.3	5.1
Dinkelland	Small, Agricultural	51.5	55.8	4.3
Rijssen-Holten	Small, Former industrial	50.7	54.8	4.1
Wierden	Small, Agricultural, Former industrial, Residential	50.5	54.5	4.0
Wageningen	Small, Growth, Work	54.1	58.0	3.9
Voerendaal	Small, Agricultural, Former industrial, Residential, Shrink, Tourist	47.7	51.5	3.9
Putten	Small, Former industrial, Green, Growth	52.4	56.0	3.6
Culemborg	Small, Former industrial, New town	50.1	53.6	3.5
Huizen	Small, Centre, Residential	51.4	54.9	3.5
Teylingen	Small, New town	51.8	55.3	3.5

Table 5.2 Ten Elected Municipalities with largest declining sustainability score in the period 2017-2020

Municipality	Typology 2017	Total score 2017	Total score 2020	Difference
Amsterdam	Large, Centre, Growth, Historic, Tourist, Work	51.6	50.7	-0.9
Amstelveen	Medium, Growth, Tourist, Work	53.4	53.0	-0.4
Waterland	Small, Historic, Residential, Tourist	51.9	51.6	-0.3
Zoeterwoude	Small, Agricultural	50.7	50.5	-0.2
Goes	Small, Work	51.4	51.6	0.1
Schiermonnikoog	Small, Historic, Residential, Tourist	53.3	53.9	0.6
Dantumadiel	Small, Agricultural, Residential, Shrink	49.3	49.9	0.6
Oostzaan	Small, Former industrial, New town, Tourist	51.3	51.9	0.6
Groningen (gemeente)	Large, Centre, Growth, Tourist, Work	53.2	53.8	0.6
Blaricum	Small, Growth	54.4	55.1	0.7

Reductions in sustainability score among Elected Municipalities were detected in Amsterdam, followed by Amstelveen, Waterland and Zoeterwoude.

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 (2017 and 2018). 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 did not realize a reduction in CO2 emissions; the CO2 emissions increased with 1.3 percentage points from 2017-2018. 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	1990-2018	2010-2018	2017-2018
Elected (110)	-14.92%	-18.44%	1.30%
Others	12.20%	-6.28%	-2.87%
Total (355)	5.83%	-8.84%	-2.11%

The highest reduction was found in Ameland, Barneveld and Reusel-de Mierden. Table 5.4 shows that Hilvarenbeek and Berkelland 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 2017-2018

Elected Municipality	Emission change over measuring years 2017-2018		Elected municipality	Emission change over measuring years 2017-2018
Ameland	-5.3		Hilvarenbeek	15.5
Barneveld	-3.2		Berkelland	15.1
Reusel-De Mierden	-2.6		Vlieland	11.4
Boekel	-2.6		Leiden	9.6
Scherpenzeel	-2.5		Hattem	5.4
Renswoude	-2.3		Son en Breugel	4.3
Stichtse Vecht	-2.2		Groningen (gemeente)	4.3
Oudewater	-1.8		Nunspeet	3.7
Olst-Wijhe	-1.8		Amsterdam	3.4
Dalfsen	-1.7		Terschelling	2.9

6 Discussion and overview of outcome of assessment period 2017-2020

The end result is that the Elected Municipalities continued to outperform the other group of municipalities with 2.1 percentage points (53.3 vs 51.2). Scores over the period 2017-2020 improved for all three capitals in a similar way. Largest improvements occurred this year for the economic capital (3.7-4.3 percentage points), while those for the ecological capital were relatively small (0.9-0.8%). The socio-cultural capital improved in both groups 1.5-1.7 percentage points.

Among Elected Municipalities 96% had similar or higher sustainability scores in 2020 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 Dinkelland improved the most.
The largest reduction in sustainability scores occurred in Amsterdam, followed by Amstelveen, Waterland and Zoeterwoude.

The highest reduction in CO2 emissions was found in Ameland, Barneveld and Reusel-de Mierden. Table 5.4 shows that Hilvarenbeek and Berkelland 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 2020 for all 110 Elected Municipalities

Municipality	Total sustainability score 2017	Total sustainability score 2020	Difference 2017-2020
Woudenberg	50.3	55.3	5.1
Dinkelland	51.5	55.8	4.3
Rijssen-Holten	50.7	54.8	4.1
Wierden	50.5	54.5	4.0
Wageningen	54.1	58.0	3.9
Voerendaal	47.7	51.5	3.9
Putten	52.4	56.0	3.6
Culemborg	50.1	53.6	3.5
Huizen	51.4	54.9	3.5
Teylingen	51.8	55.3	3.5
Best	50.1	53.5	3.4
Leusden	53.4	56.7	3.3
Weesp	48.9	52.2	3.3
Noordwijk	51.8	55.0	3.3
Oegstgeest	52.6	55.9	3.3
Bunnik	52.4	55.5	3.2
Meerssen	49.4	52.5	3.1
Castricum	52.5	55.6	3.1
Oudewater	47.5	50.5	3.1
Montfoort	49.1	52.1	3.0
Aalten	51.1	54.0	3.0
Baarn	50.1	53.0	2.8
Ede	51.5	54.4	2.8
Apeldoorn	51.4	54.2	2.8
Staphorst	52.0	54.8	2.8
Lopik	49.3	52.1	2.8
Heeze-Leende	52.6	55.4	2.8
Zwolle	51.3	54.1	2.8
Bloemendaal	55.3	58.1	2.7
Bladel	52.2	54.9	2.7
Bronckhorst	51.5	54.3	2.7
Eindhoven	50.0	52.6	2.7
Haaksbergen	52.2	54.9	2.6
Nijmegen	52.5	55.1	2.6
Delft	52.4	55.1	2.6
Berkelland	52.0	54.6	2.6

Sint-Michielsgestel	51.7	54.2	2.5
Dalfsen	52.7	55.2	2.5
Utrechtse Heuvelrug	50.7	53.1	2.5
Amersfoort	50.4	52.8	2.4
Breda	48.3	50.7	2.4
Bergen (NH.)	52.2	54.5	2.4
Leudal	49.2	51.5	2.3
Reusel-De Mierden	52.3	54.6	2.3
Langedijk	51.1	53.4	2.3
Scherpenzeel	47.0	49.3	2.3
Mook en Middelaar	53.4	55.7	2.3
Son en Breugel	49.5	51.8	2.3
Midden-Delfland	54.1	56.3	2.2
Westland	48.7	50.9	2.2
Kampen	51.6	53.8	2.2
Buren	49.6	51.8	2.2
Hellendoorn	52.3	54.5	2.2
Middelburg (Z.)	49.0	51.2	2.2
Veenendaal	47.9	50.0	2.1
Vught	52.7	54.7	2.1
Woerden	52.1	54.1	2.0
Heumen	53.0	55.0	2.0
Olst-Wijhe	51.1	53.1	2.0
Renswoude	49.5	51.5	2.0
Voorschoten	52.1	54.0	1.9
Barneveld	51.9	53.9	1.9
Krimpenerwaard	51.5	53.5	1.9
Boekel	49.0	50.9	1.9
Arnhem	51.5	53.4	1.9
Lansingerland	48.9	50.7	1.8
Pijnacker-Nootdorp	51.6	53.5	1.8
Hilvarenbeek	53.4	55.2	1.8
Houten	54.6	56.3	1.8
Katwijk	51.2	52.9	1.7
Wijk bij Duurstede	52.7	54.4	1.7
Laren (NH.)	48.5	50.2	1.7
Nuenen, Gerwen en Nederwetten	51.2	52.9	1.7
Voorst	52.6	54.3	1.7
Hilversum	51.9	53.6	1.7
Utrecht (gemeente)	52.9	54.4	1.6
Grave	49.7	51.3	1.5
Nunspeet	53.6	55.0	1.4

Kapelle	51.2	52.6	1.4
Veere	52.0	53.4	1.3
Valkenburg aan de Geul	49.3	50.6	1.3
Terschelling	53.7	55.0	1.3
Rozendaal	49.9	51.2	1.3
Haarlem	50.8	52.1	1.2
Wassenaar	52.0	53.1	1.1
Meierijstad	49.2	50.4	1.1
Eijsden-Margraten	52.2	53.2	1.0
Leidschendam-Voorburg	48.5	49.5	1.0
Uitgeest	47.5	48.5	1.0
Hattem	51.0	52.0	1.0
Zeist	49.6	50.5	1.0
Gulpen-Wittem	49.5	50.4	0.9
Leiden	51.5	52.4	0.9
Stichtse Vecht	49.8	50.7	0.9
Waalre	54.0	54.8	0.9
Gooise Meren	52.6	53.4	0.9
Ermelo	53.8	54.6	0.8
Nijkerk	52.3	53.1	0.8
Ameland	53.5	54.3	0.7
Vlieland	54.7	55.4	0.7
Blaricum	54.4	55.1	0.7
Groningen (gemeente)	53.2	53.8	0.6
Oostzaan	51.3	51.9	0.6
Dantumadiel	49.3	49.9	0.6
Schiermonnikoog	53.3	53.9	0.6
Goes	51.4	51.6	0.1
Zoeterwoude	50.7	50.5	-0.2
Waterland	51.9	51.6	-0.3
Amstelveen	53.4	53.0	-0.4
Amsterdam	51.6	50.7	-0.9

Annex B. Overview of the changes in CO2-emissions in 2017-2018 for all Elected Municipalities

Elected municipality	Typology	% Difference 2017-2018
Ameland	Small, Tourist	-5.3
Barneveld	Small, Agricultural, Growth, New town	-3.2
Reusel-De Mierden	Small, Growth	-2.6
Boekel	Small, Agricultural, Growth, New town	-2.6
Scherpenzeel	Medium, Green, Growth, New town, Work	-2.5
Renswoude	Small, Agricultural	-2.3
Stichtse Vecht	Medium, Agricultural, Growth, New town	-2.2
Oudewater	Large, Centre, Growth, Historic, Tourist, Work	-1.8
Olst-Wijhe	Small, Former industrial	-1.8
Dalfsen	Small, Agricultural, Historic	-1.7
Meierijstad	Small, New town, Residential	-1.6
Bladel	Small, Agricultural, Former industrial, Residential	-1.4
Weesp	Large, Centre, Growth, Historic	-1.3
Wijk bij Duurstede	Small, Growth, New town	-1.2
Hilversum	Small, Green, Shrink, Tourist	-1.1
Breda	Medium, Growth, New town	-1.1
Nuenen, Gerwen en Nederwetten	Small, Agricultural, Growth, New town	-1.0
Haarlem	Small, Work	-0.9
Langedijk	Small, Tourist	-0.8
Dantumadiel	Small, Agricultural, Growth	-0.8
Veenendaal	Large, Centre, Green, Work	-0.7
Houten	Small, Green, Tourist	-0.7
Middelburg (Z.)	Small, Growth, Work	-0.7
Aalten	Small, Centre, Historic, Tourist	-0.7
Best	Medium, Centre, Green, Growth, Work	-0.7
Ede	Small, Tourist	-0.7
Gulpen-Wittem	Large, Centre, Growth, Tourist, Work	-0.6
Valkenburg aan de Geul	Medium, Growth, New town, Residential	-0.6
Woudenberg	Medium, Work	-0.6
Leudal	Small, Former industrial	-0.5
Utrecht (gemeente)	Large, Centre, Green, Growth, New town	-0.5
Wierden	Small, Agricultural	-0.5
Heeze-Leende	Small, Former industrial, New town	-0.5
Huizen	Medium, Growth, Tourist, Work	-0.4
Zwolle	Small, Growth, Work	-0.4
Bronckhorst	Small, Growth	-0.4

Voorst	Medium	-0.3
Haaksbergen	Large, Centre, Growth, New town, Work	-0.3
Apeldoorn	Small, Agricultural, Residential	-0.3
Dinkelland	Small, Green	-0.3
Gooise Meren	Small, Agricultural, Historic, Shrink	-0.2
Goes	Small, Former industrial, Growth, Historic	-0.2
Rijssen-Holten	Small, New town, Residential	-0.1
Grave	Large, Centre, Growth, Historic, Tourist, Work	-0.1
Amstelveen	Medium, Growth, Historic	-0.1
Meerssen	Small, Green	-0.1
Veere	Large, Centre, Green, Growth, Tourist, Work	-0.1
Wageningen	Small, Agricultural, Former industrial, Residential, Shrink, Tourist	0.0
Buren	Small, Centre, Shrink, Tourist	0.0
Teylingen	Small, Former industrial, Residential	0.0
Leusden	Small, Agricultural, Historic, Residential, Shrink, Tourist	0.1
Bunnik	Medium, Green, Work	0.1
Kampen	Small, Historic, Residential, Tourist	0.1
Nijkerk	Small, Growth, New town, Residential	0.2
Eijsden-Margraten	Large, Centre, Growth, Work	0.2
Arnhem	Small, Historic, Residential, Tourist	0.2
Bergen (NH.)	Small, Former industrial, Green, Growth	0.2
Blaricum	Small, Historic, Tourist	0.2
Bloemendaal	Medium, Former industrial, New town	0.3
Castricum	Small, Agricultural, Historic	0.3
Voerendaal	Small, Growth	0.3
Baarn	Small	0.3
Voorschoten	Small, Residential, Shrink	0.4
Vught	Small, Shrink, Tourist	0.4
Staphorst	Small, Green	0.4
Oostzaan	Small, Agricultural	0.4
Rozendaal	Small, New town	0.4
Midden-Delfland	Small, Growth, New town	0.4
Heumen	Small, Former industrial, Residential, Shrink, Tourist	0.4
Sint-Michielsgestel	Medium, Centre	0.4
Waalre	Large, Centre, Former industrial, Growth, Work	0.4
Wassenaar	Small, Growth, New town	0.4
Laren (NH.)	Medium, Agricultural	0.5
Lopik	Large, Centre, Growth, New town, Work	0.5
Oegstgeest	Small, Growth, New town	0.5
Zeist	Small, Centre, Residential	0.5
Culemborg	Small, Agricultural, Historic, Residential, Tourist	0.5

Eindhoven	Small, Former industrial	0.6
Amersfoort	Small, Former industrial, Growth	0.6
Delft	Small, Growth, New town, Residential	0.6
Leidschendam-Voorburg	Small, Agricultural	0.7
Noordwijk	Small, Centre, Residential	0.7
Putten	Small, Growth, Residential	0.7
Utrechtse Heuvelrug	Large, Centre, Growth, Tourist, Work	0.8
Nijmegen	Small, Agricultural, Residential, Shrink	1.0
Katwijk	Small, Agricultural	1.1
Kapelle	Small, Green, Tourist, Work	1.1
Woerden	Small, Green, Residential	1.1
Hellendoorn	Large, Centre, Growth, Historic	1.1
Krimpenerwaard	Small, Green	1.2
Mook en Middelaar	Small, Green	1.6
Zoeterwoude	Small, Agricultural, Historic	1.7
Ermelo	Large, Growth, New town, Work	1.8
Waterland	Small, Green, Work	1.9
Montfoort	Small, Former industrial, New town, Work	2.0
Schiermonnikoog	Small, Agricultural	2.0
Uitgeest	Small, Former industrial, New town, Tourist	2.3
Lansingerland	Small, Green, Residential, Shrink, Tourist	2.4
Pijnacker-Nootdorp	Small, Former industrial	2.5
Westland	Small, Former industrial, Green, Residential	2.5
Terschelling	Large, Centre, Growth, Historic, Work	2.9
Amsterdam	Small, Green, Residential, Tourist	3.4
Nunspeet	Medium	3.7
Groningen (gemeente)	Small, Green	4.3
Son en Breugel	Small, Residential	4.3
Hattem	Medium, Centre, Growth	5.4
Leiden	Small, Agricultural, Growth	9.6
Vlieland	Small, Agricultural, Shrink	11.4
Berkelland	Small, Historic, Shrink, Tourist	15.1
Hilvarenbeek	Small, Former industrial, New town	15.5

(Source: www.emissieregistratie.nl)

telos brabants centrum voor duurzame ontwikkeling

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