Second Performance Report of Elected Dutch Municipalities of BNG Bank Sustainability Bond of 2017

telos brabant centre for sustainable development

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Tilburg, 15 October 2019
Documentnumber **19.218**

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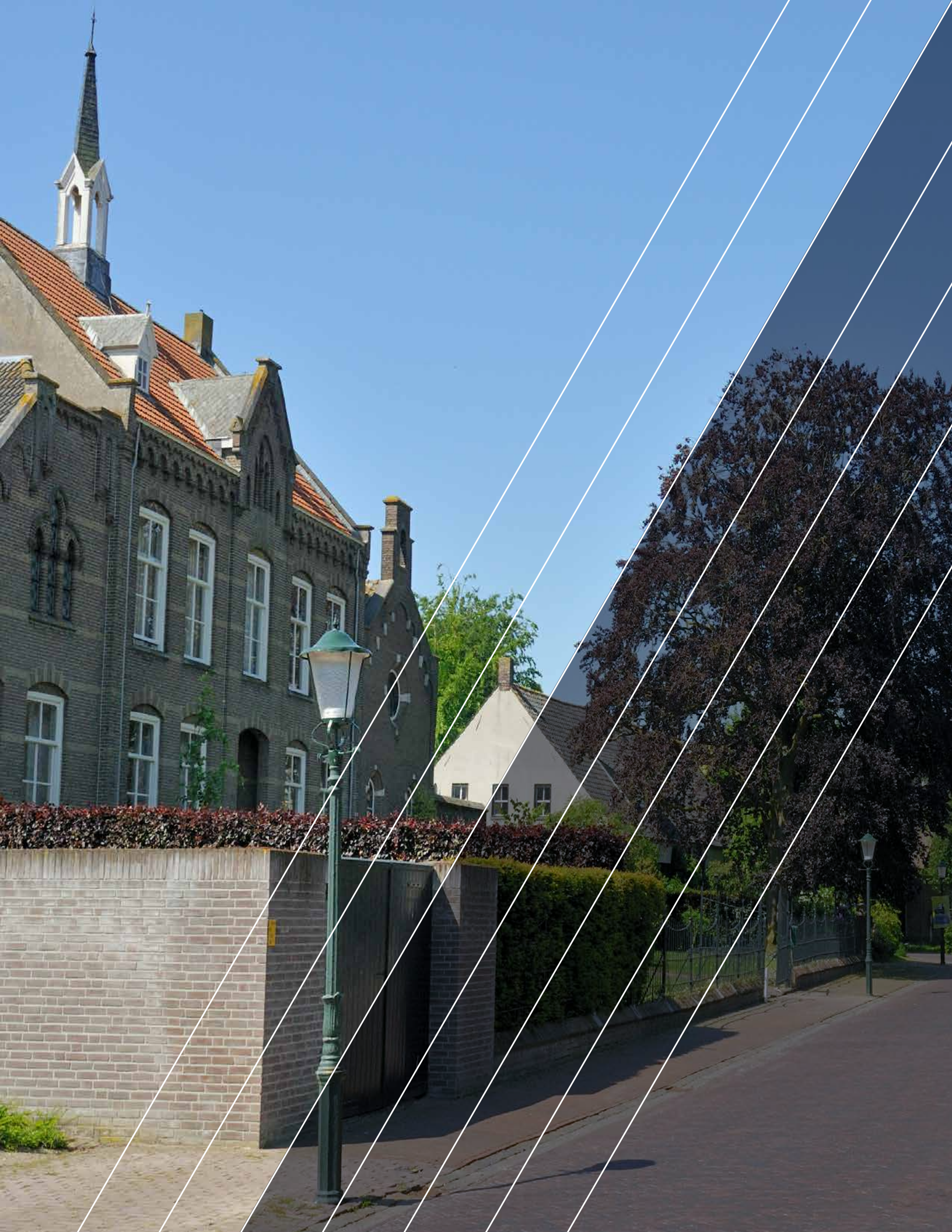

Summary

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 of 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 to provide the yearly impact reports for this bond, based on its yearly National Monitor Sustainable Municipalities. This performance report is the second impact report of the 2017 Sustainability Bond, covering the years 2017-2019.

The Elected Municipalities continued to outperform in 2019 the total group of municipalities with 2.2 percentage points (52.66 vs 50.45), as listed in table S.1. Scores over the period 2017-2019 improved for all three capitals in a similar way. Largest improvements occurred for the economic capital (1.86-2.10 percentage points), while those for the ecological capital were relatively small (0.55 percentage points). The socio-cultural capital improved in both groups 1.72-1.80 percentage points.

Table S.1 Sustainability scores (%points) of 110 elected municipalities and of the total group of 355 Dutch municipalities in 2019 compared to 2017

SUSTAINABILITY CAPITAL	ELECTED 2017	TOTAL 2017	ELECTED 2019	TOTAL 2019	ELECTED: DIFFERENCE 2017-2019	TOTAL: DIFFERENCE 2017-2019
Total	**51.29**	**48.97**	**52.66**	**50.45**	**1.38**	**1.48**
Socio-cultural	53.20	50.26	54.92	52.06	1.72	1.80
Ecological	51.92	49.99	52.47	50.55	0.55	0.55
Economic	48.74	46.66	50.60	48.76	1.86	2.10

Among Elected Municipalities 97% had similar or higher sustainability scores in 2019 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 Rozendaal, followed by Culemborg and Wageningen, improved most.
Reduction in sustainability score was occurring in Renswoude and Krimpenerwaard.

The highest reduction in CO2 emissions was found in the city of Amsterdam. Ameland, Vlieland and Terschelling noted the largest increase in CO2 emissions. However, the latter are amongst the municipalities with the lowest emissions in the Netherlands and were impacted by growth in tourism.

1 Introduction

At the request of BNG Bank, Telos of Tilburg University has provided on 6 October 2017 a Framework document to BNG Bank[1] 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 the basis of 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 yearly impact reports, 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, because such data are not yet sufficiently available.

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 second of such reports on the 2017 bond covering the period 2017-2019. It describes how the performance is assessed, the general outcome of the comparison over the years 2017-2019, 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 2019 on the municipalities elected for the BNG Bank Sustainability 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 concepts 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 , 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 less 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. Eventual reassessment of city typology (this was not needed in the recent version of the Monitor).
4. Harmonization with national monitoring activities by third parties on theme specific issues such as climate, mobility, health, etc.
5. Adjustment to the outcome of municipality rearrangements, which are continuously resulting in larger municipalities and a lower total number of municipalities.

The National Monitor Sustainable Municipalities 2017 discerned 14 types of cities. 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.

2.2 Assesment of performance of Elected Sustainable Municipalities

Based on the updated database, sustainability performance of 110 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', 'former 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 is decreasing due to rearrangements among the municipalities. In 2019 there are only 355 municipalities. This change 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 132 indicators now, compared to 109 in 2017. Such changes had to be included in the comparison between 2019 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 2019 BNG Bank Sustainability Bond , for the details of the amendments made in the calculation of the sustainability scores and how comparability between the years 2019, 2018 and 2017 was ascertained.

This assessment includes:

1. A comparison of sustainability scores of Elected Municipalities with the total group of Dutch municipalities for 2019 and 2017.
2. A comparison of sustainability scores for Elected Municipalities between 2019 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 2017-2019 will be discussed.

3 Outcome of updating exercise and comparison of 2017 and 2019

3.1 National Monitor Sustainable Municipalities 2019

In October 2019, Telos completed its National Monitor Sustainable Municipalities 2019. The major outcome is shown in table 3.1.

Table 3.1 Sustainability performance of the total group of Dutch municipalities in 2017-2019

SUSTAINABILITY CAPITAL	2017	2018	2019
Total	**48.97**	**49.81**	**50.45**
Socio-cultural	50.26	51.56	52.06
Ecological	49.99	50.30	50.55
Economic	46.66	47.56	48.76

Last year the average overall sustainability score improved from 49.81 till 50.45%. This was due to improvements of all three capitals. The ecological capital improved only marginally the past year from 50.30 till 50.55. The socio-cultural capital improved from 51.56 to 52.06%. Economic capital increased most from 47.56 till 48.76.

3.2 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 Municipalities

MUNICIPALITY SIZE (NUMBER OF INHABITANTS)	TOTAL NUMBER OF MUNICIPALITIES IN THE NETHERLANDS	TOTAL NUMBER OF MUNICIPALITIES IN ELECTED GROUP
Less than 50,000	270 (76.1%)	80 (72.72%)
50,000-100,000	54 (15.2%)	15 (13.63%)
More than 100,000	31 (8.7%)	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.

3.3 General performance of Elected Municpalities compared to total group of Dutch Municiplalities

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

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

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

Table 3.3 gives a summary of the overall differences between 2017 and 2019 for the total group of Dutch municipalities and the group of Elected Municipalities. It shows that general trends, an improvement of the overall score with 1.38-1.48 percentage points, are similar in both groups.

Table 3.3 Sustainability performance of Elected Municipalities and of the total group of Dutch municipalities in 2017 compared to 2019 (percentage points)

SUSTAINABILITY CAPITAL	ELECTED 2017	TOTAL 2017	ELECTED 2019	TOTAL 2019	ELECTED: DIFFERENCE 2017-2019	TOTAL: DIFFERENCE 2017-2019
Total	**51.29**	**48.97**	**52.66**	**50.45**	**1.38**	**1.48**
Socio-cultural	53.20	50.26	54.92	52.06	1.72	1.80
Ecological	51.92	49.99	52.47	50.55	0.55	0.55
Economic	48.74	46.66	50.60	48.76	1.86	2.10

Scores over the period 2017-2019 improved for all three capitals in a similar way. Largest improvements occurred this year for the economic capital (1.86-2.10 percentage points), while those for the ecological capital were relatively small (0.55 percentage points). The socio-cultural capital improved in both groups 1.72-1.80 percentage points.

The end result is that the Elected Municipalities continued to outperform the total group of municipalities with 2.2 percentage points (52.66 vs 50.45).

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

3.4 Changes in stock scores of Elected and the total group of Municiplaities

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

Table 3.4 Differences in sustainability scores (percentage points) of stocks between 2017 and 2019 for the group of elected Municipalities and all Dutch municipalities

SUSTAINABILITY STOCK	DIFFERENCE 2017-2019 OF 110 ELECTED MUNICIPALITIES	DIFFERENCE 2017-2019 OF ALL 355 MUNICIPALITIES
Socio-cultural		
Arts & culture	0.20	0.33
Economic participation	1.46	1.40
Education	2.63	2.79
Health	1.56	1.74
Political Participation	0.74	0.46
Residential environment	1.23	1.63
Safety	3.00	3.06
Social participation	2.95	2.98
Ecological		
Air	0.09	0.06
Annoyance & emergencies	-0.38	-0.24
Energy	3.18	3.19
Nature & landscape	0.00	0.00

Soil	-2.13	-2.53
Resources & waste	2.15	2.46
Water	0.92	0.94
Economic		
Competitiveness	1.47	1.54
Infrastructure & mobility	1.47	1.38
Knowledge	1.64	2.14
Labor	3.77	3.98
Spatial location conditions	0.96	1.45

Socio-cultural stocks

Among socio-cultural stocks, differences between both groups of municipalities were small. Most striking is the improvement in 'safety', 'education' and 'social participation' in the both groups of municipalities. The decline in both groups of 'health' is not what could 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 2017-2019 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 remarkable.

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 2017-2019 for the stock of 'labor'.


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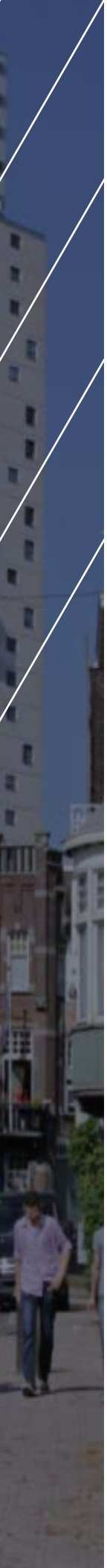


4 Elected Municipalities showing largest improvement or reduction in sustainability score in 2017-2019 depending on city typology

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-, former 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 2019 to make them comparable with the 2019 data. The results are therefore sometimes differing from those given in the 2017 Framework document.

4.1 Elected agricultural municipaties

Table 4.1 presents the 15 best-in-class municipalities of the agricultural type, their reconstructed 2017 scores and the 2019 scores for total sustainability. One municipality (Renswoude) was performing less over the past two years and fourteen did better. Dalfsen was improving most in the period 2017-2019.

Overall, the score of the group of elected agricultural municipalities improved 1.3 percentage points since 2017.

Table 4.1 Improvements and reductions in total sustainability scores of elected agricultural municipalities over 2017-2019

AGRICULTURAL MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Dalfsen	52.7	55.6	2.9
Dinkelland	51.8	54.3	2.5
Oudewater	48.5	50.8	2.2
Bunnik	52.5	54.7	2.2
Aalten	50.9	52.6	1.8
Voorst	52.4	53.8	1.4
Zoeterwoude	50.0	51.3	1.3

Bronckhorst	51.7	52.7	1.0
Wierden	51.1	52.1	1.0
Olst-Wijhe	50.8	51.6	0.8
Eijsden-Margraten	52.3	53.0	0.7
Boekel	48.7	49.3	0.6
Montfoort	50.6	51.1	0.5
Midden-Delfland	54.6	54.8	0.2
Renswoude	49.1	48.8	-0.3
Average	**51.2**	**52.4**	**1.3**

Figure 4.1 Den Aalshorst farm, Dalfsen (Photo: Friesburg)

4.2 Elected center municipalities

As table 4.2 shows, all 15 elected municipalities improved their total sustainability score the last years. Castricum scores highest with an improvement of 2.3 percentage points.

Table 4.2 Improvements in total sustainability scores of elected center municipalities over 2017-2019

CENTER MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Castricum	52.1	54.3	2.3
Huizen	50.3	52.3	2.0

Middelburg	49.5	51.2	1.7
Apeldoorn	50.8	52.5	1.7
Eindhoven	49.5	51.1	1.6
Ede	51.2	52.7	1.6
Delft	53.3	54.5	1.3
Haarlem	51.1	52.4	1.2
Hilversum	52.4	53.6	1.2
Utrecht	52.7	53.9	1.2
Westland	48.3	49.5	1.2
Leiden	52.5	53.6	1.1
Katwijk	51.3	51.9	0.6
Gooise Meren	52.0	52.7	0.6
Groningen	53.5	54.1	0.6
Average	**51.4**	**52.7**	**1.3**

4.3 Elected green municipalities

Elected green municipalities improved on average 1.7 percentage points last two years. Rozendaal improved most with 3.6 percentage points followed by Mook and Middelaar.

Table 4.3 Improvements and reductions in total sustainability scores of elected green municipalities over 2017-2019

GREEN MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Rozendaal	51.6	55.2	3.6
Mook en Middelaar	52.7	55.5	2.9
Utrechtse Heuvelrug	50.7	53.2	2.5
Heeze-Leende	52.3	54.7	2.4
Bloemendaal	53.5	55.6	2.1
Leusden	53.4	55.5	2.1
Putten	51.5	53.4	1.9
Ermelo	52.4	54.2	1.7
Baarn	51.3	52.9	1.6
Noordwijk	51.1	52.6	1.5
Wassenaar	51.6	52.7	1.1
Bergen (NH.)	52.2	53.1	0.9
Laren (NH.)	48.4	49.3	0.9
Waalre	53.8	54.6	0.8
Nunspeet	54.1	54.2	0.1
Average	**52.0**	**53.8**	**1.7**

Figure 4.2 Castle Rosendael, Rozendaal (Photo: Gouwenaar)

4.4 Elected growth municipalities

The elected growth municipalities showed an improvement of 1.4 percentage points last year. All municipalities except one, Renswoude, improved their score. Highest improvement was found at Wageningen.

Table 4.4 Improvements and reductions in total sustainability scores of elected growth municipalities over 2017-2019

GROWTH MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Wageningen	53.6	56.7	3.2
Dalfsen	52.7	55.6	2.9
Bunnik	52.5	54.7	2.2
Putten	51.5	53.4	1.9
Kampen	52.2	54.0	1.8
Voorschoten	52.9	54.7	1.8
Scherpenzeel	47.3	48.9	1.6
Oegstgeest	52.9	54.4	1.5
Houten	54.5	55.9	1.4
Kapelle	52.2	53.4	1.2
Woudenberg	51.3	52.4	1.1
Blaricum	53.6	54.0	0.5
Nijkerk	51.7	52.1	0.4

Midden-Delfland	54.6	54.8	0.2
Renswoude	49.1	48.8	-0.3
Average	**52.2**	**53.6**	**1.4**

4.5 Elected historic municipalities

Oudewater, Lopik, Weesp and Waterland improved their score last year most, with more than 2.0 percentage points among the elected historic municipalities. The average score improved last year with 1.5 percentage points, as presented in table 4.5.

Table 4.5 Improvements and reductions in total sustainability scores of elected historic municipalities over 2017-2019

HISTORIC MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Oudewater	48.5	50.8	2.2
Lopik	49.9	52.0	2.1
Weesp	49.6	51.7	2.0
Waterland	52.4	54.4	2.0
Kampen	52.2	54.0	1.8
Middelburg	49.5	51.2	1.7
Staphorst	52.0	53.4	1.4
Schiermonnikoog	54.0	55.3	1.3
Delft	53.3	54.5	1.3
Ameland	54.3	55.5	1.2
Utrecht	52.7	53.9	1.2
Bronckhorst	51.7	52.7	1.0
Eijsden-Margraten	52.3	53.0	0.7
Vlieland	54.1	54.6	0.6
Average	**51.9**	**53.4**	**1.5**

4.6 Elected mid-sized municipalities

Table 4.6 shows that mid-sized municipalities improved sustainability score on average with 0.9 percentage points last year. Meierijstad improved its score most.

Table 4.6 Improvements and reductions in total sustainability scores of elected mid-sized municipalities over 2017-2019

MID-SIZED MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Meierijstad	49.0	51.0	2.0
Kampen	52.2	54.0	1.8
Woerden	51.7	53.2	1.5
Veenendaal	48.7	50.1	1.4
Hilversum	52.4	53.6	1.2
Zeist	49.7	50.8	1.2
Leidschendam-Voorburg	49.0	49.9	0.9
Stichtse Vecht	50.8	51.5	0.7
Amstelveen	51.8	52.4	0.6
Katwijk	51.3	51.9	0.6
Gooise Meren	52.0	52.7	0.6
Pijnacker-Nootdorp	50.5	51.1	0.6
Lansingerland	48.7	49.1	0.4
Barneveld	51.3	51.5	0.2
Krimpenerwaard	51.7	51.6	-0.2
Average	**50.7**	**51.6**	**0.9**

4.7 Elected New Town municipalities

Elected New Town municipalities improved on average their score with 1.0 percentage points (see table 4.7). Wijk bij Duurstede was on top of the list of improvement.

Table 4.7 Improvements and reductions in total sustainability scores of elected New Town municipalities over 2017-2019

NEW TOWN MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Wijk bij Duurstede	52.2	54.5	2.3
Teylingen	52.7	54.6	1.8
Best	50.0	51.7	1.7
Oegstgeest	52.9	54.4	1.5
Heumen	53.5	54.9	1.4
Houten	54.5	55.9	1.4
Nuenen, Gerwen en Nederwetten	51.3	52.4	1.1
Woudenberg	51.3	52.4	1.1
Langedijk	50.9	51.7	0.7
Boekel	48.7	49.3	0.6
Oostzaan	52.1	52.5	0.5
Nijkerk	51.7	52.1	0.4

Midden-Delfland	54.6	54.8	0.2
Uitgeest	49.6	49.7	0.1
Renswoude	49.1	48.8	-0.3
Average	**51.7**	**52.6**	**1.0**

Figure 4.3 Sculpture in front of the Town Hall of Teylingen (Photo: Gouwenaar)

4.8 Elected former industrial municipalities

Elected former industrial municipalities scored on average 1.5 percentage points higher over the reporting period, as shown in table 4.8. Culemborg has improved the most in the last two years.

Table 4.8 Improvements and reductions in total sustainability scores of elected former industrial municipalities over 2017-2019

FORMER INDUSTRIAL MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Culemborg	50.5	53.9	3.3
Hattem	50.8	52.8	2.1
Weesp	49.6	51.7	2.0
Bladel	50.6	52.6	2.0
Voerendaal	48.4	50.3	1.9
Putten	51.5	53.4	1.9
Rijssen-Holten	51.6	53.4	1.8

Best	50.0	51.7	1.7
Reusel-De Mierden	50.4	51.5	1.1
Nuenen, Gerwen en Nederwetten	51.3	52.4	1.1
Wierden	51.1	52.1	1.0
Hellendoorn	52.8	53.7	0.9
Waalre	53.8	54.6	0.8
Haaksbergen	52.6	53.1	0.5
Oostzaan	52.1	52.5	0.5
Average	**51.1**	**52.7**	**1.5**

4.9 Elected residential municipalizes

Residential municipalities are a well performing elected group of municipalities when comparing the scores in 2017 with those of 2019, resulting in an average increased score of 1.6 percentage points (table 4.9).

Table 4.9 Improvements and reductions in total sustainability scores of elected residential municipalities over 2017-2019

RESIDENTIAL MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Rozendaal	51.6	55.2	3.6
Mook en Middelaar	52.7	55.5	2.9
Wijk bij Duurstede	52.2	54.5	2.3
Castricum	52.1	54.3	2.3
Bloemendaal	53.5	55.6	2.1
Waterland	52.4	54.4	2.0
Voorschoten	52.9	54.7	1.8
Heumen	53.5	54.9	1.4
Sint-Michielsgestel	51.2	52.5	1.3
Wierden	51.1	52.1	1.0
Waalre	53.8	54.6	0.8
Eijsden-Margraten	52.3	53.0	0.7
Langedijk	50.9	51.7	0.7
Uitgeest	49.6	49.7	0.1
Average	**52.1**	**53.8**	**1.6**

4.10 Elected shrink municipalities

As far as elected shrink municipalities are concerned, it is found that they improved 1.2 percentage points on average last year (see table 4.10).

Table 4.10 Improvements and reductions in total sustainability scores of elected shrink municipalities over 2017-2019

SHRINK MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Mook en Middelaar	52.7	55.5	2.9
Valkenburg aan de Geul	50.2	52.2	2.1
Voerendaal	48.4	50.3	1.9
Meerssen	49.1	51.0	1.8
Leudal	48.6	49.7	1.1
Gulpen-Wittem	49.2	50.3	1.0
Bronckhorst	51.7	52.7	1.0
Bergen (NH.)	52.2	53.1	0.9
Berkelland	52.3	53.0	0.7
Vlieland	54.1	54.6	0.6
Dantumadiel	47.5	48.1	0.6
Grave	51.1	51.4	0.3
Average	**50.6**	**51.8**	**1.2**

4.11 Elected small municipalities

The group of small municipalities has improved its score in 2019 by 1.7 percentage points. Rozendaal is here on top of the list of improvement.

Table 4.11 Improvements and reductions in total sustainability scores of elected small municipalities over 2017-2019

SMALL MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Rozendaal	51.6	55.2	3.6
Wageningen	53.6	56.7	3.2
Dalfsen	52.7	55.6	2.9
Bunnik	52.5	54.7	2.2
Hattem	50.8	52.8	2.1
Bloemendaal	53.5	55.6	2.1
Veere	50.6	52.5	1.9
Oegstgeest	52.9	54.4	1.5
Voorst	52.4	53.8	1.4
Kapelle	52.2	53.4	1.2
Woudenberg	51.3	52.4	1.1
Vught	53.0	54.0	1.0
Montfoort	50.6	51.1	0.5
Blaricum	53.6	54.0	0.5
Midden-Delfland	54.6	54.8	0.2
Average	**52.4**	**54.1**	**1.7**

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 1.3 percentage points (see table 4.12).

Table 4.12 Improvements and reductions in total sustainability scores of elected tourist municipalities over 2017-2019

TOURIST MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Mook en Middelaar	52.7	55.5	2.9
Bloemendaal	53.5	55.6	2.1
Waterland	52.4	54.4	2.0
Voerendaal	48.4	50.3	1.9
Veere	50.6	52.5	1.9
Noordwijk	51.1	52.6	1.5
Schiermonnikoog	54.0	55.3	1.3
Ameland	54.3	55.5	1.2
Wassenaar	51.6	52.7	1.1
Bergen (NH.)	52.2	53.1	0.9
Terschelling	52.2	53.1	0.9
Eijsden-Margraten	52.3	53.0	0.7
Vlieland	54.1	54.6	0.6

Oostzaan	52.1	52.5	0.5
Hilvarenbeek	52.4	52.7	0.3
Average	**52.3**	**53.6**	**1.3**

4.13 Elected work municipalities

Elected work municipalities performed the past year on average well (plus 1.4 percentage point), as illustrated in table 4.13. All municipalities improved in score. Wageningen was improving its score most (3.2 percentage points).

Table 4.13 Improvements and reductions in total sustainability scores of elected work municipalities over 2017-2019

WORK MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Wageningen	53.6	56.7	3.2
Ermelo	52.4	54.2	1.7
Best	50.0	51.7	1.7
Amersfoort	50.4	52.1	1.7
Apeldoorn	50.8	52.5	1.7
Noordwijk	51.1	52.6	1.5
Goes	50.1	51.5	1.4
Utrecht	52.7	53.9	1.2
Westland	48.3	49.5	1.2
Zeist	49.7	50.8	1.2
Son en Breugel	49.4	50.5	1.1
Leiden	52.5	53.6	1.1
Amstelveen	51.8	52.4	0.6
Barneveld	51.3	51.5	0.2
Average	**51.0**	**52.4**	**1.4**

4.14 Elected 100,000plus municipalities

The, for Dutch circumstances, large elected 100,000plus cities show on average a high improvement (1.5 percentage points) in score from 2017 to 2019. Center- and work type of municipalities often show a similar development as the 100,000plus cities. No large municipalities showed reduced scores. Zwolle improved most.

Table 4.14 Improvements and reductions in total sustainability scores of elected 100,000plus over 2017-2019

100,000PLUS MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Zwolle	52.0	54.5	2.4
Breda	48.0	50.0	1.9
Nijmegen	52.6	54.5	1.9
Arnhem	50.3	52.0	1.7
Amersfoort	50.4	52.1	1.7
Apeldoorn	50.8	52.5	1.7
Eindhoven	49.5	51.1	1.6
Ede	51.2	52.7	1.6
Amsterdam	52.0	53.3	1.4
Delft	53.3	54.5	1.3
Haarlem	51.1	52.4	1.2
Utrecht	52.7	53.9	1.2
Westland	48.3	49.5	1.2
Leiden	52.5	53.6	1.1
Groningen	53.5	54.1	0.6
Average	**51.2**	**52.7**	**1.5**

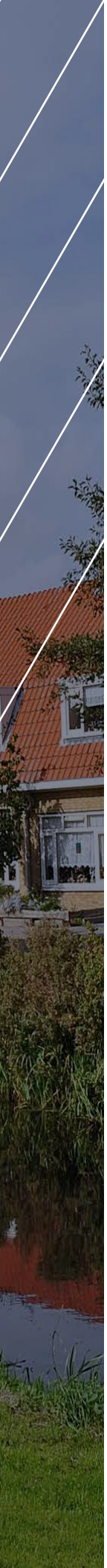
Figure 4.5 Grote Markt, Breda (Photo: G. Lanting)

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 types of municipalities. Highest improvements in percentage points were found in 100,000plus cities and work municipalities. Highest sustainability scores were measured in small municipalities (54.1 percentage points) and lowest in mid-sized municipalities (51.6 percentage points).

Table 4.15 Changes in total sustainability scores of 14 types of elected municipalities over 2017-2019

TYPE OF MUNICIPALITY	SUSTAINABILITY SCORE 2017	SUSTAINABILITY SCORE 2019	DIFFERENCE
Small municipalities	52.4	54.1	1.7
Mid-sized municipalities	50.7	51.6	0.9
100,000plus municipality	51.2	52.7	1.5
Agricultural municipality	51.2	52.4	1.3
Center municipality	51.4	52.7	1.3
Former industrial municipality	51.1	52.7	1.5
Green municipality	52.0	53.8	1.7
Growth municipalities	52.2	53.6	1.4
Historic municipalities	51.9	53.4	1.5
New Town municipality	51.7	52.6	1.0
Residential municipalities	52.1	53.8	1.6
Shrink municipality	50.6	51.8	1.2
Touristic municipalities	52.3	53.6	1.3
Work municipality	51.0	52.4	1.4



5 Overall outcome for Elected Municipalities including their CO2-emission scores in 2017-2019

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

This chapter also 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 97% had similar or higher sustainability scores in 2019 compared to 2017 (see also Annex A).

Tables 5.1 and 5.2 show Elected Municipalities which were changing their sustainability score most or least favorably. The best performing municipality in this respect among Elected Municipalities is Rozendaal followed by Culemborg and Wageningen.

Table 5.1 Ten Elected Municipalities improving sustainability score most in the period 2017-2019

ELECTED MUNICIPALITY	TYPOLOGY 2017	TOTAL SCORE 2017	TOTAL SCORE 2019	DIFFERENCE
Rozendaal	Small, Green, Residential	51.6	55.2	3.6
Culemborg	Small, Former industrial, New town	50.5	53.9	3.3
Wageningen	Small, Growth, Work	53.6	56.7	3.2
Dalfsen	Small, Agricultural, Growth	52.7	55.6	2.9
Mook en Middelaar	Small, Green, Residential, Shrink, Tourist	52.7	55.5	2.9
Buren	Small, Agricultural, Residential	48.6	51.4	2.7
Dinkelland	Small, Agricultural	51.8	54.3	2.5
Utrechtse Heuvelrug	Small, Green	50.7	53.2	2.5
Zwolle	Large, Centre, Growth, New town, Work	52.0	54.5	2.4
Heeze-Leende	Small, Green	52.3	54.7	2.4

Reduction in sustainability score among Elected Municipalities was detected in Renswoude and Krimpenerwaard.

Table 5.2 Ten Elected Municipalities with declining or lowest improving sustainability score in the period 2017-2019

MUNICIPALITY	TYPOLOGY 2017	TOTAL SCORE 2017	TOTAL SCORE 2019	DIFFERENCE
Renswoude	Small, Agricultural, Growth, New town	49.1	48.8	-0.3
Krimpenerwaard	Medium, Agricultural	51.7	51.6	-0.2
Nunspeet	Small, Green	54.1	54.2	0.1
Uitgeest	Small, Growth, New town, Residential	49.6	49.7	0.1
Midden-Delfland	Small, Agricultural, Growth, New town	54.6	54.8	0.2
Barneveld	Medium, Green, Growth, New town, Work	51.3	51.5	0.2
Grave	Small, Residential, Shrink	51.1	51.4	0.3
Hilvarenbeek	Small, Tourist	52.4	52.7	0.3
Nijkerk	Small, Growth, New town	51.7	52.1	0.4
Lansingerland	Medium, Growth, New town	48.7	49.1	0.4

5.2 CO2-emission 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, a national climate agreement has been signed and a climate program has been sent to Parliament by the national government to ascertain that ambitious goals to halve emissions by 2050 are being implemented.

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 (2016 and 2017). 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 over de last year of 2.33 percent. This is a better result than for the total group. 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	1990-2017	2010-2017	2016-2017
Elected (110)	-15.99%	-19.33%	-2.33%
Others	15.92%	-3.30%	-1.23%
Total (355)	**8.41%**	**-6.69%**	**-1.44%**

The highest reduction was found in the city of Amsterdam. Table 5.4 shows that Ameland, Vlieland and Terschelling noted the largest increase in CO2 emissions. However, the latter are amongst the municipalities with the lowest emissions in the Netherlands and under the strain of growing tourism. 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 2016-2017

ELECTED MUNICIPALITY	EMISSION CHANGE OVER MEASURING YEARS 2016-2017		ELECTED MUNICIPALITY	EMISSION CHANGE OVER MEASURING YEARS 2016-2017
Amsterdam	-9%		Ameland	36%
Uitgeest	-8%		Vlieland	19%
Teylingen	-8%		Terschelling	16%
Scherpenzeel	-7%		Berkelland	12%
Nuenen, Gerwen en Nederwetten	-5%		Schiermonnikoog	11%
Reusel-De Mierden	-5%		Westland	9%
Son en Breugel	-5%		Lansingerland	8%
Castricum	-5%		Pijnacker-Nootdorp	6%
Leiden	-4%		Midden-Delfland	6%
Amersfoort	-4%		Middelburg	3%

6 Discussion and overview of outcome of assessment period 2017-2019

The end result shows that Elected Municipalities continued to outperform in 2019 the total group of municipalities with 2.2 percentage points (52.66 vs 50.45), as listed in table 1. Scores over the period 2017-2019 improved for all three capitals in a similar way. Largest improvements occurred for the economic capital (1.86-2.10 percentage points), while those for the ecological capital were relatively small (0.55%). The socio-cultural capital improved in both groups 1.72-1.80 percentage points.

Among Elected Municipalities 97% had similar or higher sustainability scores in 2019 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 Rozendaal increased its score most, followed by Culemborg and Wageningen.

A reduction in sustainability score was occurring in Renswoude and Krimpenerwaard.

The highest reduction of CO2 emissions was found in the city of Amsterdam. Ameland, Vlieland and Terschelling noted the largest increase in CO2 emissions. However, the latter are amongst the municipalities with the lowest emissions in the Netherlands and are under the strain of growing tourism.

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

ANNEXES

A Overview of the differences in total sustainability scores in 2017 and 2019 for the 110 Elected Municipalities

MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2017	TOTAL SUSTAINABILITY SCORE 2019	DIFFERENCE 2017-2019
Rozendaal	51.6	55.2	3.6
Culemborg	50.5	53.9	3.3
Wageningen	53.6	56.7	3.2
Dalfsen	52.7	55.6	2.9
Mook en Middelaar	52.7	55.5	2.9
Buren	48.6	51.4	2.7
Dinkelland	51.8	54.3	2.5
Utrechtse Heuvelrug	50.7	53.2	2.5
Zwolle	52.0	54.5	2.4
Heeze-Leende	52.3	54.7	2.4
Wijk bij Duurstede	52.2	54.5	2.3
Castricum	52.1	54.3	2.3
Oudewater	48.5	50.8	2.2
Bunnik	52.5	54.7	2.2
Hattem	50.8	52.8	2.1
Valkenburg aan de Geul	50.2	52.2	2.1
Bloemendaal	53.5	55.6	2.1
Lopik	49.9	52.0	2.1
Leusden	53.4	55.5	2.1
Weesp	49.6	51.7	2.0
Huizen	50.3	52.3	2.0
Waterland	52.4	54.4	2.0
Meierijstad	49.0	51.0	2.0
Bladel	50.6	52.6	2.0
Breda	48.0	50.0	1.9
Nijmegen	52.6	54.5	1.9
Voerendaal	48.4	50.3	1.9
Veere	50.6	52.5	1.9
Putten	51.5	53.4	1.9
Teylingen	52.7	54.6	1.8
Meerssen	49.1	51.0	1.8
Kampen	52.2	54.0	1.8

MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2017	TOTAL SUSTAINABILITY SCORE 2019	DIFFERENCE 2017-2019
Voorschoten	52.9	54.7	1.8
Aalten	50.9	52.6	1.8
Rijssen-Holten	51.6	53.4	1.8
Ermelo	52.4	54.2	1.7
Middelburg	49.5	51.2	1.7
Arnhem	50.3	52.0	1.7
Best	50.0	51.7	1.7
Amersfoort	50.4	52.1	1.7
Apeldoorn	50.8	52.5	1.7
Baarn	51.3	52.9	1.6
Eindhoven	49.5	51.1	1.6
Scherpenzeel	47.3	48.9	1.6
Ede	51.2	52.7	1.6
Oegstgeest	52.9	54.4	1.5
Woerden	51.7	53.2	1.5
Noordwijk	51.1	52.6	1.5
Veenendaal	48.7	50.1	1.4
Heumen	53.5	54.9	1.4
Staphorst	52.0	53.4	1.4
Voorst	52.4	53.8	1.4
Houten	54.5	55.9	1.4
Amsterdam	52.0	53.3	1.4
Goes	50.1	51.5	1.4
Sint-Michielsgestel	51.2	52.5	1.3
Zoeterwoude	50.0	51.3	1.3
Schiermonnikoog	54.0	55.3	1.3
Delft	53.3	54.5	1.3
Ameland	54.3	55.5	1.2
Haarlem	51.1	52.4	1.2
Hilversum	52.4	53.6	1.2
Utrecht	52.7	53.9	1.2
Kapelle	52.2	53.4	1.2
Westland	48.3	49.5	1.2
Zeist	49.7	50.8	1.2
Leudal	48.6	49.7	1.1
Reusel-De Mierden	50.4	51.5	1.1
Nuenen, Gerwen en Nederwetten	51.3	52.4	1.1
Woudenberg	51.3	52.4	1.1
Son en Breugel	49.4	50.5	1.1
Wassenaar	51.6	52.7	1.1
Leiden	52.5	53.6	1.1
Gulpen-Wittem	49.2	50.3	1.0

MUNICIPALITY	TOTAL SUSTAINABILITY SCORE 2017	TOTAL SUSTAINABILITY SCORE 2019	DIFFERENCE 2017-2019
Bronckhorst	51.7	52.7	1.0
Vught	53.0	54.0	1.0
Wierden	51.1	52.1	1.0
Leidschendam-Voorburg	49.0	49.9	0.9
Hellendoorn	52.8	53.7	0.9
Bergen (NH.)	52.2	53.1	0.9
Laren (NH.)	48.4	49.3	0.9
Terschelling	52.2	53.1	0.9
Olst-Wijhe	50.8	51.6	0.8
Waalre	53.8	54.6	0.8
Eijsden-Margraten	52.3	53.0	0.7
Langedijk	50.9	51.7	0.7
Stichtse Vecht	50.8	51.5	0.7
Berkelland	52.3	53.0	0.7
Amstelveen	51.8	52.4	0.6
Boekel	48.7	49.3	0.6
Katwijk	51.3	51.9	0.6
Gooise Meren	52.0	52.7	0.6
Groningen	53.5	54.1	0.6
Pijnacker-Nootdorp	50.5	51.1	0.6
Vlieland	54.1	54.6	0.6
Dantumadiel	47.5	48.1	0.6
Haaksbergen	52.6	53.1	0.5
Oostzaan	52.1	52.5	0.5
Montfoort	50.6	51.1	0.5
Blaricum	53.6	54.0	0.5
Lansingerland	48.7	49.1	0.4
Nijkerk	51.7	52.1	0.4
Hilvarenbeek	52.4	52.7	0.3
Grave	51.1	51.4	0.3
Barneveld	51.3	51.5	0.2
Midden-Delfland	54.6	54.8	0.2
Uitgeest	49.6	49.7	0.1
Nunspeet	54.1	54.2	0.1
Krimpenerwaard	51.7	51.6	-0.2
Renswoude	49.1	48.8	-0.3

B Overview of the changes in CO2-emissions in 2016-2017 for all Elected Municipalities

ELECTED MUNICIPALITY	TYPOLOGY	% DIFFERENCE 2016-2017
Amsterdam	Large, Centre, Growth, Historic, Tourist, Work	-9%
Uitgeest	Small, Growth, New town, Residential	-8%
Teylingen	Small, New town	-8%
Scherpenzeel	Small, Growth	-7%
Nuenen, Gerwen en Nederwetten	Small, Former industrial, New town	-5%
Reusel-De Mierden	Small, Former industrial, Residential	-5%
Son en Breugel	Small, Growth, Work	-5%
Castricum	Small, Centre, Residential	-5%
Leiden	Large, Centre, Growth, Historic, Work	-4%
Amersfoort	Large, Growth, New town, Work	-4%
Nunspeet	Small, Green	-4%
Putten	Small, Former industrial, Green, Growth	-4%
Zoeterwoude	Small, Agricultural	-3%
Goes	Small, Work	-3%
Weesp	Small, Former industrial, Growth, Historic	-3%
Boekel	Small, Agricultural, Growth, New town	-3%
Oostzaan	Small, Former industrial, New town, Tourist	-3%
Rijssen-Holten	Small, Former industrial	-3%
Hattem	Small, Former industrial	-3%
Nijmegen	Large, Centre, Growth, Tourist, Work	-2%
Best	Small, Former industrial, New town, Work	-2%
Hilvarenbeek	Small, Tourist	-2%
Utrecht	Large, Centre, Growth, Historic, Tourist, Work	-2%
Woudenberg	Small, Growth, New town	-2%
Eijsden-Margraten	Small, Agricultural, Historic, Residential, Tourist	-2%
Leudal	Small, Centre, Shrink, Tourist	-2%
Aalten	Small, Agricultural	-2%
Montfoort	Small, Agricultural	-2%
Katwijk	Medium, Centre, Growth	-2%
Renswoude	Small, Agricultural, Growth, New town	-2%
Haaksbergen	Small, Former industrial	-2%
Dantumadiel	Small, Agricultural, Residential, Shrink	-1%
Heeze-Leende	Small, Green	-1%

Oegstgeest	Small, Growth, New town	-1%
Haarlem	Large, Centre, Growth, Historic	-1%
Huizen	Small, Centre, Residential	-1%
Utrechtse Heuvelrug	Small, Green	-1%
Veenendaal	Medium, Former industrial, New town	-1%
Voorschoten	Small, Growth, Residential	-1%
Laren	Small, Green	-1%
Olst-Wijhe	Small, Agricultural	-1%
Grave	Small, Residential, Shrink	-1%
Veere	Small, Tourist	-1%
Buren	Small, Agricultural, Residential	-1%
Nijkerk	Small, Growth, New town	-1%
Sint-Michielsgestel	Small, Residential	-1%
Wassenaar	Small, Green, Tourist	-1%
Leidschendam-Voorburg	Medium	-1%
Bladel	Small, Former industrial, Growth	-1%
Rozendaal	Small, Green, Residential	-1%
Groningen	Large, Centre, Growth, Tourist, Work	-1%
Ermelo	Small, Green, Work	-1%
Voerendaal	Small, Agricultural, Former industrial, Residential, Shrink, Tourist	-1%
Gooise Meren	Medium, Centre	-1%
Waalre	Small, Former industrial, Green, Residential	-1%
Bunnik	Small, Agricultural, Growth	-1%
Vught	Small	-1%
Zwolle	Large, Centre, Growth, New town, Work	-1%
Meierijstad	Medium, Work	-1%
Oudewater	Small, Agricultural, Historic	-1%
Meerssen	Small, Former industrial, Residential, Shrink, Tourist	-1%
Zeist	Medium, Green, Work	-1%
Barneveld	Medium, Green, Growth, New town, Work	0%
Voorst	Small, Agricultural	0%
Bronckhorst	Small, Agricultural, Historic, Shrink	0%
Bloemendaal	Small, Green, Residential, Tourist	0%
Bergen (NH)	Small, Green, Shrink, Tourist	0%
Wierden	Small, Agricultural, Former industrial, Residential	0%
Blaricum	Small, Growth	0%
Leusden	Small, Green	0%
Culemborg	Small, Former industrial, New town	0%
Stichtse Vecht	Medium	0%
Baarn	Small, Green	0%
Mook en Middelaar	Small, Green, Residential, Shrink, Tourist	0%
Wijk bij Duurstede	Small, New town, Residential	0%
Eindhoven	Large, Centre, Former industrial, Growth, Work	0%

Apeldoorn	Large, Centre, Green, Work	0%
Heumen	Small, New town, Residential	0%
Amstelveen	Medium, Growth, Tourist, Work	0%
Noordwijk	Small, Green, Tourist, Work	0%
Waterland	Small, Historic, Residential, Tourist	0%
Ede	Large, Centre, Green, Growth, New town	0%
Valkenburg aan de Geul	Small, Shrink, Tourist	0%
Dinkelland	Small, Agricultural	0%
Woerden	Medium, Agricultural, Growth, New town	0%
Dalfsen	Small, Agricultural, Growth	0%
Hellendoorn	Small, Former industrial	0%
Hilversum	Medium, Centre, Green, Growth, Work	1%
Gulpen-Wittem	Small, Agricultural, Historic, Residential, Shrink, Tourist	1%
Breda	Large, Centre, Growth, Work	1%
Staphorst	Small, Agricultural, Historic	1%
Houten	Small, Growth, New town	1%
Lopik	Small, Agricultural, Historic	1%
Wageningen	Small, Growth, Work	1%
Delft	Large, Centre, Growth, Historic	1%
Kampen	Medium, Growth, Historic	1%
Arnhem	Large, Centre, Green, Growth, Tourist, Work	1%
Langedijk	Small, Growth, New town, Residential	2%
Kapelle	Small, Growth	2%
Krimpenerwaard	Medium, Agricultural	3%
Middelburg	Small, Centre, Historic, Tourist	3%
Midden-Delfland	Small, Agricultural, Growth, New town	6%
Pijnacker-Nootdorp	Medium, Growth, New town, Residential	6%
Lansingerland	Medium, Growth, New town	8%
Westland	Large, Centre, Growth, New town, Work	9%
Schiermonnikoog	Small, Historic, Residential, Tourist	11%
Berkelland	Small, Agricultural, Shrink	12%
Terschelling	Small, Tourist	16%
Vlieland	Small, Historic, Shrink, Tourist	19%
Ameland	Small, Historic, Tourist	36%

(Source: www.emissieregistratie.nl)