

# **Sustainability Framework for a 2017 BNG Bank Social Bond for Dutch Housing Associations**

Internal and external assessment from an  
integrated sustainability point of view

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# TABLE OF CONTENTS

<b>Summary</b>	<b>5</b>
<b>1 Introduction</b>	<b>7</b>
1.1 Historical developments	7
1.2 Preparing an elaborated framework for a social housing bond	8
1.3 Request for a 2017 Framework for a Social Housing Bond	8
1.4 Set-up of report	9
<b>2 The design of an elaborated framework for a sustainable social housing bond</b>	<b>10</b>
2.1 General approach	10
2.2 Basic starting points for sustainability assessment of housing associations	11
2.3 Mindmap of capitals, themes and indicators	13
2.4 Remarks on allocation of indicators to capitals and themes	17
2.5 Sources of data on indicators	18
2.6 Sustainability norms used for the indicators and aggregation to the overall sustainability score	18
2.7 The group of associations included in the framework	19
<b>3 Internal sustainability performance of Dutch social housing associations</b>	<b>20</b>
3.1 General results for the internal sustainability performance of social housing associations	20
3.2 Impact of association size	21
3.3 Impact of age of property of associations	21
3.4 Impact of one-family houses or high-rise buildings type of associations	22
<b>4 External sustainability performance of Dutch social housing associations</b>	<b>23</b>
4.1 General results on external sustainability for the social housing associations	23
4.2 Impact of association size	24
4.3 Impact of age of property of associations	24
4.4 Impact of one-family houses or high-rise buildings type of associations	25
<b>5 Integrated sustainability performance of Dutch social housing associations</b>	<b>26</b>
5.1 General results for the social housing associations	26
5.2 Statistical analysis of association size and property age	27
<b>6 Selection of 'best in class' social housing associations</b>	<b>30</b>
6.1 How to reconcile maximizing sustainability score and awarding the social task of housing associations?	30
6.2 The use of 10 association classes	31
6.3 Sustainability scores of preselected associations for 10 association types	36
6.4 Elected sustainable social housing associations	39

<b>7</b>	<b>Conclusions</b>	<b>42</b>
	<b>References</b>	<b>44</b>
	<b>Annexes</b>	<b>46</b>
	Annex 1: Description of indicators used for the framework	47
	Annex 2: Norms for indicators in order to calculate sustainability scores from indicator scores	54
	Annex 3: Sustainability scores of 332 housing associations (alphabetical order)	57
	Annex 4: List of 91 elected associations for a 2017 sustainable social housing bond (ranked according to total sustainability score)	67

## Summary

BNG Bank invited Telos, Sustainability Centre of Tilburg University, to develop a framework for a sustainable bond for social housing associations in the Netherlands. Similar frameworks were developed by Telos for the BNG Bank SRI bond for municipalities in 2014, 2015 and 2016. It was agreed to follow a two-phased approach. In spring 2016 a solid but simplified social bond framework was produced which would be elaborated and refined later. The simplified framework was published July 2016 and used for the first BNG social housing bond of 6 July 2016 (EUR 1,000,000,000 | 0.05% | 13 Jul 2024).

In December 2016 an elaboration of the simplified framework was finished. Not only the internal sustainability performance of housing associations was addressed but also the external performance of the surrounding neighborhood of the rental units of the association.

This elaborated framework is also used for the present framework for a 2017 social housing bond of BNG Bank. It gives an integral view on sustainability, resulting in four internal domains:

- the three sustainability capitals (PPP), as indicated by the United Nations Brundtland Commission of 1987 and in the UN post 2015 Sustainable Development Goals (SDGs), and
- one capital for the Internal Business aspect of the association.

For the external performance, the three (PPP) sustainability capitals are used as well. The result is that the total sustainability score is based on the mean value of the internal and external performance scores, including in total 7 capitals and 83 indicators.

The framework implies a preselection step, limiting the group of 332 associations by preferring in the study those 200 that have a high sustainability score and are most focused on investing in neighborhoods with a large social challenge, as this is the core business of Dutch housing associations. Subsequently 10 classes of associations have been defined, based on association size and age of association property as well as on two other types characterized by a large proportion of one-family dwellings or high-rise buildings.

From the group of 200 preselected associations the 15 highest scoring associations on sustainability in each of the 10 classes have been selected, resulting, after correcting for double counting, in a total group of 91 selected associations. These are the best scoring associations on sustainability of their classes and can be used as the elected associations for a 2017 sustainable social housing bond of BNG Bank.

# 1 Introduction

## 1.1 Historical developments

A Dutch national law of 1901 made it possible to provide national subsidies to social housing associations or other types of organizations, which subsequently resulted in a major influence of the national government in the social housing sector. Government not only provided financial subsidies, but also developed regulation and its enforcement. The execution of the housing task was left to the housing organizations. As a result, a long tradition exists in the Netherlands to provide affordable housing to low income groups in society (TK, 2015).

In 2014, some 360 so-called housing associations (Dutch: *woningcorporaties*) existed, which number is decreasing, e.g. by mergers of associations, involving a total of 2.4 million housing units (Aedes, 2016). This shows that social housing associations play a major role in the Netherlands, providing housing for one-third of the Dutch population. Investments are financed by housing associations' own equity and bank loans. The collective assets of all housing associations are used as collateral for financiers through the Social Housing Guarantee Fund (Dutch: *Waarborgfonds Sociale Woningbouw*) which also watches over risk management. Ultimately, bank loans are backed up by the Dutch State and municipalities which act as potential guarantors of last resort. This results in more favorable financing terms and counter-cyclical investments, without any direct government subsidies for new investments. The Guarantee Fund never needed to materialize a guarantee since its start in 1983.

Housing associations are, in summary, organizations meant to construct, maintain and rent housing space of good quality for an affordable price to relatively vulnerable citizens requiring special attention. The gradually developed additional roles of housing associations, such as investing in aspects of the residential environment, has been limited recently in a new Housing Act (Dutch: *Woningwet*) of 2015.

## **1.2 Preparing an elaborated framework for a social housing bond**

At the start of the year 2016, BNG Bank invited Telos, Sustainability Centre of Tilburg University, to develop a framework for a bond for social housing associations in the Netherlands which defines the sustainability characteristics for selecting the best scoring housing associations. A similar framework was developed by Telos for the BNG Bank SRI bond for municipalities since 2014 (Zoeteman et al. 2015a, Sustainability, 2015), using an earlier developed methodology (Zoeteman et al., 2016a, 2016b; Zoeteman, 2012) such as the methodology published in the Dutch 'National Monitor for Sustainable Municipalities' (Zoeteman et al., 2015b). This national monitor was issued for the first time in 2014 on request of the Ministry of Infrastructure and Environment. In the case of a social bond for stimulating sustainable social housing, the basics for a framework could not be copied from the work on municipalities but had to be developed from scratch. On the other hand, gained experiences with municipalities, provinces and business sectors made it easier to move quickly towards establishing such a framework.

At the same time, BNG Bank announced plans to issue a social bond for the social housing sector, respecting aspects as described in the Social Bond Guidance (ICMA, 2016), a recent development within the context of the Green Bond Principles. Against this background, Telos proposed to follow a two-step approach. A solid but simplified social bond framework in the spring of 2016, which would be further refined later that year. The simplified framework was published July 2016 and used for the first BNG social housing bond that was issued 6 July 2016, (EUR 1,000,000,000 | 0.05% | 13 Jul 2024).

Subsequently, an elaboration of the simplified framework was developed and finished end 2016 (Zoeteman and Mulder, 2016). Not only the internal sustainability performance of housing associations was addressed but also the performance of the surrounding environment of the rental units of the association.

## **1.3 Request for a 2017 Framework for a Social Housing Bond**

BNG Bank (Bart van Dooren) asked Telos on 13 March 2017 to prepare a 2017 Framework for a Social Housing Bond, using the elaborated methodology reported December 2016. The 2017 framework uses this elaborated framework of December 2016 but includes more recent internal data on the housing associations, published March 2017 by Aedes. For the sustainability characteristics of the external conditions of the housing units the most recent data of the Telos National monitor for sustainable cities of 2016 (Zoeteman et al., 2016c) are used.



## **1.4 Set-up of report**

After chapter 2, explaining the elaborated framework for the bond, chapter 3 presents the outcome for the internal performance and chapter 4 for the external sustainability performance of the housing associations. In chapter 5 the combined outcome is shown, and the outcome of the selection is given in chapter 6. Chapter 7 presents the conclusions.

## **2 The design of an elaborated framework for a sustainable social housing bond**

### **2.1 General approach**

The framework is based on measuring internal performance aspects of social housing associations and the external sustainability performance of the environment of the housing units as described by Zoeteman and Mulder (2016).

A prerequisite to operationalize the external performance is knowledge of the location of the rental units. This is however not as strait forward as it may seem, as such location specific data is not easily accessible. Telos is still in the process of acquiring such data. In the meantime, an approximation of the location specific sustainability characteristics of rental units of housing associations is followed, as will be described in later chapters. The result includes a framework based on 4 internal performance capitals (governance, ecological, social and economic) and 3 external performance capitals (ecological, social and economic). Their scores are calculated on the basis of in total 83 indicators.

Since the internal and external sustainability performance are assessed separately, the question is how to weigh both aspects in the final compilation of the total sustainability scores. It was considered to either weigh both aspects equally (1:1) or to give the internal performance score a heavier weight than the external performance score (e.g. 2:1). Arguments in favor of the latter are that housing associations have more direct power to influence internal performance and that data for internal performance are more readily available. An argument for the equal weighing of both aspects is that, although associations may not be able to directly influence external performance, associations have a dominant position in the neighborhoods where they are active and therefore are a key player that can exert pressure on municipal authorities to improve sustainability. Furthermore, internal and external performance do mutually impact each-other. Based on the latter two arguments internal and external performance are weighed equally.

Furthermore, the framework considers classes for the associations in order to avoid one-sidedness in assessing associations, that would e.g. result in always preferring larger associations over smaller ones. Including different classes allows to correct for this effect and gives associations of different types similar chances to be selected.

Using the best-in-class approach for social housing associations is however a complicated issue for an additional reason: a simple calculation per class of the highest scoring associations does not suffice. Social housing associations are created to help solve social problems in neighborhoods. Associations investing most in the poorest neighborhoods should be credited most for this reason but will probably perform less according to the usual scoring methodology for sustainability. To overcome this potential paradox, a weighed preselection approach has been used, as was also the case for the 2016 social bond of BNG Bank, and which is further described in chapter 6.1.

After these preparative steps, the final selection of best-in-class performing social housing associations from a sustainability point of view is a straight-forward exercise.

## **2.2 Basic starting points for sustainability assessment of housing associations**

Telos has developed a general framework to quantify sustainable development of organizations, municipalities and regional authorities since the year 2000 (Zoeteman, Mommaas and Dagevos, 2016).

The framework is based on the broad sustainability definition of the UN Brundtland commission report *Our Common Future* (1987). The essence of the broad definition of sustainable development is that environmental quality, socio-cultural resilience and economic prosperity are societal aspects that should improve jointly and in a balanced way, safeguarding developmental prospects for future generations everywhere on our planet. The operationalization of this broad definition of sustainable development has been a matter of much debate, but has reached international consensus as reflected in the recently renewed and redefined 17 UN post 2015 Sustainable Development Goals (SDGs) and in the related 2030 Agenda. Governments, including the Dutch Government, have agreed to monitor progress towards these goals on an annual basis.



For the housing sector goal 11 is of direct importance: **‘Make cities and human settlements inclusive, safe, resilient and sustainable’**.

This goal is specified with amongst others the following targets:

- 1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.
- 2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- 3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
- 4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage.
- 5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.
- 6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.
- 7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.

Development annual forums (Zoeteman, 2016), it may be expected that monitoring data will become available on an annual basis for a broader set of indicators.

The social housing sector plays an important role in contributing to these targets and their monitoring.

Based on these principles, Telos has developed a framework for housing associations that resembles in essence the framework developed for monitoring sustainability of municipalities. This means that the three domains of sustainable development: ecological, socio-cultural and economic aspects (Planet, People, Profit) are included. Moreover, a fourth domain is added representing the sustainability performance of the housing association as a business unit, which concerns roughly speaking the operations at the central office, such as procurement, energy saving at the head office building, overall financial aspects and governance elements of the association. These governance aspects are in line with the SDGs. The PPP-aspects are related to the characteristics of the decentral housing property of the associations and the users. As explained in the previous chapter the characteristics of the decentral housing property have been divided in internal performance (the housing units themselves) and the external performance (the neighborhood of the housing units).

## 2.3 Mindmap of capitals, themes and indicators

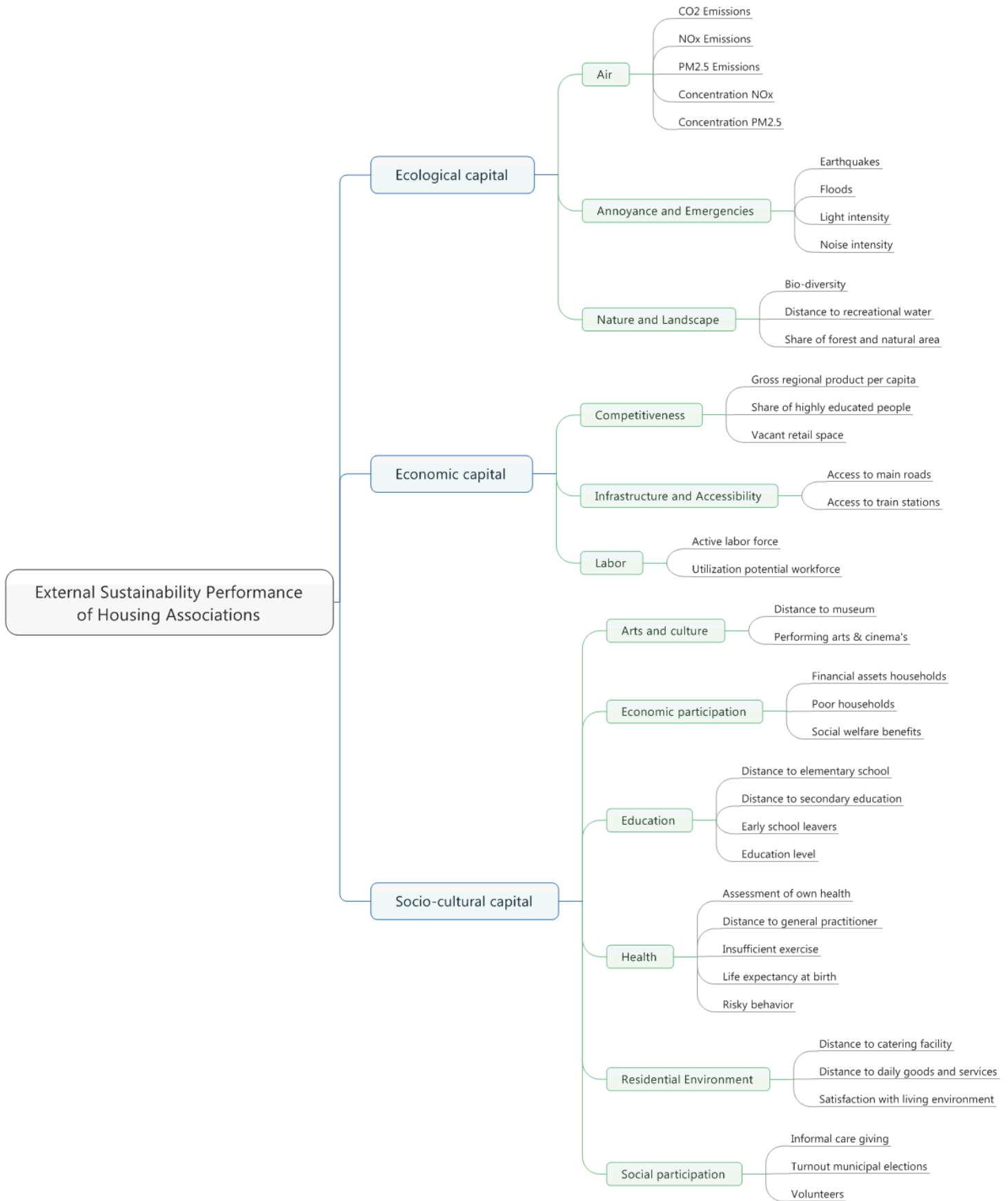
The structure for the capitals, their themes and related general sustainability requirements are listed in Table 2.1.

**Table 2.1** General requirements for sustainability assessment of capitals and their themes relevant to social housing associations

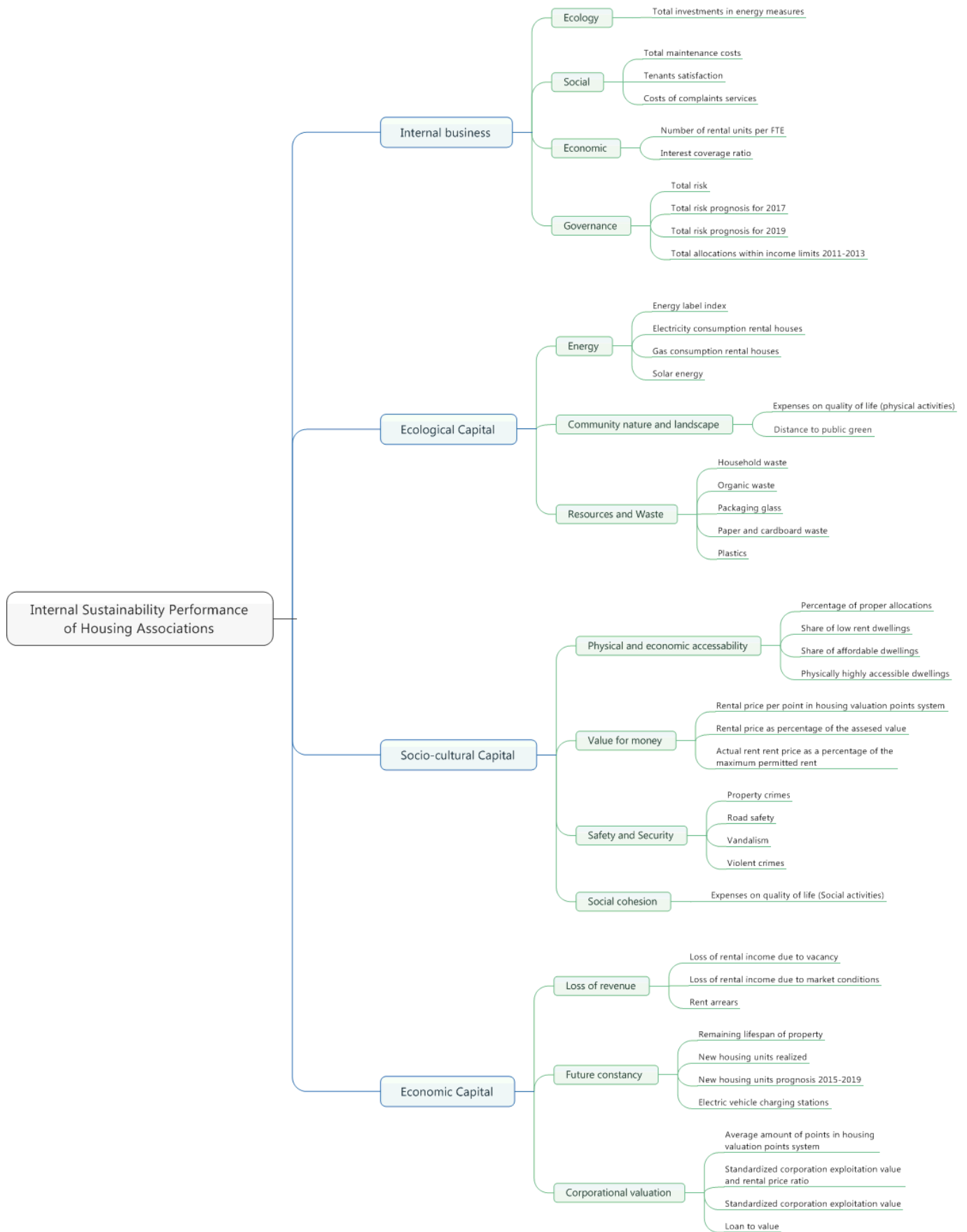
Capital	Theme	Sustainability requirements
Internal business	Ecological	Housing associations apply sustainable procurement principles
		Housing associations generate for internal use sustainable energy
		Housing associations are functioning in a climate neutral way
		Housing associations promote a circular economy through separated waste collection
	Social	Housing associations provide excellent service to their clients
		Employees have a high job satisfaction
		Housing associations provide opportunities for trainees, etc.
	Economical	Housing associations provide sufficient employment opportunities for all groups in society
		Housing associations have a good exploitation outcome
		Housing associations have a debt position with an acceptable risk profile
	Governance	Housing associations apply sustainability principles for their policies
		Housing associations highly value legality, financial continuity and integrity
Ecological	Air, Soil, Water	The environmental compartments are clean

	Nature and landscape	Nature is preserved as much as possible and where feasible reinforced
	Energy and climate	Citizens consume less energy
		Households use and generate themselves sustainable energy and emit less greenhouse gasses
	Waste collection and recycling	Citizens contribute to a wasteless circular economy
	Annoyance and emergencies	The risk for people of being affected by disasters is negligible
		Annoyance by odors, noise or light is absent
Socio-cultural	Living environment	Public daily facilities are available and accessible for everyone
	Participation	Poverty and deprivation are adequately addressed
		Citizens are able to cope economically
	Arts and culture	Cultural variety and availability is sufficiently large
		Everybody can participate actively or passively in cultural activities
	Safety	The chance of becoming a victim of violence, crime and traffic accidents is negligible
		Everybody does feel safe
	Health	Everybody feels physically and mentally healthy
		Health care is of good quality and accessible for everyone
	Education	Education is of high quality
		Everybody has access to the education appropriate to his or her capacities
Economic	Labor	Labor potential of the population is used as much as possible
		Labor offered to the population is healthy
	Spatial conditions	Available space is used in an optimal way
	Infrastructure and accessibility	Businesses, facilities, institutions and economic centers are adequately accessible by transport means and ICT
	Knowledge	Knowledge infrastructure is of high quality and supports local activities
		Creative, adaptive and innovative characteristics of the housing facilities are of high level

To implement these requirements in practice, the choice has been made, as mentioned before, to split the ecological, socio-cultural and economic capitals in an interior and exterior part, resulting in 4 interior capitals and 3 exterior capitals. The mind-maps for the interior and exterior parts are given in Figure 2.1 and Figure 2.2. The sources of these data will be discussed in par. 2.5.



**Figure 2.1** Mind-map of capitals, themes and indicators used in the internal framework for a sustainable social housing bond



**Figure 2.2** Mind-map of capitals, themes and indicators of the external framework for a sustainable social housing bond



The mentioned 4 capitals, 14 themes and 44 indicators in Figure 2.1 will be used to assess the internal sustainability performance.

Figure 2.2 shows the 3 capitals, 12 themes and 39 indicators used to describe the external sustainability performance of the associations. The data for the indicators were collected on neighborhood level, for all relevant Dutch neighborhoods (Dutch: wijken). A solution had to be found for the different scale levels used in the study. In order to connect the neighborhood characteristics and sustainability scores to the housing associations, detailed information is needed on the location of the association property. However, this data is unfortunately only available to Telos on municipality level. Because of this problem, a method was developed to link the neighborhood sustainability characteristics with housing association property.

Firstly, all neighborhoods were put into a selection process which started by excluding neighborhoods that are not relevant for this study. Neighborhoods with less than 100 houses were excluded, as well as neighborhoods with less than 150 inhabitants. On top of that, only the neighborhoods exceeding a boundary of 15% social housing in the total housing stock were selected for the analysis. These criteria resulted in a reduction of neighborhoods in the selection from 2981 to 1921.

Secondly, the neighborhood data was aggregated to municipality level. This was done by taking the weighted<sup>1</sup> average of all the neighborhoods in a municipality.

In the last step, the data on municipality level was transformed to the housing associations based on a weighted average on property per municipality. For example: association A has 25% of its property in Amsterdam, and 75% of its property in Utrecht. This association obtains an external sustainability score for 25% based on Amsterdam, and for 75% based on Utrecht.

This method was used for all 39 indicators in the external sustainability performance assessment, and for 14 out of the 44 indicators in the internal sustainability performance assessment. The used approximation is not perfect, but, given the data available, the best possible at the moment.

## **2.4 Remarks on allocation of indicators to capitals and themes**

A detailed description of the 83 indicators used is given in Annex 1. This annex also explains how these indicators are defined and measured and in what direction they are related to the sustainability scores. It should be realized that the Dutch association sector has, seen in an international context, a rather unique position. For this reason, the social housing sector uses many concepts with a national signature, which are difficult to translate correctly into English. Where appropriate the Dutch term is added.

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<sup>1</sup> The weighing was conducted based on the number of housing association houses in a neighborhood.

## 2.5 Sources of data on indicators

Indicator values for the social housing associations have been retrieved from the sources listed in Table 2.2 .

**Table 2.2** Data sources for the indicators used

Capital	Sources
Ecological capital	Compendium voor de Leefomgeving, Centraal Bureau voor de Statistiek, Emissie-registratie, Grootchalige Concentratiekaarten Nederland, WoonOnderzoek, RIVM, Risicokaart, KNMI, KRW portaal, Inspectie voor de Leefomgeving, Rioned, NOAA/ NGDC, Nationale Databank Flora en Fauna, Rijkswaterstaat klimaatmonitor, lokale bronnen, RVO, ABF Research.
Economic capital	Centraal Bureau voor de Statistiek, Uitvoeringsinstituut Werknemersverzekeringen, LISA, IBIS, Compendium voor de Leefomgeving, BAK; bewerking PBL, Kamer van Koophandel, CROW.
Socio-cultural capital	Centraal Bureau voor de Statistiek, Waarstaatjegemeente.nl, Databank Verkiezings-uitslagen, Verkiezingkaart, Nationale Zorgtoeslag, Kernkaart, Uitvoeringsinstituut Werknemersverzekeringen, Erfgoed databank, Elsevier “ Beste ziekenhuizen”, BVI Stuurkubus, Kinderen in tel; VerweyJonker instituut, Inspectie voor het Onderwijs.

The sources are amongst others Aedes, the Dutch association of housing associations, which publishes yearly data on the individual associations in its report *Associations in Perspective* (Aedes, CiP, 2017), Rapportage Aedes benchmark 2015, (Aedes, 2016); the social housing associations authority, part of the Dutch Human Environment and Transport Inspectorate (ILT) in its annual accountability report on social housing associations dVi (The Human Environment and Transport Inspectorate, 2015); and from National Statistics (CBS) as far as neighborhood related data are concerned.

## 2.6 Sustainability norms used for the indicators and aggregation to the overall sustainability score

In order to transform individual indicator scores into a uniform system of sustainability scores, Telos has developed an approach using sustainability norms for each indicator by which ranges of sustainability goal achievement are defined. The system specifies minimum and maximum values and three intermediate categories indicated by color codes (from red till gold). The set of norms applied to the 83 indicators used in this framework is given in Annex 2.

Once goal achievement scores of indicators have been derived, these are aggregated to theme scores and the theme scores are subsequently aggregated by giving them equal weight to capital scores. The capital scores are aggregated with

equal weight to the overall internal or external sustainability score of which the overall score is derived by calculating their mean value.

## **2.7 The group of associations included in the framework**

As described above, 332 housing associations were active in the Netherlands in 2016. These vary in size and own a wide variety of housing units. Some associations have more than 10,000 housing units and a large staff. They are also major players in local developments. Others own only a small number of several hundred housing units and show little dynamic in time.

Only those housing associations that are large enough to provide adequate data on a yearly basis have been included in the framework. This resulted in the group of in total 332 associations.

### 3 Internal sustainability performance of Dutch social housing association

This chapter describes the internal sustainability performance of the 332 Dutch housing associations. Besides an overall list of associations and their internal sustainability performance score, this chapter describes the role of association size, age of the property, the magnitude of changes in the property and the type of housing units (one-family homes or units in high-rise buildings).

The external sustainability performance will be discussed in chapter 4, while an overview of the integrated sustainability scores will be described in chapter 5. In chapter 6 the classes chosen and the associations selected for the sustainability bond are discussed.

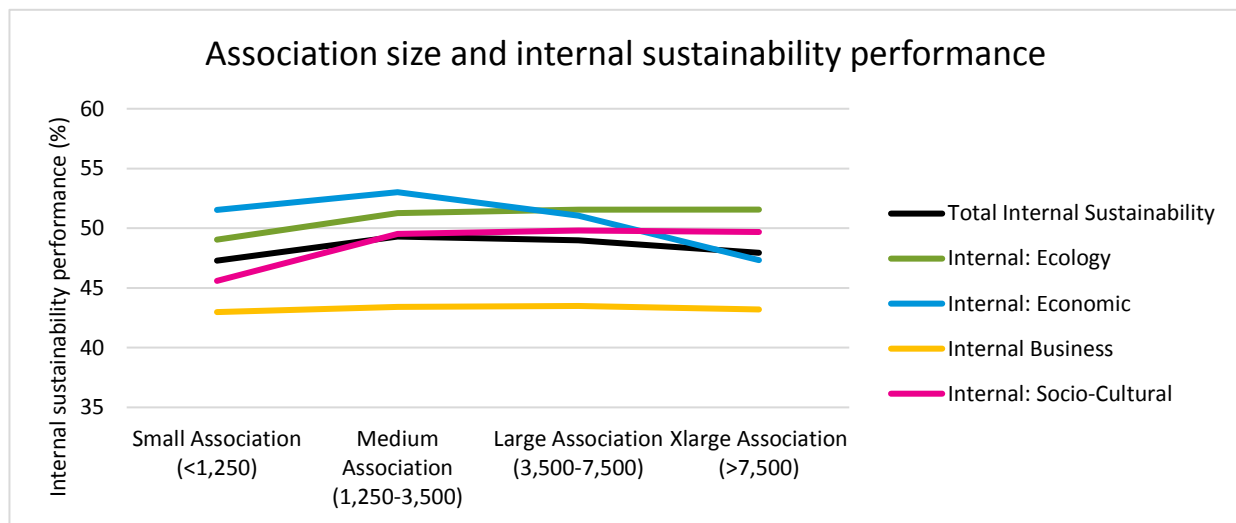
#### 3.1 General results for the internal sustainability performance of social housing associations

**Table 3.1** Ten associations among the 332 associations studied scoring highest on internal sustainability performance including their four capital scores

Code	Name	Internal Business	Ecological	Socio-cultural	Economic	Total Internal score
L1670	Oosterpoort Wooncombinatie	56.41	56.44	59.53	61.33	58.43
L1693	Woningstichting Nijkerk	55.92	52.11	56.20	64.65	57.22
L1239	Stichting IJsseldal Wonen	46.01	62.43	56.12	61.36	56.48
L0343	Stichting KleurrijkWonen	55.20	59.51	55.65	55.42	56.45
L0661	Woonstichting VechtHorst	51.32	51.57	59.90	61.89	56.17
L1857	Wovesto	55.89	48.58	56.80	61.38	55.66
L0782	Woningstichting Brummen	56.42	62.55	50.35	51.19	55.13
L1877	Stichting Woonservice Drenthe	50.62	55.53	57.74	55.91	54.95
L0979	de Woningstichting	52.15	53.16	60.73	52.91	54.74
L1413	Woningstichting Hellendoorn	50.18	56.71	56.28	54.97	54.53

Table 3.1 shows the 10 highest scoring associations, including their four capital scores which show wide variations. Compensation between the capitals makes it possible to score high on total internal sustainability even if one capital has a below average (less than 50) score. Annex 3 presents, in alphabetical order, the 332 housing associations and their internal, external and total sustainability scores.

### 3.2 Impact of association size



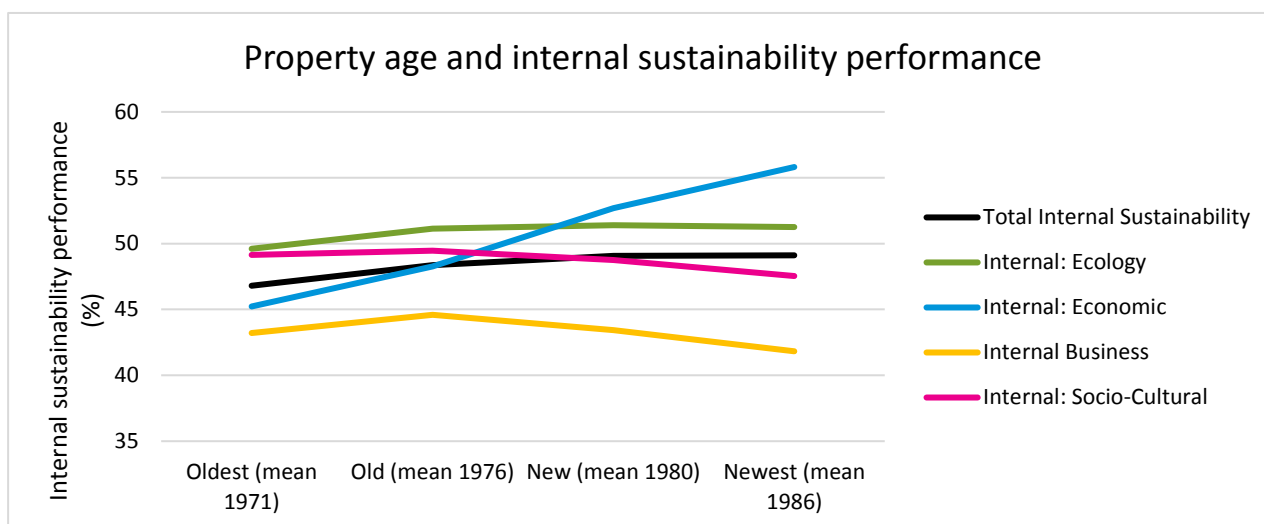
**Figure 3.1** Impact of size classes of associations on their internal sustainability performance

As Figure 3.1 shows, internal sustainability performance scores are highest for the medium sized associations (1,250-3,500 housing units; black line) mainly because economic capital scores are highest. At higher sizes, social capital scores further improve, ecological capital stabilizes, but internal business and particularly economic capital scores decrease.

### 3.3 Impact of age of property of associations

A similar analysis of the impact of the age of association property is presented in Figure 3.2. Associations with the oldest property<sup>2</sup> show the lowest sustainability scores. The newer the property of associations, the higher their sustainability score, except for the associations with the newest property. This is the combined result of considerable higher economic capital scores, but lower socio-cultural capital performance for associations with newer property. Internal business scores tend to improve with decreasing property age but decrease again progressively for associations with newer property.

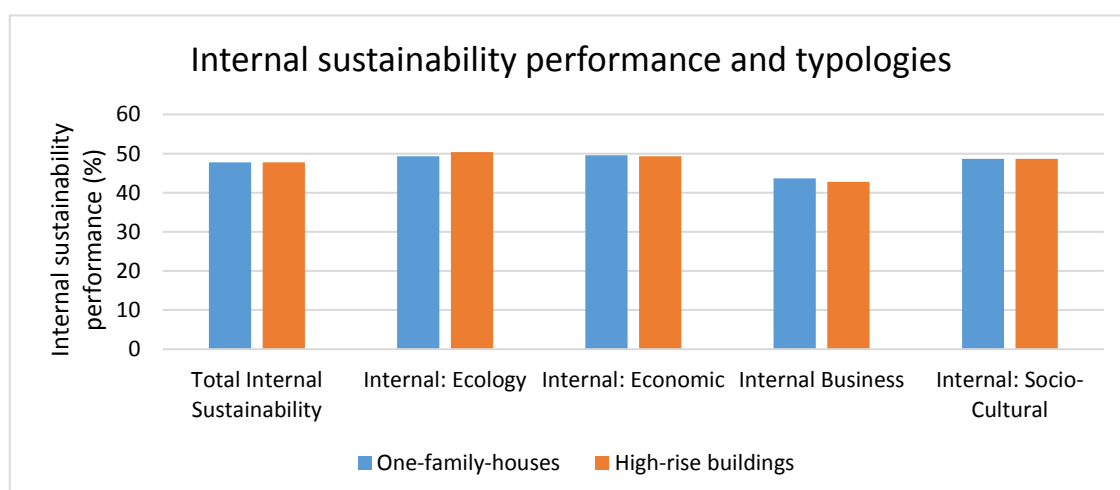
<sup>2</sup> Property age has been dealt with in this analysis by calculating the average age of association property and listing all associations according to this characteristic. Subsequently equal quarts (n=85) of this average property age list have been used as the four categories shown in Figure 4.2. The group of associations with the oldest property represents an average property construction year of 1971, for the old property category the average construction year is 1976, and for the new and newest categories the average construction year is resp. 1980 and 1986.



**Figure 3.2** Impact of year of construction of property of associations on their internal sustainability performance

### 3.4 Impact of one-family houses or high-rise buildings type of associations

Figure 4.3 shows the scores for total sustainability and the four capital scores for the two additional association types discussed in this paragraph.



**Figure 3.3** Sustainability scores of two qualitative types of associations

Differences between the two types are rather small, while the associations with high levels of one-family dwellings seem to perform a little bit better on sustainability in general and on all the capitals, except for internal business. Internal business capital scores are highest for associations with high levels of high-rise buildings.

## 4 External sustainability performance of Dutch social housing associations

This chapter describes the general outcome of the second part of the study focusing on the external sustainability performance. The external sustainability performance gives an image of the sustainability of the area in which the property of the associations is located. Besides an overall list of associations with their external sustainability performance score, the role of association size, age of the property, the magnitude of changes in the property and the type of housing units (one-family homes or units in high-rise buildings) are described. An overview of the total sustainability will be described in chapter 5. In chapter 6 the classes chosen and the associations selected for a sustainability bond will be discussed.

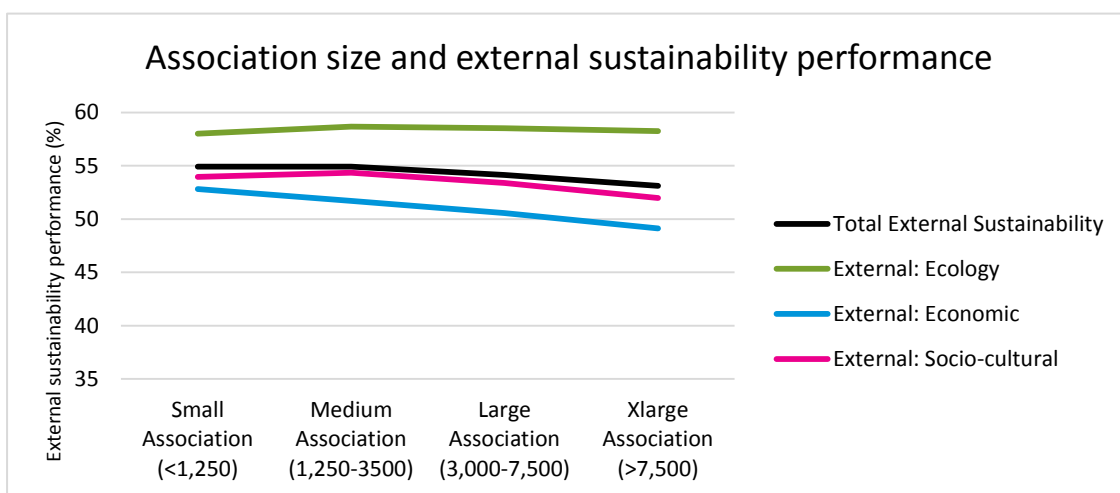
### 4.1 General results on external sustainability for the social housing associations

**Table 4.1** Ten associations among the 332 associations studied scoring highest on external sustainability performance including their three capital scores

Code	Name	External Sustainability Performance			
		Ecology	Economic	Socio-cultural	Total External score
L1164	Woningbouwvereniging St. Willibrordus	75.13	56.98	65.30	65.80
L0757	Woningbouwvereniging Oostzaanse Volkshuisvesting	66.30	71.67	57.11	65.03
L0936	Stichting Eemland Wonen	62.92	69.58	61.22	64.58
L1836	Stichting Heuvelrug Wonen	67.87	63.53	61.62	64.34
L1903	Woningbouwvereniging Amerongen	67.87	63.53	61.62	64.34
L1395	Woningbouwvereniging Maarn	67.87	63.53	61.62	64.34
L1100	Stichting Wonen Midden-Delfland	54.98	69.96	67.63	64.19
L1471	Stichting Woonwijze	65.87	64.28	61.66	63.94
L0386	Woningstichting Naarden	63.78	64.43	63.27	63.83
L0272	Wassenaarsche Bouwstichting	72.67	55.43	62.99	63.70

Table 4.1 shows the 10 highest scoring associations on external sustainability performance, including their three capital scores which show wide variations. The ecological capital scores are not even above average in some cases. Annex 3 presents, in alphabetical order, the 332 housing associations and their internal, external and total sustainability performance scores.

## 4.2 Impact of association size



**Figure 4.1** Impact of size classes of associations on their external sustainability performance

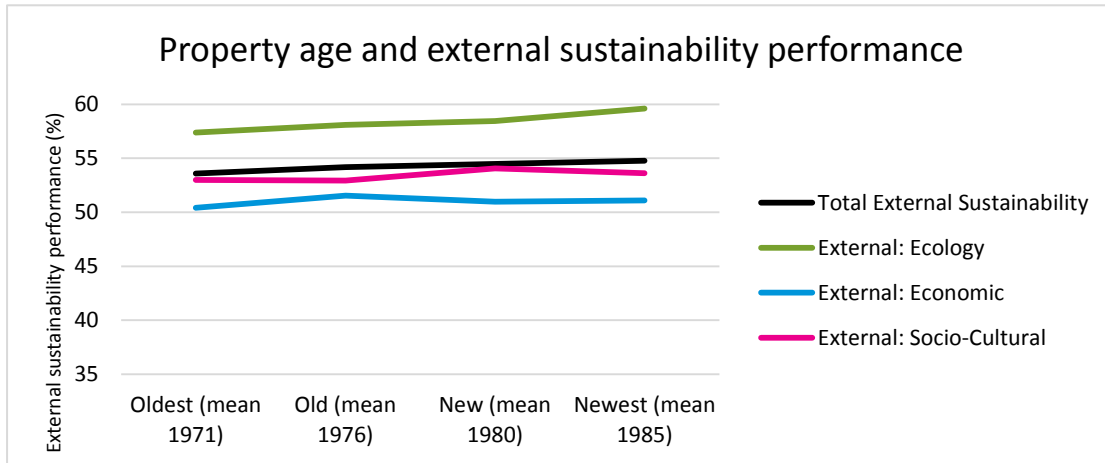
As Figure 4.1 shows, total sustainability scores are highest for the medium sized associations (1,250-3,500 housing units) mainly because socio-cultural and ecological capital scores are here highest, while economic scores are highest for small associations. At higher sizes, ecological capital scores remain more or less stable, but all other capital scores decrease. The XLarge associations are mainly active in neighborhoods with lower external sustainability scores.

## 4.3 Impact of age of property of associations

A similar analysis of the impact of the age of association property is presented in Figure 4.2. Associations with the oldest property<sup>3</sup> show the lowest external sustainability scores. The newer the property of associations, the higher their sustainability score, although this effect is small. This is the result of higher ecological capital scores, and stabilizing socio-cultural and economic capital performances for associations with newer property.

<sup>3</sup> Property age has been dealt with in this analysis by calculating the average age of association property and listing all associations according to this characteristic. Subsequently equal quarts (n=85) of this average property age list have been used as the four categories shown in Figure 4.2. The group of associations with the oldest property represents an average property age of 1971 as the year of construction, for the old property category the average construction year is 1976, and for the new and newest categories the average construction year is resp. 1980 and 1985.

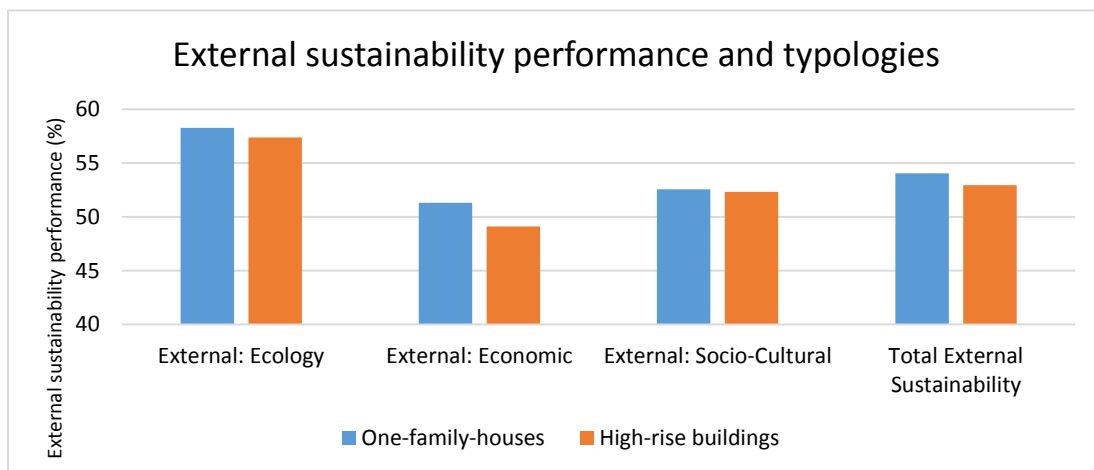




**Figure 4.2** Impact of year of construction of property of associations on their external sustainability performance

#### 4.4 Impact of one-family houses or high-rise buildings type of associations

Figure 4.3 shows the scores for total external sustainability performance and the three capital scores for the two additional qualitative association types<sup>4</sup> discussed in this paragraph.



**Figure 4.3** External sustainability scores of two types of associations (one-family-houses and high-rise buildings)

Differences between the two types are rather small. Associations with a lot of one-family dwellings have on average a higher score on ecological and economic external sustainability than associations with a large part of high-rise buildings. The scores on socio-cultural capital are rather similar for these types.

<sup>4</sup> The type 'one-family houses' includes all associations of which the property consists for 80% or more of one-family houses. The 'high-rise buildings' type refers to associations of which the property consists for 20% or more of high-rise housing units.

## 5 Integrated sustainability performance of Dutch social housing associations

This chapter describes the general outcome of the study for the group of 332 associations. Besides an overall list of associations with their sustainability score, the role of association size, age of the property, and the type of housing units (one-family homes or units in high-rise buildings) are described. In chapter 6 the associations selected for a social housing bond will be discussed.

### 5.1 General results for the social housing associations

**Table 5.1** Ten associations among the 332 associations studied scoring highest on total sustainability performance.

Code	Name	<i>External sustainability performance</i>	<i>Internal sustainability performance</i>	<b>Total score</b>
L1543	Vallei Wonen	63.19	54.42	<b>58.81</b>
L1471	Stichting Woonwijze	63.94	52.03	<b>57.98</b>
L1164	Woningbouwvereniging St. Willibrordus	65.80	50.12	<b>57.96</b>
L1878	Woningstichting Leusden	61.45	54.11	<b>57.78</b>
L1670	Oosterpoort Wooncombinatie	57.10	58.43	<b>57.76</b>
L1100	Stichting Wonen Midden-Delfland	64.19	50.68	<b>57.44</b>
L1865	Woningstichting Putten	60.60	54.20	<b>57.40</b>
L0386	Woningstichting Naarden	63.83	50.82	<b>57.32</b>
L1875	Stichting Woningcorporaties Het Gooi en Omstreken	61.41	53.08	<b>57.24</b>
L0936	Stichting Eemland Wonen	64.58	49.80	<b>57.19</b>

Table 5.1 shows the 10 highest scoring associations, including their internal and external performance scores. Annex 3 presents, in alphabetical order, the 332 housing associations and their internal, external and total sustainability scores.

## 5.2 Statistical analysis of association size and property age

The statistical significance of the differences between different age and size classes are shown below in Tables 5.2 and 5.3. Table 5.2 provides the outcome of an independent sample T-test analysis of the impact of association size on the internal and external scores as well as on the total sustainability score. In Table 5.3 the same outcome is presented from a property-age point of view.

**Table 5.2** Difference of sustainability score of size related association types compared to the average scores of the associations that do not belong to the type specified

Type of association	<i>External sustainability Performance</i>	<i>Internal sustainability Performance</i>	<b>Total Sustainability</b>
Small (n=77)	1.06 *	-1.42 **	<b>-0.18</b>
Medium sized (n=81)	0.76	1.23 *	<b>0.99 *</b>
Large (n=82)	-0.03	0.77	<b>0.37</b>
Extra Large (n=92)	-1.62 ***	-0.61	<b>-1.11 **</b>

\*: p<0.05, \*\*: p<0.01, \*\*\*: p<0.001

**Table 5.3** Difference of sustainability score of age related association types compared to the average scores of the associations that do not belong to the type specified

Type of association	<i>External sustainability Performance</i>	<i>Internal sustainability Performance</i>	<b>Total Sustainability</b>
Oldest (n= 78)	-0.87	-2.05 ***	<b>-1.46 ***</b>
Old (n=85)	-0.09	-0.05	<b>-0.07</b>
New (n=84)	0.10	0.93	<b>0.52</b>
Newest (n=85)	0.86	0.99 *	<b>0.92 *</b>

\*: p<0.05, \*\*: p<0.01, \*\*\*: p<0.001

Tables 5.2 and 5.3 confirm statistically the trends already signaled in Figures 3.1, 3.2, 4.1 and 4.2. Small associations are significantly related to lower internal sustainability performance scores. Extra-large associations are significantly negatively related to external sustainability performance. Medium sized associations show overall the best sustainability scores, which is particularly the case for internal sustainability performance.

The older the property, the lower the total sustainability performance, however these results are not always statistically significant. Due to high scores on internal sustainability performance, associations with new property score significantly higher on total sustainability.

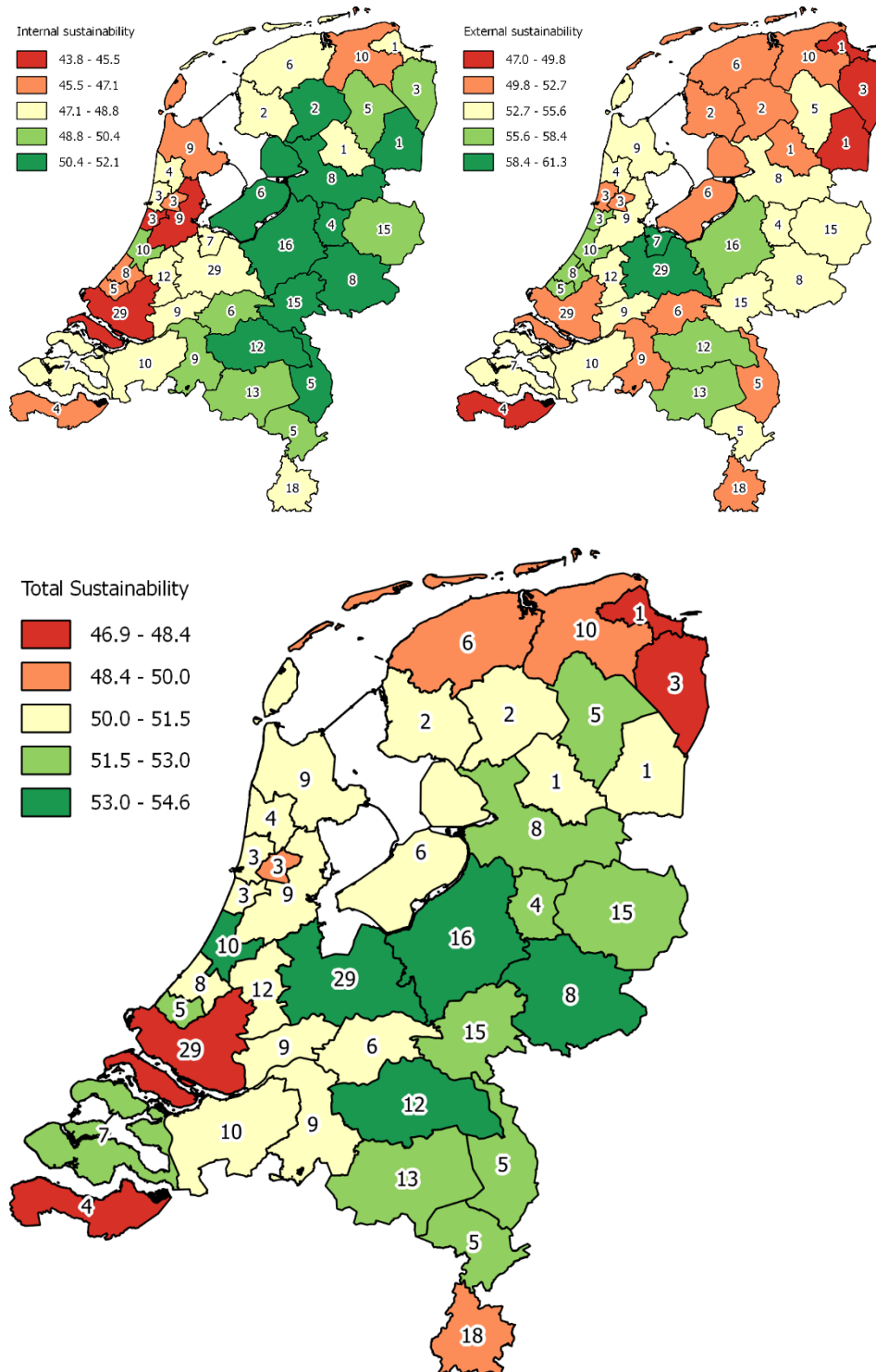
**Table 5.4** Difference of sustainability score of two types of associations in which a characteristic stands out, compared to the average scores of the associations that do not belong to the type specified

Type of association	<i>External sustainability Performance</i>	<i>Internal sustainability Performance</i>	<b>Total Sustainability</b>
One-family-dwellings (n=35)	-0.41	-0.68	<b>-0.54</b>
High-rise Buildings (n=37)	-1.55 *	-0.70	<b>-1.12 *</b>

\*: p<0.05, \*\*: p<0.01

Table 5.4 looks further into the statistical significance of differences between one-family-type of associations versus high-rise buildings associations. In the case of associations with much one-family houses, it is found that their lower scores on external and internal sustainability are not statistically significant. For associations with high levels of high-rise buildings, the score for external sustainability performance is significantly lower. This affects the total sustainability in such a way that it also scores significantly lower than the rest. The data indicate that both classes are scoring less favorable than the other classes of the associations.

Figures 5.1 and 5.2 show the average scores for internal and external sustainability of housing associations, grouped according to economic homogeneous regions (Dutch: COROP regio's). For the internal sustainability a clear West-East gradient shows itself, and for external sustainability a weaker reverse gradient seems to be the case. Figure 5.3 shows the average total sustainability scores of housing associations per Dutch COROP region. The overall result indicates lowest sustainability scores of housing associations in the North-east and South-west parts of the Netherlands and highest in the center of the country.

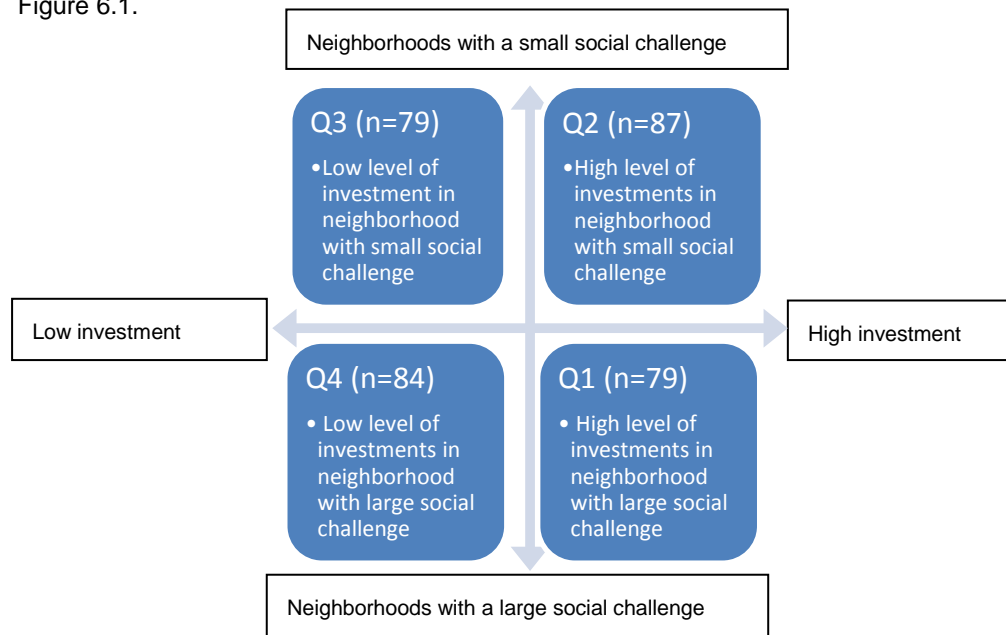


**Figures 5.1, 5.2 and 5.3** Overview of average internal, external and total sustainability scores of social housing associations per economic (COROP) region of the Netherlands

## 6 Selection of ‘best in class’ social housing associations

### 6.1 How to reconcile maximizing sustainability score and awarding the social task of housing associations?

As described in paragraph 2.3, social housing associations have a special social responsibility in society. Simply ranking associations according to their sustainability score would not value this social responsibility to invest in neighborhoods with large social challenges. To include this aspect in the selection of associations for the sustainable social housing bond framework, the following preselection step has been designed. Associations have been divided in four categories by defining them in four quadrants, depending on social challenge and level of investment, as presented in Figure 6.1.



**Figure 6.1** Four categories of housing associations depending on their level of investment in a neighborhood and the level of social challenges in the neighborhood<sup>5</sup>

<sup>5</sup> The numbers of the four quarters add up to 329 associations. 3 associations were left out of the analyses due to a lack of data on investments.

Most favored are associations (Q1) with a high level of investment in neighborhoods with large social challenges. Least favored are associations (Q4) with a low level of investment in neighborhoods with large social challenges. Second best are associations (Q2) with a high level of investment in neighborhoods with a small social challenge. Third best are associations (Q3) with a low level of investment in neighborhoods with a small social challenge.

Data to make it possible at this stage to allocate associations to these four categories have been processed as follows.

Firstly, neighborhoods have been assessed on the dominance of social housing in order to exclude those neighborhoods where the impact of associations is relatively small. Neighborhoods where associations own less than 25% of the housing stock are for this reason left out. For the remainder of neighborhoods, it was determined if the number of poor households (as provided by Statistics Netherlands - CBS), exceeded a value of 40%. Neighborhoods with more than 40% poor households were defined as neighborhoods with a large social challenge.

Secondly, the total amount of investments spent by the housing associations on residential improvements was considered. This describes to what extent associations do invest in improving the quality and living conditions of the neighborhoods. A high level of investments was defined as 'an association that has spent more than 1002 euro per rental unit over the period from 2013 till 2015 on mutation- and planned maintenance.

To value these aspects, a preselection of associations was carried out by in principle<sup>6</sup> selecting the 80 best on sustainability scoring associations in Q1, the 60 best scoring associations in Q2, the 40 best scoring associations in Q3 and the best 20 in Q4, resulting in 200 of the 332 associations carried on to the next selection exercise.

## 6.2 The use of 10 association classes

As a result of the previously described considerations, the framework for a BNG Bank sustainable social housing bond can be based on a total of 10 classes of housing associations.

This number is composed of 4 size related classes, 4 age of property related classes and the last discussed two types: a one-family house class and a high-rise buildings association class.

Other possible classes, such as student housing and property dynamics have also been considered, but were found not to be representative enough for the framework.

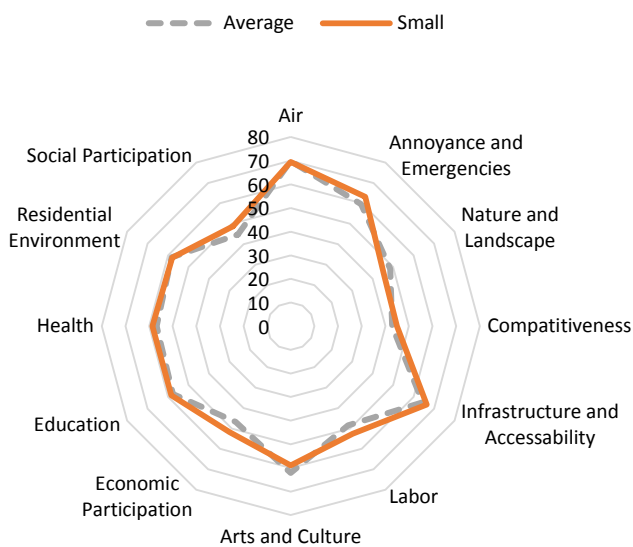
Some examples of thematic characteristics of the 10 classes of associations considered, in comparison with the average scores of associations, are given below.

<sup>6</sup> Because there are only 79 associations in quarter 1, there has been made an exception to this rule. 79 associations were elected from quarter 1, and 61 associations from quarter 2. The selections from Q3 and Q4 remain the same as described.

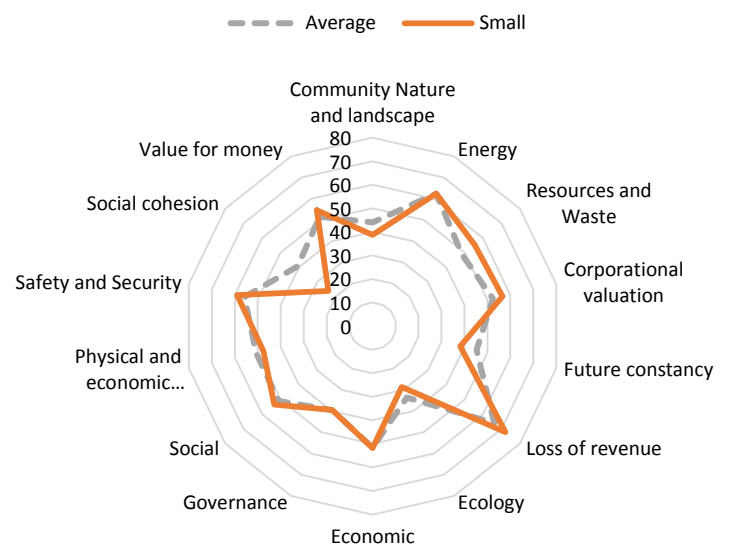
Note that the higher the score of a theme, the better the sustainability requirement is met.

Small associations show a better sustainability score on the loss of revenue theme (internal). Associations with many high-rise housing units score better on annoyance and emergencies (external) than those with many one-family homes. Scores for economic participation (external) are better for associations with the newest property than for associations with older property.

## External sustainability performance

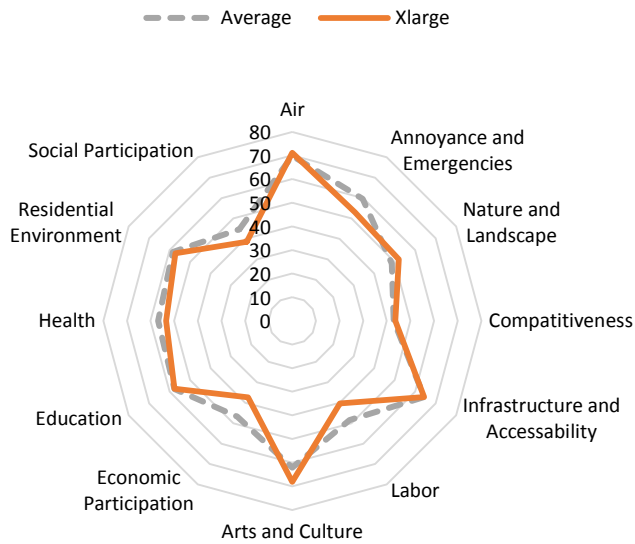


## Internal sustainability performance

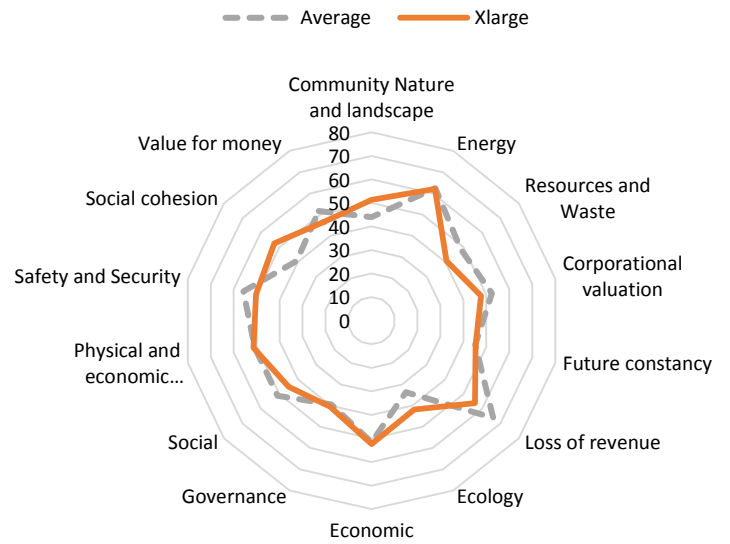




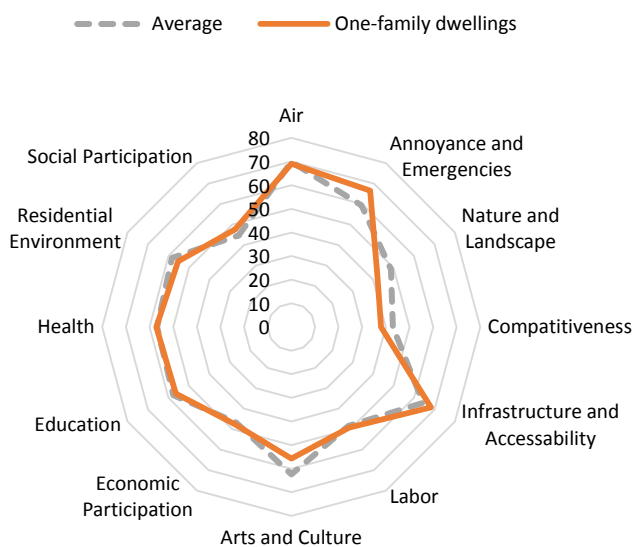
### External sustainability performance



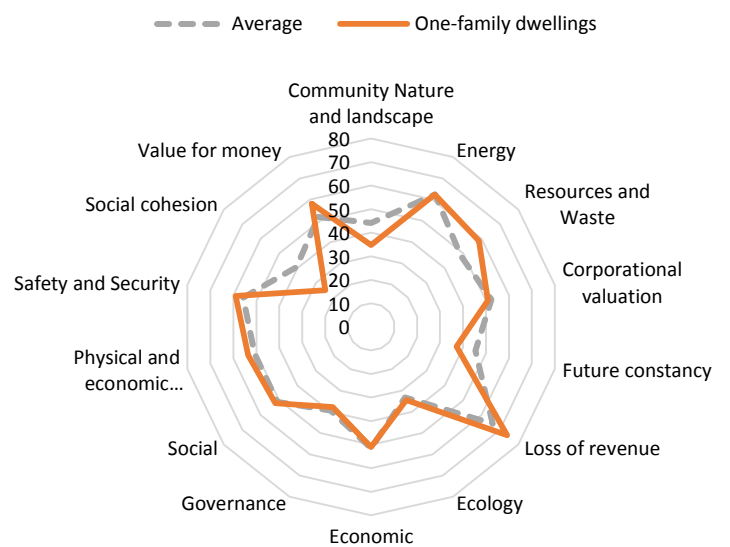
### Internal sustainability performance



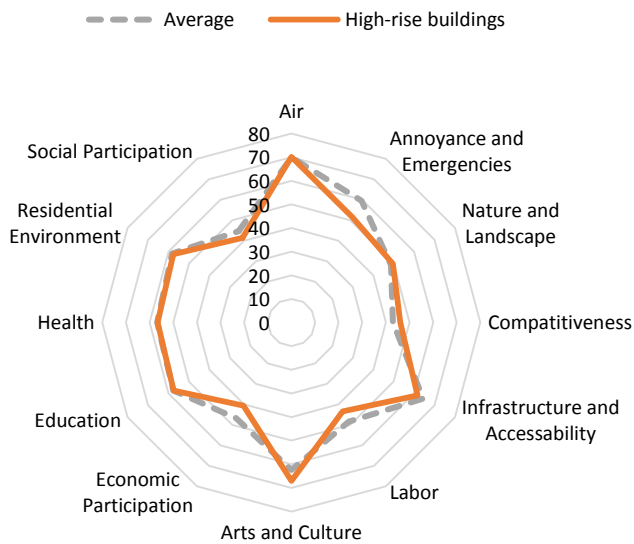
### External sustainability performance



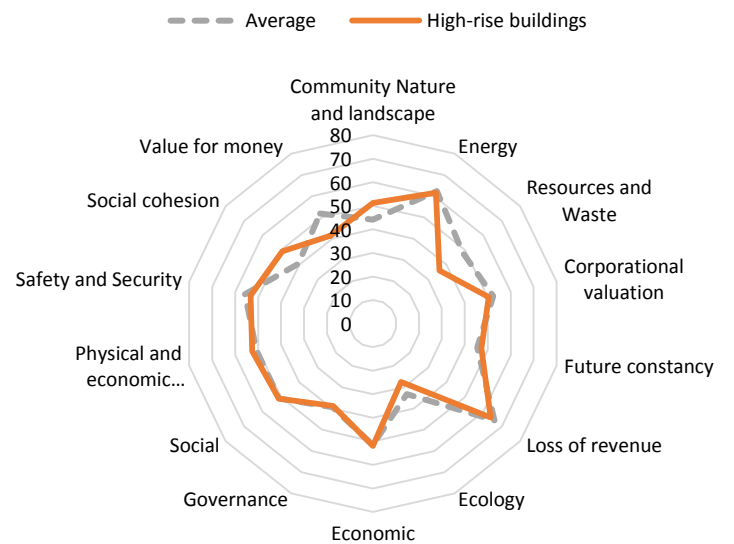
### Internal sustainability performance



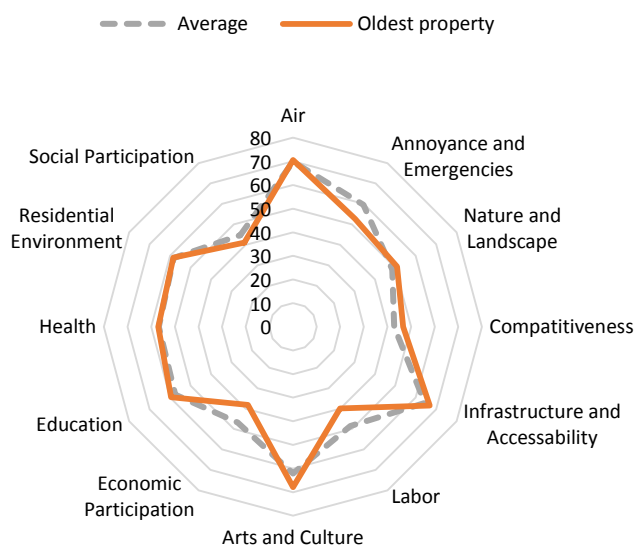
## External sustainability performance



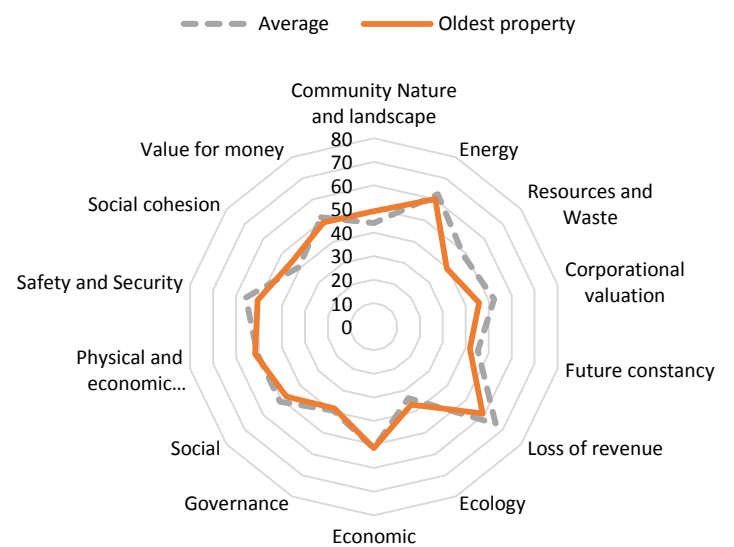
## Internal sustainability performance



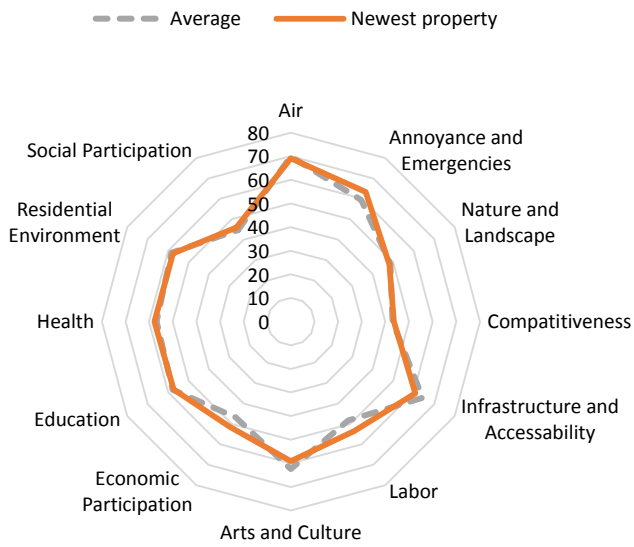
## External sustainability performance



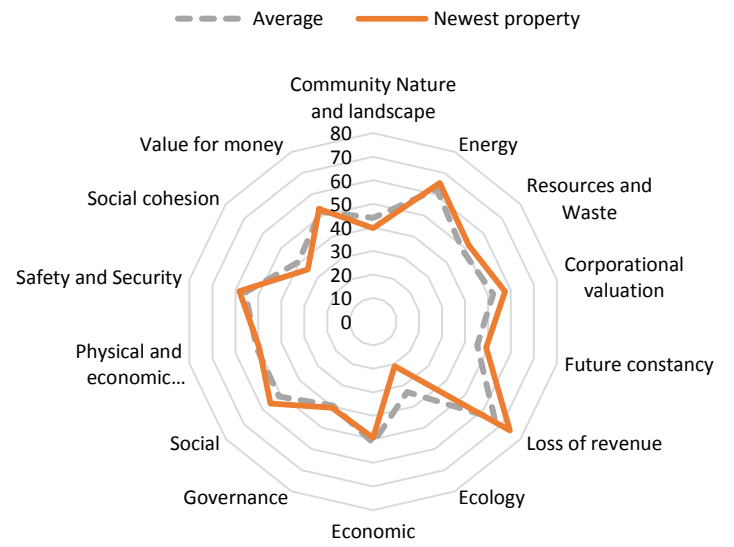
## Internal sustainability performance



## External sustainability performance



## Internal sustainability performance



### 6.3 Sustainability scores of preselected associations for 10 association types

Below, the 10 classes of associations are listed with 15 associations scoring best on total sustainability in each class.

#	Top 15 Small associations (n=38)		Quad-rant	Total Sustainability	#	Top 15 Medium associations (n=57)		Quad-rant	Total Sustainability
1	L1543	Vallei Wonen	3	58.81	1	L1471	Stichting Woonwijze Woningbouwvereniging St.	2	57.98
2	L0386	Woningstichting Naarden Woningbouwvereniging Oostzaanse	4	57.32	2	L1164	Willibrordus	4	57.96
3	L0757	Volkshuisvesting	3	55.23	3	L1878	Woningstichting Leusden	2	57.78
4	L1893	Woonstichting Valburg	2	55.19	4	L1100	Stichting Wonen Midden-Delfland	2	57.44
5	L1596	Wonen Wijdmeren	3	54.97	5	L1865	Woningstichting Putten	3	57.40
6	L2104	Stichting Woningbedrijf Warnsveld	4	54.96	6	L0936	Stichting Eemland Wonen	1	57.19
7	L2101	Stichting Goed Wonen Liempde	3	54.92	7	L0661	Woonstichting VechtHorst	3	57.12
8	L0238	Woningstichting Voerendaal	3	54.90	8	L1693	Woningstichting Nijkerk	3	56.68
9	L1395	Woningbouwvereniging Maarn	3	54.80	9	L1836	Stichting Heuvelrug Wonen	3	56.66
10	L0254	Woningstichting Heteren Stichting Woningbeheer De	2	54.59	10	L1239	Stichting IJsseldal Wonen	2	56.61
11	L1525	Vooruitgang	3	54.58	11	L0590	Random Wonen	3	56.43
12	L0765	Stichting Wonen Delden	3	54.41	12	L0672	Woningstichting Volksbelang	2	56.13
13	L1892	Woningbouwvereniging Oudewater	3	54.26	13	L2092	Noordwijkse Woningstichting	3	56.13
14	L0623	Woningstichting 'Warmunda'	3	54.26	14	L1413	Woningstichting Hellendoorn	2	56.11
15	L0705	Veenendaalse Woningstichting	1	54.11	15	L1857	Wovesto	3	56.11

# Sustainability Framework for a 2017 BNG Bank Social Bond for Dutch Housing Associations

#	Top 15 Large associations (n=53)		Quad-rant	Total Sustainability
1	L1670	Oosterpoort Wooncombinatie	2	57.76
2	L1875	Stichting Woningcorporaties Het Gooi en Omstreken	3	57.24
3	L1716	Viveste	3	56.95
4	L0317	IJsselsteinse Woningbouwvereniging (Provides)	2	56.89
5	L0383	Stichting Dudok Wonen	1	56.67
6	L1910	Stichting WBO Wonen	4	56.42
7	L1236	Woonstichting St. Joseph	3	56.31
8	L0643	Bouwvereniging Huis en Erf	2	56.11
9	L0347	Stichting Viverion	2	55.66
10	L1436	Stichting Dunavie	4	55.38
11	L0157	Woningstichting Stek	3	55.04
12	L0979	de Woningstichting	1	54.84
13	L1794	Woningstichting de Zaligheden	3	54.47
14	L2082	Woningstichting Barneveld	3	54.35
15	L0923	Bouwvereniging Woningbelang	2	54.19

#	Top 15 XLarge associations (n=52)		Quad-rant	Total Sustainability
1	L0369	Stichting UWoon	2	55.74
2	L2051	Stichting Woonstede	2	55.44
3	L0835	Wooncorporatie ProWonen	2	55.27
4	L0151	Woonstichting 'thuis	2	55.23
5	L0886	Stichting Area	2	55.07
6	L0343	Stichting KleurrijkWonen	3	55.05
7	L1464	Stichting Woonbedrijf SWS.Hhvl	4	53.85
8	L0176	BrabantWonen	1	53.80
9	L1533	Stichting WOONopMAAT	1	53.65
10	L0766	Stichting GroenWest	2	53.64
11	L0734	Patrimonium woonstichting	1	53.47
12	L1781	Stichting Thuisvester	2	53.16
13	L0029	Stichting deltaWonen	1	53.06
14	L0446	Woningstichting De Goede Woning	2	53.05
15	L0540	Stichting QuaWonen	2	52.75

#	Top 15 one-family-dwellings associations (n=17)		Quad-rant	Total Sustainability
1	L0661	Woonstichting VechtHorst	3	57.12
2	L2104	Stichting Woningbedrijf Warnsveld	4	54.96
3	L1395	Woningbouwvereniging Maarn	3	54.80
4	L0254	Woningstichting Heteren	2	54.59
5	L2099	Woonstichting De Marken	4	53.47
6	L1491	Woningstichting Kessel	4	53.09
7	L0641	Stichting Destion	2	52.84
8	L0379	Woningbouwvereniging Arnemuiden	4	52.41
9	L1584	Bouwvereniging Ambt Delden	2	52.34
10	L0543	R&B Wonen	2	52.01
11	L1847	Woningbouwvereniging Compaen	1	51.07
12	L0077	Stichting Wold en Waard	2	50.88
13	L1247	Woningstichting Obbicht en Papenhoven	1	49.95
14	L0056	Stichting Woningbouw Achtkarspelen	1	49.89
15	L0676	Stichting Wonen Zuidwest Friesland	1	49.19

#	Top 15 high-rise-buildings associations (n=18)		Quad-rant	Total Sustainability
1	L1878	Woningstichting Leusden	2	57.78
2	L0590	Rondom Wonen	3	56.43
3	L2051	Stichting Woonstede	2	55.44
4	L0439	Stichting Rhiant	3	53.71
5	L0637	Stichting De Seyster Veste	3	53.69
6	L1533	Stichting WOONopMAAT	1	53.65
7	L0734	Patrimonium woonstichting	1	53.47
8	L0837	Jutphaas Wonen	3	53.43
9	L1524	Rijnhart Wonen	2	52.05
10	L0267	Stichting Trivire	1	51.07
11	L2072	Waterweg Wonen	1	50.06
12	L1663	WoonFriesland	1	49.78
13	L0841	Woningstichting De Voorzorg	1	48.62
14	L0017	Woningstichting Rochdale	1	48.13
15	L0371	Woningstichting Samenwerking Vlaardingen	1	46.43

#	Top 15 oldest property associations (n=46)		Quad-rant	Total Sustainability
1	L1164	Woningbouwvereniging St. Willibrordus	4	57.96
2	L0936	Stichting Eemland Wonen	1	57.19
3	L0383	Stichting Dudok Wonen	1	56.67
4	L1910	Stichting WBO Wonen	4	56.42
5	L1436	Stichting Dunavie	4	55.38
6	L0979	de Woningstichting	1	54.84
7	L1395	Woningbouwvereniging Maarn	3	54.80
8	L0254	Woningstichting Heteren	2	54.59
9	L1464	Stichting Woonbedrijf SWS.Hhvl	4	53.85
10	L0602	Woonstichting SSW	3	53.76
11	L0630	Brederode Wonen	2	53.47
12	L0533	Woningbouwvereniging Laren	1	53.27
13	L0446	Woningstichting De Goede Woning	2	53.05
14	L0943	Stichting Woongoed Middelburg	1	52.94
15	L0379	Woningbouwvereniging Arnemuiden	4	52.41

#	Top 15 new property associations (n=52)		Quad-rant	Total Sustainability
1	L1471	Stichting Woonwijze	2	57.98
2	L0386	Woningstichting Naarden	4	57.32
3	L1239	Stichting IJsseldal Wonen	2	56.61
4	L0672	Woningstichting Volksbelang	2	56.13
5	L2092	Noordwijkse Woningstichting	3	56.13
6	L1413	Woningstichting Hellendoorn	2	56.11
7	L0643	Bouwvereniging Huis en Erf	2	56.11
8	L0369	Stichting UWON	2	55.74
9	L1745	Stichting Goed Wonen	2	55.64
10	L2051	Stichting Woonstede	2	55.44
11	L0835	Wooncorporatie ProWonen	2	55.27
12	L1893	Woonstichting Valburg	2	55.19
13	L2044	Stichting Wonen Wierden-Enter	2	54.89
14	L0705	Veenendaalse Woningstichting	1	54.11
15	L1506	Woningstichting SallandWonen	3	54.04

#	Top 15 old property associations (n=52)		Quad-rant	Total Sustainability
1	L1875	Stichting Woningcorporaties Het Gooi en Omstreken	3	57.24
2	L1836	Stichting Heuvelrug Wonen	3	56.66
3	L1236	Woonstichting St. Joseph	3	56.31
4	L0782	Woningstichting Brummen	2	55.92
5	L0347	Stichting Viverion	2	55.66
6	L0272	Wassenaarsche Bouwstichting	4	55.56
7	L0757	Woningbouwvereniging Oostzaanse Volkshuisvesting	3	55.23
8	L0343	Stichting KleurrijkWonen	3	55.05
9	L0157	Woningstichting Stek	3	55.04
10	L1596	Wonen Wijdmeren	3	54.97
11	L2104	Stichting Woningbedrijf Warnsveld	4	54.96
12	L0238	Woningstichting Voerendaal	3	54.90
13	L0765	Stichting Wonen Delden	3	54.41
14	L1892	Woningbouwvereniging Oudewater	3	54.26
15	L0623	Woningstichting 'Warmunda'	3	54.26

#	Top 15 newest property associations (n=50)		Quad-rant	Total Sustainability
1	L1543	Vallei Wonen	3	58.81
2	L1878	Woningstichting Leusden	2	57.78
3	L1670	Oosterpoort Wooncombinatie	2	57.76
4	L1100	Stichting Wonen Midden-Delfland	2	57.44
5	L1865	Woningstichting Putten	3	57.40
6	L0661	Woonstichting VechtHorst	3	57.12
7	L1716	Viveste	3	56.95
8	L0317	IJsselsteinse Woningbouwvereniging (Provides)	2	56.89
9	L1693	Woningstichting Nijkerk	3	56.68
10	L0590	Rondom Wonen	3	56.43
11	L1857	Wovesto	3	56.11
12	L0305	Woningbouwvereniging Langedijk	3	55.26
13	L0151	Woonstichting 'thuis	2	55.23
14	L0886	Stichting Area	2	55.07
15	L2101	Stichting Goed Wonen Liempde	3	54.92

## 6.4 Elected sustainable social housing associations

Table 6.1 summarizes the remaining 91 sustainable social housing associations, after correcting for double counting where an association is represented in more than one class. This list represents the framework which can be used for issuing a 2017 social housing bond by BNG Bank.

**Table 6.1** List of 91 housing associations (alphabetical order) selected for the framework for a sustainable social housing bond

	Association name	Quadrant	Total Sustainability score
L1584	Bouwvereniging Ambt Delden	2	52.34
L0643	Bouwvereniging Huis en Erf	2	56.11
L0923	Bouwvereniging Woningbelang	2	54.19
L0176	BrabantWonen	1	53.80
L0630	Brederode Wonen	2	53.47
L0979	de Woningstichting	1	54.84
L0317	IJsselsteinse Woningbouwvereniging (Provides)	2	56.89
L0837	Jutphaas Wonen	3	53.43
L2092	Noordwijkse Woningstichting	3	56.13
L1670	Oosterpoort Wooncombinatie	2	57.76
L0734	Patrimonium woonstichting	1	53.47
L0543	R&B Wonen	2	52.01
L1524	Rijnhart Wonen	2	52.05
L0590	Rondom Wonen	3	56.43
L0886	Stichting Area	2	55.07
L0637	Stichting De Seyster Veste	3	53.69
L0029	Stichting deltaWonen	1	53.06
L0641	Stichting Destion	2	52.84
L0383	Stichting Dudok Wonen	1	56.67
L1436	Stichting Dunavie	4	55.38
L0936	Stichting Eemland Wonen	1	57.19
L1745	Stichting Goed Wonen	2	55.64
L2101	Stichting Goed Wonen Liempde	3	54.92
L0766	Stichting GroenWest	2	53.64
L1836	Stichting Heuvelrug Wonen	3	56.66
L1239	Stichting IJsseldal Wonen	2	56.61

Association name		Quadrant	Total Sustainability score
L0343	Stichting KleurrijkWonen	3	55.05
L0540	Stichting QuaWonen	2	52.75
L0439	Stichting Rhiant	3	53.71
L1781	Stichting Thuisvester	2	53.16
L0267	Stichting Trivire	1	51.07
L0369	Stichting UWoon	2	55.74
L0347	Stichting Viverion	2	55.66
L1910	Stichting WBO Wonen	4	56.42
L0077	Stichting Wold en Waard	2	50.88
L0765	Stichting Wonen Delden	3	54.41
L1100	Stichting Wonen Midden-Delfland	2	57.44
L2044	Stichting Wonen Wierden-Enter	2	54.89
L0676	Stichting Wonen Zuidwest Friesland	1	49.19
L2104	Stichting Woningbedrijf Warnsveld	4	54.96
L1525	Stichting Woningbeheer De Vooruitgang	3	54.58
L0056	Stichting Woningbouw Achtkarspelen	1	49.89
L1875	Stichting Woningcorporaties Het Gooi en Omstreken	3	57.24
L1464	Stichting Woonbedrijf SWS.Hhvl	4	53.85
L0943	Stichting Woongoed Middelburg	1	52.94
L1533	Stichting WOONopMAAT	1	53.65
L2051	Stichting Woonstede	2	55.44
L1471	Stichting Woonwijze	2	57.98
L1543	Vallei Wonen	3	58.81
L0705	Veenendaalse Woningstichting	1	54.11
L1716	Viveste	3	56.95
L0272	Wassenaarsche Bouwstichting	4	55.56
L2072	Waterweg Wonen	1	50.06
L1596	Wonen Wijdmeren	3	54.97
L0379	Woningbouwvereniging Arnhemuiden	4	52.41
L1847	Woningbouwvereniging Compaen	1	51.07
L0305	Woningbouwvereniging Langedijk	3	55.26
L0533	Woningbouwvereniging Laren	1	53.27
L1395	Woningbouwvereniging Maarn	3	54.80



Association name		Quadrant	Total Sustainability score
L0757	Woningbouwvereniging Oostzaanse Volkshuisvesting	3	55.23
L1892	Woningbouwvereniging Oudewater	3	54.26
L1164	Woningbouwvereniging St. Willibrordus	4	57.96
L2082	Woningstichting Barneveld	3	54.35
L0782	Woningstichting Brummen	2	55.92
L0446	Woningstichting De Goede Woning	2	53.05
L0841	Woningstichting De Voorzorg	1	48.62
L1794	Woningstichting de Zaligheden	3	54.47
L1413	Woningstichting Hellendoorn	2	56.11
L0254	Woningstichting Heteren	2	54.59
L1491	Woningstichting Kessel	4	53.09
L1878	Woningstichting Leusden	2	57.78
L0386	Woningstichting Naarden	4	57.32
L1693	Woningstichting Nijkerk	3	56.68
L1247	Woningstichting Obbicht en Papenhoven	1	49.95
L1865	Woningstichting Putten	3	57.40
L0017	Woningstichting Rochdale	1	48.13
L1506	Woningstichting SallandWonen	3	54.04
L0371	Woningstichting Samenwerking Vlaardingen	1	46.43
L0157	Woningstichting Stek	3	55.04
L0238	Woningstichting Voerendaal	3	54.90
L0672	Woningstichting Volksbelang	2	56.13
L0623	Woningstichting 'Warmunda'	3	54.26
L0835	Wooncorporatie ProWonen	2	55.27
L1663	WoonFriesland	1	49.78
L2099	Woonstichting De Marken	4	53.47
L0602	Woonstichting SSW	3	53.76
L1236	Woonstichting St. Joseph	3	56.31
L0151	Woonstichting 'thuis	2	55.23
L1893	Woonstichting Valburg	2	55.19
L0661	Woonstichting VechtHorst	3	57.12
L1857	Wovesto	3	56.11

## 7 Conclusions

In this report an elaborated framework has been developed to be used for the issuance in 2017 by BNG Bank of a sustainable bond for social housing associations. This framework has been based on a theoretical framework used more often for the monitoring of sustainability of organizations such as businesses and municipalities. The framework gives an integral view on internal and external sustainability, resulting in seven domains: the four internal sustainability capitals (People, Profit and Planet and the Internal Business aspect) of the housing association, as well as the three external sustainability capitals (PPP). The data for the framework are derived from the association of housing associations AEDES and different other sources as specified in Table 3.2. These data include in total 83 indicators, focusing on the housing property and its users as well as its external neighborhood. The way the location of the property is related to neighborhood sustainability characteristics could not be described directly but has been estimated using socio-geographical association property identifiers and municipality sustainability characteristics.

A preselection step is applied, limiting the group of associations from which a selection is made of those scoring high on sustainability and at the same time focusing on investing in neighborhoods with a large social challenge. The latter is the core business of housing associations in the Dutch context. The result has been that from a total group of 332 associations 200 are preselected for further analysis.

Subsequently, 10 classes of associations have been defined based on association size and age of association property as well as based on two other types, characterized by a large proportion of one-family dwellings or high-rise buildings.

The 15 highest scoring associations on sustainability in each of these 10 classes have been selected, which results, after correcting for double counting, in a total group of 91 selected associations. These are the best scoring associations on sustainability of their classes.

The outcome of 91 selected associations will be monitored yearly during the term of the bond using the methodology of this framework. The outcome of the annual monitoring will be reported in an Impact Report including:

1. A comparison of sustainability scores of the group of elected housing associations in the reporting year with the year of issuance;
2. An analysis on the level of themes, and occasionally on the level of indicators, to better understand the causes of changes in performance of elected associations and the total group of associations.
3. A list of elected associations which showed the largest improvement in overall score and an indication of the main improvement themes and causes.

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## **Annexes**

## Annex 1: Description of indicators used for the framework

### Indicators used to describe the internal sustainability performance

Capital	Stock	Indicator	Description	Note
Internal Business	Ecology	Total investments in energy measures	Indicator covers realized energy investments in dwellings, resulting in an increase of at least 2 points on the energy-label index	Investments are more related to innovative processes than to energy saving measures such as insulation by double glass. Higher costs are related to higher sustainability scores.
		Total maintenance costs	Total investment costs to maintain the quality of rental units	Higher costs indicate a poorer quality of the housing units. Higher costs are valued as less sustainable.
	Social	Tenants satisfaction	Overall satisfaction assessment of clients of an association in a figure	Higher figures are valued as representing a higher sustainability level.
		Costs of complaints services	Costs of handling complaints from residents and users	High costs indicate a poor quality of the housing units and therefore are related with lower sustainability scores.
	Economic	Number of rental units per FTE	Number of rental units per fulltime employee of the association	A high number relates to less attention for residents.
		Interest coverage ratio	Interest coverage ratio is based on net cash flow, national government contributions, corporate income tax, levies special project support and sanitation, divided by paid interest minus interest collected	Interest coverage ratio indicates the ability of the association to pay for its debts. Higher ratio scores correspond with better sustainability scores.
	Governance	Total risk	Total risk is assessed by an external supervisor and concerns the combination of market risk, macro-economic risk and operational risk, which are independent risks. The squared risks are added and the root is drawn to calculate the total risk in a figure. To this value the corporate tax obligations are added.	Lower risk scores are related to higher sustainability scores
		Total risk prognosis for 2017	This indicator is based on the Total risk score but includes additional or deletes certain risk aspects depending on prognosticated changes in the risk area in the year of concern and solid obligations.	Lower risk scores are related to higher sustainability scores
		Total risk prognosis for 2019	See Total risk prognosis for 2017	Lower risk scores are related to higher sustainability scores
		Total allocations	Allocations in the reporting year by an association of the number of	A larger % of allocations in defined categories represents a better ability of

Capital	Stock	Indicator	Description	Note
		within income limits 2011-2013	households within certain classes of housing units and ages of residents as indicated in the Dutch Law on rent allowances of 2014.	the association to link its property to the envisaged target groups and the higher the sustainability score.
Ecology	Energy	Energy label index	This indicator represents the % of housing units of an association with a certain energy label. Based on scores (0.25 till 3.4) attributed to the labels (A++ till G) the weighted average score of all housing units of the association is calculated.	Lower scores represent better energy labels and therefore higher sustainability scores.
		Solar Energy	Average installed capacity of solar (PV) panels per address (kW peak)	More installed capacity leads to a higher sustainability score
		Gas Consumption Rental Houses	Average Gas Consumption of Rental Houses (kWh)	Less gas consumption leads to higher sustainability scores
		Electricity Consumption Rental Houses	Average electricity consumption of rental houses (kWh)	Less electricity consumption leads to higher sustainability scores
	Community nature and landscape	Expenses on quality of life (physical activities)	These expenses include physical measures to improve the residential environment including neighborhood centers, special buildings and posts, park management, playground equipment, security measures, camera surveillance, graffiti removal, etc.	Higher expenses are associated with better sustainability scores
		Distance to Public Green	The average distance of inhabitants to all forms of public green (e.g. (recreational) parks and public gardens)	The higher the distance, the lower the sustainability score
	Resources and Waste	Household Waste	The total amount of unseparated household waste in kg per inhabitant	The higher the amount of unseparated household waste, the lower the sustainability score
		Organic Waste	The total amount of organic waste produced in kg per inhabitant	The higher the amount of organic waste, the higher the sustainability score
		Paper and Cardboard Waste	The total amount paper and cardboard waste in kg per inhabitant	The higher the amount of paper and cardboard waste, the higher the sustainability score
		Packaging Glass	The total amount of packaging glass collected in kg per inhabitant	The higher the amount of packaging glass collected, the higher the sustainability score
		Plastics	The total amount of plastic waste in kg per inhabitant	The higher the amount of plastic waste, the higher the sustainability score
Socio-cultural	Physical and economic access-ability	Percentage of proper allocations	The percentage of proper allocations represent the fit between income and rent. Proper allocations involve all allocations after subtraction of too	Less proper allocations result in better sustainability scores.



Capital	Stock	Indicator	Description	Note
			expensive or cheap allocations according to the Law on rent allowances	
		Share of low rent dwellings	The share of low rent dwellings is based on a classification given in the Law on rent allowances	A larger stock of low priced housing units fits with the primary task of social housing associations to provide housing to low income households and therefore with higher sustainability scores
		Share of affordable dwellings	The share of affordable dwellings suitable to provide housing to low income households within the regional market	A larger stock of low priced housing units fits with the primary task of social housing associations to provide housing to low income households and therefore with higher sustainability scores
		Physically highly accessible dwellings	Percentage of housing units which are physically easily accessible, internally as well as externally, e.g. by the absence of stairs	A higher percentage coincides with a higher sustainability score
	Value for money	Rental price per point in housing valuation points system	Rental price is related to the Dutch housing valuation system which depends on points attributed to technical housing qualities and to qualities of the residential environment.	This indicator shows the price-quality ratio of the property of the association. Lower prices for housing valuation points attained represent higher sustainability scores
		Rental price as percentage of the assessed value	Actual rent as percentage of the value based on the Dutch Valuation of Immovable Property Act (Dutch: WOZ-waarde) of the housing unit	A lower rent corresponds with a higher sustainability score
		Actual rent as a percentage of the maximum permitted rent	Ratio of actual rent and maximum rent permitted by Dutch law. (DAEB)	Lower values indicate the provision of housing to the target group for the lowest possible price and relate to higher sustainability scores
	Safety and Security	Property crimes	The number of arrested suspects for property related crimes per 10,000 inhabitants	Less crime results in higher sustainability scores
		Road safety	The number of deaths or heavily wounded victims of traffic incidents per 1,000 inhabitants	Less traffic accidents result in higher sustainability scores
		Vandalism	The number of arrested suspects for vandalism per 10,000 inhabitants	Less crime results in higher sustainability scores
		Violent crimes	The number of arrested suspects for violent crimes or sexual assaults per 10,000 inhabitants	Less crime results in higher sustainability scores
	Social cohesion	Expenses on quality of life (Social activities)	These expenses include neighborhood related cost for social activities such as sponsoring neighborhood activities, district administrator, caretaker, debt remediation, care for the homeless, etc.	Higher expenses relate to higher sustainability scores

Capital	Stock	Indicator	Description	Note
Economic	Loss of revenue	Loss of rental income due to vacancy	This indicator relates to vacancy as a result of the execution of projects	This loss of rental income is negatively related to the sustainability score
		Loss of rental income due to market conditions	This indicator measures loss of rental income due to vacancies exceeding 3 months as a result of market circumstances	This loss of rental income is negatively related to the sustainability score
		Rent arrears	The percentage of the annual rent that is missed by outstanding rental arrears	Higher values are related to lower sustainability scores
	Future constancy	Remaining lifespan of property	The remaining lifespan of property is a standardized measure under the auspices of the CFV (Dutch: Centraal Fonds Volkshuisvesting) representing with a margin of 3 years the average remaining lifespan of the property of an association	The index aims at showing the sustainability in time of the corporate property. Higher indicator values therefore coincide with better sustainability scores
		New housing units realized	Number of newly constructed housing units to be rented as percentage of the total stock exploited in the reporting year. Newly constructed units destined for direct sale or for rental by third parties are excluded from this figure	Higher score are related to better sustainability scores
		Electric vehicle charging stations	Number of (semi-) public charging stations for electric or hybrid cars per inhabitant.	More charging stations lead to a higher sustainability score
		New housing unit's prognosis 2015-2019	Number of newly constructed housing units to be rented as percentage of the total stock exploited in the reporting years. Newly constructed units destined for direct sale or for rental by third parties are excluded from this figure	Higher scores are related to better sustainability scores
	Corporat- ional valuation	Average amount of points in housing valuation points system	Average number of points according to the Dutch associational valuation system for rental units (including a housing unit technical assessment and an assessment of the residential environment)	Higher scores coincide with better sustainability performance
		Standardized association exploitation value (Dutch: volkshuisvestelijke exploitatie waarde) and	This ratio of association exploitation value and rental price	This ratio of association exploitation value and rental price shows how the yearly rental yield relates to the value of the property. Higher scores relate to higher sustainability scores as it indicates the ability of the association to fulfil its societal task

Capital	Stock	Indicator	Description	Note
		rental price ratio		
		Standardized association exploitation value (Dutch: volkshuis-vestelijke exploitatie-waarde)	The exploitation value in view of a continuation of the exploitation of the housing units after standardization by the CFV (Dutch: Centraal Fonds Volkshuisvesting) expressed per average housing unit	Higher values coincide with better sustainability scores
		Loan to value	The ratio of the long-term debts and the standardized association exploitation value.	This is an indicator for the coverage of the long-term debt. Lower indicator scores coincide with better sustainability scores

### Indicators used to describe the external sustainability performance

Capital	Stock	Indicator	Description	Note
Ecology	Air	CO2 Emissions	Total CO2 emissions in kg per inhabitants	The lower the CO2 emissions, the higher the sustainability score
		NOx Emissions	Total nitrogen emissions in kg per inhabitants	The lower the NOx emissions, the higher the sustainability score
		Emission particulate matter (PM2.5)	Total particulate matter emissions in kg per inhabitants	The lower the particular matter emissions, the higher the sustainability score
		Concentration NOx	The average yearly concentration of nitrogen in the air in µg/m3	The higher the concentration, the lower the sustainability score
		Concentration Particulate Matter (PM2.5)	The average yearly concentration of particulate matter in the air in µg/m3	The higher the concentration, the lower the sustainability score
	Annoyance and Emergencies	Light intensity	The average yearly emission of light by night time in nanoWatts/cm2/sr	The more light emissions, the lower the sustainability score
		Noise Intensity	The percentage of the area charged with noise intensity of 55 dB or higher.	The higher the noise intensity, the lower the sustainability score
		Earthquakes	The three-yearly moving average of the number of registered earthquakes in the area	The more earthquakes, the lower the sustainability score
		Floods	Number of probable victims in case of a flood per squared kilometer	The more possible victims, the lower the sustainability score
	Nature and Landscape	Share of Forest and Natural Area	Percentage of the area covered with forest or other natural terrain	The higher the share of forest and natural area, the higher the sustainability score
		Distance to Recreational Water	The average distance of inhabitants to any form of recreational water	The higher the distance, the lower the sustainability score

Capital	Stock	Indicator	Description	Note
		Biodiversity	The total number of observed species in the area in a 10-year period	The higher the biodiversity, the higher the sustainability score
Socio-cultural	Social Participation	Volunteers	The share of people that was enrolled in any form of volunteering in the past 12 months	The higher the share of volunteers, the higher the sustainability score
		Turnout Municipal Elections	The turnout in the last municipal elections (2014)	The higher the election turnout, the higher the social participation and thus the sustainability
		Informal Caregiving	The share of people that was enrolled in any form of informal care giving in the past 12 months	The higher the share of informal care givers, the higher the sustainability score
		Financial Assets Households	The share of households in possession of financial assets of 5,000 Euro or more (excluding real estate (dept.))	The higher the share of people with financial assets, the higher the sustainability score
	Economic Participation	Social Welfare Benefits	The share of the potential labor force that receives social assistance in the form of social welfare benefits.	The higher the share of social welfare receivers, the lower the sustainability score
		Poor Households	The share of households with a household income below 105% of the social minimum	The more poor households, the lower the sustainability score
	Arts and Culture	Performing Arts & Cinema's	Average distance per inhabitant to for instance a theater or cinema.	The bigger the distance, the lower the sustainability score
		Distance to Museum	Average distance per inhabitant to a museum.	The bigger the distance, the lower the sustainability score
	Health	Insufficient Exercise	Share of the inhabitants that does not meet the requirements of sufficient movement	When more people comply to the sufficient movement requirements, the sustainability score rises
		Risky Behavior	the share of the inhabitants that show risky behavior (e.g. heavy smokers or drinkers)	The higher the risky behavior, the lower the sustainability score
		Distance to General Practitioner	Average distance per inhabitant to a general practitioner.	The bigger the distance, the lower the sustainability score
		Life Expectancy at Birth	The regional life expectancy at birth	The higher the life expectancy, the higher the sustainability score
		Assessment of Own Health	The share of inhabitants that assesses their own health as 'good' or 'very good'	The higher the assessment of own health, the higher the sustainability score
	Residential Environment	Distance to Catering Facility	Average distance per inhabitant to catering facilities like restaurants or bars.	The bigger the distance, the lower the sustainability score
		Distance to Daily Goods and Services	Average distance per inhabitant to shops who provide daily goods and services.	The bigger the distance, the lower the sustainability score

Capital	Stock	Indicator	Description	Note
	Education	Satisfaction with Living Environment	The share of inhabitants that is satisfied with the living environment	The higher the satisfaction level, the higher the sustainability level
		Distance to Elementary School	Average distance per inhabitant to the closest elementary school.	The bigger the distance, the lower the sustainability score
		Distance to Secondary Education	Average distance per inhabitant to the closest school for secondary education	The bigger the distance, the lower the sustainability score
		Early School Leavers	The share of people that leaves the education circuit without a diploma	The higher the share of early school leavers, the lower the sustainability score
		Education Level	The share of low educated people in the 18+ population (excluding students)	The higher the share of low educated people, the lower the sustainability score
Economic	Labor	Utilization Potential Workforce	The extent to which the potential workforce is used in the labor market	The higher the utilization of potential workforce, the higher the sustainability score
		Active Labor force	The share of the potential work force that is currently active in the labor market	The higher the active labor force the higher the sustainability score
	Competitiveness	Vacant Retail Space	The share of retail space that is currently available (vacant)	The higher the level of vacancy, the lower the sustainability score
		Gross Regional Product per Capita	The total regional production divided by the number of inhabitants resulting in a regional version of gross domestic product (GDP)	The higher the GRP, the higher the sustainability score
		Share Highly Educated People	The total share of highly educated people	The higher the share of highly educated people, the higher the sustainability score
	Infrastructure and Accessibility	Access to Train Station	Average distance per inhabitant to the closest train station with a connection to the domestic railway network.	The bigger the distance, the lower the sustainability score
		Access to Main Roads	Average distance per inhabitant to the closest main road access point.	The bigger the distance, the lower the sustainability score

**Annex 2: Norms for indicators in order to calculate sustainability scores from indicator scores**

Indicator	Norm ranges				
	Minimum score	Red - Orange range	Orange - Green range	Green - Gold range	Maximum score
CO2 Emissions	10000000	11437	6862	2287	0
Nox Emissions	10000	30	21	17	0
Particular matter (PM2.5)	1000	2	1	1	0
Concentration Nox	100	40	25	10	0
Concentration Particular Matter (PM2.5)	100	25	20	10	0
Light Intensity	2000	10	5	3	0
Noise Intensity	1	0	0	0	0
Earthquakes	50	1	0	0	0
Floods	2500	60	10	1	0
Share of Forest and Natural Area	0	5	10	50	100
Distance to Public Green	5	1	1	0	0
Distance to Recreational Water	20	5	3	2	0
Biodiversity	0	250	375	500	1000
Solar Energy	0	1	4	21	100
Gas Consumption Rental Houses	5000	3000	2000	1000	0
Electricity Consumption Rental Houses	6000	3500	3200	2500	0
Household Waste	700	275	225	175	0
Organic Waste	0	50	100	150	300
Paper and Cardboard Waste	0	40	70	100	200
Packaging Glass	0	15	20	25	150
Plastics	0	5	10	20	50
Volunteers	0	30	45	60	100
Turnout Municipal Elections	0	45	60	75	100
Informal Caregiving	0	10	13	15	100
Financial Assets Households	0	60	70	80	100
Social Welfare Benefits	100	4	2	1	0
Poor Households	100	12	6	3	0
Performing Arts & Cinema's	100	15	8	3	0
Distance to Museum	100	6	4	2	0
Insufficient Exercise	100	40	35	30	0
Risky Behavior	100	31	27	23	0

Indicator	Norm ranges				
	Minimum score	Red - Orange range	Orange - Green range	Green - Gold range	Maximum score
Distance to General Practitioner	100	2	1	1	0
Life Expectancy at Birth	0	80	81	82	100
Assessment of Own Health	0	70	75	80	100
Vandalism	1000	15	7	2	0
Violent Crimes	1000	15	5	2	0
Property Crimes	2000	100	30	10	0
Road Safety	10	1	1	0	0
Distance to Catering Facility	10	2	1	1	0
Distance to Daily Goods and Services	10	2	1	1	0
Satisfaction with Living Environment	0	80	85	90	100
Distance to Elementary School	10	2	1	1	0
Distance to Secondary Education	50	8	4	2	0
Early School Leavers	10	2	1	1	0
Education Level	100	40	35	30	0
Utilization Potential Workforce	0	65	75	85	100
Active Laborforce	0	65	70	75	100
Vacant Retail Space	100	10	7	3	0
Gross Regional Product per Capita	0	85	100	115	200
Access to Train Station	100	10	6	2	0
Access to Main Roads	100	3	2	2	0
Electric Vehicle Charging Station	0	5	10	100	5000
Share Highly Educated People	0	25	35	45	100
Total costs energy measures	0	10	150	1000	3000
Total maintenance costs	10000	2000	1250	750	0
Tenants' rating of social housing bond	0	7	7.5	8	10
Costs of complaints services	2000	800	300	100	0
Number of rental units per FTE	12000	200	120	80	0
Interest coverage ratio	-20	0	3	5	50
Total risk	30	18	15	12	0
Total risk prognosis for 2017	30	18	15	12	0
Total risk prognosis for 2019	30	18	15	12	0
Total allocations within income limits 2013-2015	0	60	70	85	100
Energy label index	4	2	1.6	1.3	0
Expenses on quality of life (physical activities)	0	5	25	100	250
Percentage of proper allocations	0	50	70	90	100

Indicator	Norm ranges				
	Minimum score	Red - Orange range	Orange - Green range	Green - Gold range	Maximum score
Share of low cost dwellings	0	5	15	25	100
Share of affordable dwellings	0	50	65	80	100
Physically highly accessible dwellings	0	10	30	50	100
Rental price per point in housing valuation system	7	4	3.5	3	0
Rental price in percentage of the assessed value	15	6	4.5	3	0
Rent price as a percentage of the maximum permitted rent	100	80	65	55	0
Expenses on quality of life (Social activities)	0	5	40	150	400
Loss of rental income due to vacancy	25	1.5	0.5	0.01	0
Loss of rental income due to market conditions	10	2.5	1	0.2	0
Rent arrears	15	2	1	0.5	0
Remaining lifespan of property	0	20	25	30	50
New housing units realized	0	0.01	1	3	100
New housing units prognosis 2016-2020	0	0.2	1	2	10
Average amount of points in housing valuation system	0	130	150	170	250
Standardized corporation value by rental price	0	5	8	11	15
Standardized corporation value	0	35000	50000	65000	120000
Loan to value	2	0.8	0.6	0.4	0



**Annex 3: Sustainability scores of 332 housing associations  
(alphabetical order)**

<b>Code</b>	<b>Name of Association</b>	<b>External sustainability performance</b>	<b>Internal sustainability performance</b>	<b>Total Sustainability score</b>
L0358	Almelose Woningstichting Beter Wonen	48.43	47.27	47.85
L1128	Baston Wonen	54.68	46.37	50.52
L1584	Bouwvereniging Ambt Delden	59.39	45.30	52.34
L0643	Bouwvereniging Huis en Erf	58.65	53.56	56.11
L0993	Bouwvereniging Onze Woning	47.22	40.29	43.75
L0923	Bouwvereniging Woningbelang	56.67	51.71	54.19
L0176	BrabantWonen	53.62	53.98	53.80
L0630	Brederode Wonen	60.89	46.04	53.47
L0944	Casade Woonstichting	49.65	52.24	50.94
L1674	Christelijke Stichting BCM Wonen	49.13	48.36	48.75
L1709	Christelijke Woningstichting De Goede Woning	60.02	49.47	54.74
L0380	Christelijke Woningstichting Patrimonium	53.75	44.90	49.32
L0449	Christelijke Woongroep Marenland	49.34	47.22	48.28
L0979	de Woningstichting	54.94	54.74	54.84
L1680	de Woonmensen/SJA	54.22	47.36	50.79
L0045	Domesta	48.49	51.58	50.04
L2004	DUWO	54.98	43.23	49.11
L0231	Elan Wonen	56.28	45.29	50.79
L0506	FidesWonen	55.91	48.32	52.12
L1573	Groen Wonen Vlist	53.76	44.02	48.89
L1985	Harmonisch Wonen	46.76	50.77	48.77
L0732	HW Wonen	54.67	47.81	51.24
L0317	IJsselsteinse Woningbouwvereniging (Provides)	61.38	52.39	56.89
L0837	Jutphaas Wonen	53.33	53.53	53.43
L1821	Laris Wonen en diensten (Stichting Plavei)	51.87	42.79	47.33
L1005	Laurentius	53.05	45.57	49.31
L0089	l'escaut woonservice	50.30	45.63	47.96
L0036	Lyaemer Wonen	52.55	51.50	52.03
L0986	Maaskant Wonen	50.27	51.02	50.65
L1804	Mercatus	48.78	50.92	49.85
L0178	Mijande Wonen	56.56	48.52	52.54
L2058	Mitros	55.32	49.00	52.16
L2092	Noordwijkse Woningstichting	61.49	50.77	56.13
L0968	Omnia Wonen	55.74	49.24	52.49

<b>Code</b>	<b>Name of Association</b>	<b>External sustainability performance</b>	<b>Internal sustainability performance</b>	<b>Total Sustainability score</b>
L1691	'Ons Huis', Woningstichting	54.35	52.36	53.35
L1670	Oosterpoort Wooncombinatie	57.10	58.43	57.76
L0734	Patrimonium woonstichting	59.78	47.15	53.47
L0640	Pré Wonen	55.29	43.12	49.20
L0543	R&B Wonen	54.72	49.30	52.01
L0147	R. K. Woningbouwvereniging Zeist	56.29	50.74	53.52
L1459	R.K. Woningbouwstichting "De Goede Woning"	53.56	48.46	51.01
L0173	R.K. Woningstichting Ons Huis	50.83	48.72	49.78
L1901	Regionale Woningbouwvereniging Samenwerking	55.89	47.38	51.64
L0694	Rentree	53.13	49.99	51.56
L2056	Ressort Wonen	47.22	44.05	45.63
L2068	Rhenense Woningstichting	59.03	44.16	51.59
L1524	Rijnhart Wonen	55.61	48.48	52.05
L0590	Rondom Wonen	58.76	54.10	56.43
L0939	SCW Tiel	47.66	46.61	47.13
L1017	Sité Woondiensten	55.64	47.94	51.79
L0124	Stadgenoot	53.36	43.21	48.28
L1768	Staedion	51.80	39.06	45.43
L0237	Standvast Wonen	51.14	52.05	51.59
L0013	Stichting Zayaz	52.30	47.18	49.74
L1215	stichting 3B-Wonen	55.24	44.87	50.05
L1793	Stichting Acanthus Groep	45.21	47.30	46.25
L1638	Stichting Accolade	50.54	50.47	50.51
L0574	Stichting Actium	51.75	53.40	52.58
L0495	Stichting AlleeWonen	53.37	46.78	50.08
L0241	Stichting Antares Woonservice	49.63	52.25	50.94
L0410	Stichting Arcade mensen en wonen	56.26	46.19	51.23
L0886	Stichting Area	55.70	54.45	55.07
L0858	Stichting Beter Wonen	55.72	51.01	53.36
L0041	Stichting Bo-Ex '91	55.75	48.03	51.89
L0418	Stichting Clavis	43.38	47.73	45.56
L1912	Stichting de Alliantie	56.49	45.37	50.93
L0686	Stichting De Delthe	52.27	43.95	48.11
L1194	Stichting De Goede Woning	56.13	48.62	52.38
L0385	Stichting De Huismeesters	53.93	43.47	48.70
L1896	Stichting De Leeuw van Putten	46.24	43.72	44.98
L0637	Stichting De Seyster Veste	56.63	50.74	53.69

Code	Name of Association	External sustainability performance	Internal sustainability performance	Total Sustainability score
L1066	Stichting De Woonmaat (Woningbouwvereniging Moordrecht)	54.49	45.59	50.04
L0876	Stichting De Woonschakel Westfriesland	56.04	48.65	52.35
L1995	Stichting De Zoutvliet	43.38	41.24	42.31
L0029	Stichting deltaWonen	55.73	50.40	53.06
L0641	Stichting Destion	55.27	50.40	52.84
L0383	Stichting Dudok Wonen	61.91	51.43	56.67
L1436	Stichting Dunavie	59.27	51.50	55.38
L0568	Stichting Eelder Woningbouw	55.86	50.46	53.16
L0936	Stichting Eemland Wonen	64.58	49.80	57.19
L0553	Stichting Elkien	50.87	44.80	47.84
L1745	Stichting Goed Wonen	58.84	52.44	55.64
L2101	Stichting Goed Wonen Liempde	58.57	51.27	54.92
L0766	Stichting GroenWest	56.31	50.96	53.64
L1666	Stichting Habion	55.13	41.70	48.42
L0392	Stichting Havensteder	47.89	39.80	43.85
L1836	Stichting Heuvelrug Wonen	64.34	48.98	56.66
L1986	Stichting Huisvesting Bejaarden Oosterhout	54.86	50.91	52.88
L1933	Stichting Huisvesting Vredewold	51.96	54.46	53.21
L1968	Stichting Idealis	54.94	51.41	53.18
L1239	Stichting IJsseldal Wonen	56.75	56.48	56.61
L0019	Stichting Intermaris	52.84	46.70	49.77
L1964	Stichting Jongeren Huisvesting Twente	51.27	48.48	49.87
L0343	Stichting KleurrijkWonen	53.65	56.45	55.05
L2066	Stichting Laurens Wonen	47.30	37.98	42.64
L1542	Stichting Lefier	49.69	50.43	50.06
L1876	Stichting Maasdelta Groep	49.72	45.02	47.37
L0308	Stichting MeerWonen	51.76	53.02	52.39
L1817	Stichting Mooiland	54.53	47.09	50.81
L0232	Stichting Mozaïek Wonen	54.84	48.44	51.64
L1109	Stichting Nijestee	53.77	47.85	50.81
L0582	Stichting Omnivera	55.76	47.71	51.73
L1861	Stichting Oost Flevoland Woondiensten	52.64	52.22	52.43
L1926	Stichting Ouderenhuisvesting Rotterdam	48.09	40.70	44.40
L0059	Stichting Parteon	49.20	47.24	48.22
L1811	Stichting PeelrandWonen	56.37	46.20	51.29
L1549	Stichting Poort 6	53.01	43.75	48.38
L0117	Stichting Portaal	55.00	49.00	52.00

<b>Code</b>	<b>Name of Association</b>	<b>External sustainability performance</b>	<b>Internal sustainability performance</b>	<b>Total Sustainability score</b>
L0540	Stichting QuaWonen	54.57	50.93	52.75
L0439	Stichting Rhiant	56.10	51.32	53.71
L1122	Stichting Rijswijk Wonen	54.18	41.82	48.00
L0573	stichting Sprengenland Wonen	55.72	50.53	53.13
L1944	stichting SSHN	50.39	51.10	50.75
L1785	Stichting Stadlander	54.44	50.68	52.56
L1675	Stichting Steelande wonen	51.67	45.44	48.56
L0867	Stichting Tablis Wonen	53.93	46.40	50.16
L1479	Stichting Talis	52.92	51.36	52.14
L0497	Stichting TBV	51.17	51.78	51.48
L1781	Stichting Thuisvester	53.70	52.63	53.16
L1792	Stichting Thús Wonen	51.49	44.69	48.09
L0267	Stichting Trivire	52.37	49.78	51.07
L0527	Stichting Trudo	53.67	48.31	50.99
L0688	Stichting Uithuizer Woningbouw	52.27	42.60	47.44
L0369	Stichting UWOON	57.97	53.50	55.74
L0510	Stichting Velison Wonen	49.88	44.37	47.12
L1924	Stichting Vestia	50.95	40.76	45.86
L1093	Stichting Vidomes	54.76	45.20	49.98
L0347	Stichting Viverion	58.62	52.69	55.66
L0065	Stichting Volkshuisvesting Arnhem	53.36	48.09	50.73
L0478	Stichting Volkshuisvestingsgroep Wooncompagnie	55.27	45.45	50.36
L0033	Stichting voorheen De Bouwvereniging	48.33	52.24	50.29
L0221	Stichting Waardwonen	54.97	50.89	52.93
L1910	Stichting WBO Wonen	59.89	52.95	56.42
L0225	Stichting Weller Wonen	50.10	45.93	48.02
L1753	Stichting Wetland Wonen Groep	55.55	48.37	51.96
L1766	Stichting woCom	55.64	47.82	51.73
L0077	Stichting Wold en Waard	54.03	47.73	50.88
L0765	Stichting Wonen Delden	59.39	49.44	54.41
L1100	Stichting Wonen Midden-Delfland	64.19	50.68	57.44
L1864	Stichting Wonen Vierlingsbeek	55.00	50.72	52.86
L0354	Stichting Wonen Wateringen	57.27	42.47	49.87
L2044	Stichting Wonen Wierden-Enter	59.89	49.89	54.89
L1622	Stichting Wonen Wittem	56.65	43.75	50.20
L0081	Stichting Wonen Zuid	52.37	45.57	48.97
L0676	Stichting Wonen Zuidwest Friesland	52.64	45.74	49.19

Code	Name of Association	External sustainability performance	Internal sustainability performance	Total Sustainability score
L1911	Stichting WonenBreburch	51.88	49.91	50.90
L0565	Stichting wonenCentraal	53.31	48.71	51.01
L2073	Stichting Woningbedrijf Velsen	49.88	49.52	49.70
L2104	Stichting Woningbedrijf Warnsveld	56.51	53.40	54.96
L1881	Stichting Woningbeheer Betuwe	53.45	50.09	51.77
L1468	Stichting Woningbeheer Born-Grevenbicht	47.26	49.41	48.34
L1525	Stichting Woningbeheer De Vooruitgang	57.55	51.60	54.58
L0056	Stichting Woningbouw Achtkarspelen	50.88	48.91	49.89
L1748	Stichting Woningcorporatie WoonGenoot	50.39	48.65	49.52
L1875	Stichting Woningcorporaties Het Gooi en Omstreken	61.41	53.08	57.24
L0898	Stichting Wonion	52.66	50.35	51.50
L1418	Stichting Woonbedrijf ieder1	54.59	50.82	52.70
L1464	Stichting Woonbedrijf SWS.Hhvl	54.24	53.47	53.85
L0666	Stichting Woonborg	56.57	44.37	50.47
L1606	Stichting Woonburg	56.91	48.63	52.77
L0363	Stichting Woonconcept	52.54	47.65	50.09
L1737	Stichting Woondiensten Enkhuizen (Stichting WelWonen)	55.71	46.85	51.28
L1839	Stichting WoonGoed 2-Duizend	53.24	52.98	53.11
L0943	Stichting Woongoed Middelburg	56.70	49.17	52.94
L0673	Stichting Wooninvest	55.89	45.69	50.79
L1921	Stichting Woonkracht10	53.19	48.18	50.68
L0931	Stichting Woonlinie	53.56	48.78	51.17
L1533	Stichting WOONopMAAT	56.05	51.25	53.65
L2014	Stichting Woonpalet Zeewolde	52.60	48.82	50.71
L1647	Stichting Woonpartners	52.09	48.84	50.47
L2085	Stichting Woonplus Schiedam	49.17	44.34	46.75
L0571	Stichting Woonpunt	49.27	42.40	45.84
L1877	Stichting Woonservice Drenthe	52.37	54.95	53.66
L1409	Stichting Woonservice IJsselland	50.12	52.71	51.41
L0271	Stichting Woonservice Meander	53.50	46.30	49.90
L0079	Stichting Woonstad Rotterdam	47.22	42.96	45.09
L2051	Stichting Woonstede	56.76	54.11	55.44
L1560	Stichting Woontij	55.16	44.59	49.88
L1763	Stichting Woonveste	57.84	49.75	53.79
L0689	Stichting Woonvisie	53.57	49.85	51.71
L1182	Stichting Woonwaard Noord-Kennemerland	51.70	46.21	48.96

<b>Code</b>	<b>Name of Association</b>	<b>External sustainability performance</b>	<b>Internal sustainability performance</b>	<b>Total Sustainability score</b>
L1471	Stichting Woonwijze	63.94	52.03	57.98
L1646	Stichting Woonzorg Nederland	54.02	41.77	47.89
L0202	Stichting Wormerwonen	58.01	48.27	53.14
L2070	Stichting Ymere	54.36	45.17	49.77
L0278	Stichting Zaandams Volkshuisvesting	49.19	42.38	45.79
L0269	Stichting ZO Wonen	48.99	46.74	47.87
L1913	TIWOS Tilburgse Woonstichting	51.17	53.06	52.12
L0927	Trifolium Woondiensten Boskoop	53.31	48.30	50.80
L1543	Vallei Wonen	63.19	54.42	58.81
L0705	Veenendaalse Woningstichting	59.80	48.43	54.11
	Vereniging tot Verbetering der Volkshuisvesting			
L0428	Vooruitgang	53.44	48.47	50.95
L0658	Vivare	55.44	48.36	51.90
L1716	Viveste	63.20	50.70	56.95
L0272	Wassenaarsche Bouwstichting	63.70	47.43	55.56
L2072	Waterweg Wonen	52.90	47.22	50.06
L1064	Welbions	55.95	49.48	52.71
L1697	Wonen Limburg	53.36	50.43	51.89
L0003	Wonen Noordwest Friesland	51.11	50.58	50.85
L1596	Wonen Wijdmeren	61.29	48.64	54.97
L1588	Woningbouwstichting Cothen	60.39	46.85	53.62
L1357	Woningbouwstichting De Gemeenschap	50.39	51.20	50.79
L1498	Woningbouwstichting Kamerik	58.43	49.42	53.92
L1597	Woningbouwstichting 'Lek en Waard Wonen'	54.78	44.48	49.63
L1532	Woningbouwstichting 'Samenwerking'	53.76	43.54	48.65
L0794	Woningbouwvereniging Anna Paulowna	50.10	46.54	48.32
L0379	Woningbouwvereniging Arnhem	56.79	48.04	52.41
L1226	Woningbouwvereniging Bergopwaarts	56.54	51.48	54.01
L1482	Woningbouwvereniging Beter Wonen	55.91	44.62	50.27
L1559	Woningbouwvereniging Beter Wonen	53.76	46.54	50.15
L1700	Woningbouwvereniging Beter Wonen	55.91	43.48	49.70
L1454	Woningbouwvereniging 'Beter Wonen'	50.10	44.37	47.24
L1847	Woningbouwvereniging Compaen	53.66	48.47	51.07
L1453	Woningbouwvereniging De Goede Woning	47.22	45.16	46.19
	Woningbouwvereniging De Goede Woning -			
L0846	Neerijnen	48.29	41.67	44.98
	Woningbouwvereniging De Goede Woning			
L1034	Driemond	53.30	44.42	48.86

Code	Name of Association	External sustainability performance	Internal sustainability performance	Total Sustainability score
L1713	Woningbouwvereniging de Combinatie	56.29	49.17	52.73
L0295	Woningbouwvereniging De Sleutels	54.33	46.36	50.34
L1550	Woningbouwvereniging Goed Wonen	54.99	44.78	49.88
L0764	Woningbouwvereniging Habeko Wonen	53.31	49.30	51.30
L0817	Woningbouwvereniging Heerjansdam	51.25	47.26	49.26
L0992	Woningbouwvereniging Helpt Elkander	59.28	50.88	55.08
L1640	Woningbouwvereniging Hoek van Holland	47.22	40.39	43.80
L0305	Woningbouwvereniging Langedijk	58.98	51.54	55.26
L0533	Woningbouwvereniging Laren	62.11	44.44	53.27
L1866	Woningbouwvereniging Lopik	54.99	47.18	51.08
L1395	Woningbouwvereniging Maarn	64.34	45.27	54.80
L1586	Woningbouwvereniging Nieuw-Lekkerland	54.78	47.79	51.29
	Woningbouwvereniging Oostzaanse			
L0757	Volkshuisvesting	65.03	45.44	55.23
L1892	Woningbouwvereniging Oudewater	57.81	50.71	54.26
L0248	Woningbouwvereniging Patrimonium	53.95	47.79	50.87
L0629	Woningbouwvereniging Poortugaal	54.91	45.13	50.02
L1760	Woningbouwvereniging Reeuwijk	55.62	48.60	52.11
L1164	Woningbouwvereniging St. Willibrordus	65.80	50.12	57.96
	Woningbouwvereniging van Erfgooiers te Laren			
L0667	N.H.	62.11	41.20	51.65
L1585	Woningbouwvereniging Vecht en Omstreken	57.83	42.45	50.14
L0249	Woningbouwvereniging Volksbelang	52.07	52.37	52.22
L1426	Woningcorporatie Domijn	52.53	49.49	51.01
L1061	Woningcorporatie Plicht Getrouw	56.78	44.41	50.59
L2082	Woningstichting Barneveld	57.26	51.45	54.35
L1627	Woningstichting Berg en Terblijt	57.81	44.20	51.01
L0762	Woningstichting Beter Wonen Vechtdal	54.10	49.22	51.66
L1906	Woningstichting Brabantse Waard	50.93	51.21	51.07
L0782	Woningstichting Brummen	56.72	55.13	55.92
L0446	Woningstichting De Goede Woning	54.22	51.88	53.05
L1775	Woningstichting de Veste	53.35	50.26	51.81
L1899	Woningstichting De Volmacht	52.51	43.14	47.83
L0841	Woningstichting De Voorzorg	49.94	47.31	48.62
L1842	Woningstichting De Woonplaats	53.26	48.05	50.66
L1794	Woningstichting de Zaligheden	59.63	49.30	54.47
L1399	Woningstichting Den Helder	52.11	42.15	47.13
L0669	Woningstichting Domus	52.86	48.32	50.59

<b>Code</b>	<b>Name of Association</b>	<b>External sustainability performance</b>	<b>Internal sustainability performance</b>	<b>Total Sustainability score</b>
L1306	Woningstichting Eendracht	47.22	35.32	41.27
L0108	Woningstichting Eigen Haard	54.43	43.95	49.19
L1718	Woningstichting Goed Wonen	54.30	41.28	47.79
L1891	Woningstichting GoedeStede	53.31	50.73	52.02
L1598	Woningstichting Gouderak	53.76	42.87	48.31
L0259	Woningstichting Gulpen	56.65	45.63	51.14
L0425	Woningstichting Haag Wonen	51.65	40.96	46.31
L0228	Woningstichting HEEMwonen	49.92	48.95	49.44
L1413	Woningstichting Hellendoorn	57.69	54.53	56.11
L0883	Woningstichting Het Grootslag	54.93	52.19	53.56
L0254	Woningstichting Heteren	57.97	51.21	54.59
L0583	Woningstichting Kennemer Wonen	58.77	46.97	52.87
L1491	Woningstichting Kessel	53.12	53.06	53.09
L1852	Woningstichting Kleine Meierij	53.81	47.59	50.70
L0758	Woningstichting Kockengen	57.83	39.41	48.62
L1878	Woningstichting Leusden	61.45	54.11	57.78
L1835	Woningstichting Maasdriel	51.59	51.48	51.54
L1038	Woningstichting Maasvallei Maastricht	48.53	51.80	50.17
L0636	Woningstichting Meerssen	54.46	51.88	53.17
L0386	Woningstichting Naarden	63.83	50.82	57.32
L2083	Woningstichting Nieuwkoop	53.48	48.43	50.95
L1693	Woningstichting Nijkerk	56.13	57.22	56.68
L1247	Woningstichting Obbicht en Papenhoven	47.26	52.64	49.95
L0682	Woningstichting Ons Doel	53.70	45.35	49.53
L0008	Woningstichting Openbaar Belang	55.42	48.29	51.85
L1865	Woningstichting Putten	60.60	54.20	57.40
L0017	Woningstichting Rochdale	53.42	42.84	48.13
L1506	Woningstichting SallandWonen	56.78	51.30	54.04
L0371	Woningstichting Samenwerking Vlaardingen	52.90	39.97	46.43
L0005	Woningstichting Servatius	48.87	47.77	48.32
L0528	Woningstichting Simpelveld	50.86	44.25	47.55
L0264	Woningstichting Spaubeek	53.72	47.22	50.47
L0678	Woningstichting St. Antonius van Padua	57.21	52.42	54.82
L0921	Woningstichting St. Joseph	48.15	46.75	47.45
L1689	Woningstichting St. Joseph	55.65	50.26	52.95
L0157	Woningstichting Stek	56.88	53.20	55.04
L0093	Woningstichting SWZ	55.42	50.90	53.16



<b>Code</b>	<b>Name of Association</b>	<b>External sustainability performance</b>	<b>Internal sustainability performance</b>	<b>Total Sustainability score</b>
L1678	Woningstichting Tubbergen	57.25	49.96	53.60
L0082	Woningstichting Vaals	45.17	50.47	47.82
L0063	Woningstichting Van Alckmaer voor Wonen	50.86	45.89	48.38
L0238	Woningstichting Voerendaal	58.96	50.83	54.90
L0672	Woningstichting Volksbelang	60.39	51.87	56.13
L1802	Woningstichting Volksbelang	54.78	49.32	52.05
L0623	Woningstichting 'Warmunda'	57.81	50.72	54.26
L0165	Woningstichting Weststellingwerf	52.80	50.76	51.78
L0366	Woningstichting Wierden en Borgen	53.39	43.44	48.42
L1850	Woningstichting Woensdrecht	55.32	48.12	51.72
L0274	Woningstichting WoonWENZ	49.33	51.85	50.59
L1579	Woningstichting Wuta	57.83	41.64	49.74
L1837	Woningvereniging Nederweert	54.87	52.72	53.79
L2110	Woon Compas	48.25	37.09	42.67
L0665	Woonbron	49.77	44.79	47.28
L0835	Wooncorporatie ProWonen	56.26	54.27	55.27
L1663	WoonFriesland	50.78	48.77	49.78
L1544	Woongoed Goeree-Overflakkee	55.91	49.79	52.85
L1569	Woongoed Zeeuws-Vlaanderen	49.01	44.25	46.63
L1519	Wooninc.	55.06	45.07	50.07
L2114	Woonpartners Midden-Holland	55.55	46.14	50.84
L1888	Woonstichting Centrada	46.76	51.60	49.18
L1825	Woonstichting De Kernen	51.14	49.34	50.24
L2103	Woonstichting De Key	54.28	45.77	50.02
L2099	Woonstichting De Marken	53.13	53.80	53.47
L2090	Woonstichting De Zes Kernen	46.24	44.78	45.51
L2052	Woonstichting Etten-Leur	57.38	50.50	53.94
L1855	Woonstichting Gendt	55.03	50.18	52.61
L0740	Woonstichting Groninger Huis	46.59	50.86	48.73
L0579	Woonstichting Hulst	55.21	50.81	53.01
L1704	Woonstichting Land van Altena	54.78	47.03	50.91
L1788	Woonstichting Leystromen	56.29	48.77	52.53
L0602	Woonstichting SSW	61.47	46.04	53.76
L1236	Woonstichting St. Joseph	58.57	54.06	56.31
L0928	Woonstichting 't Heem	52.21	53.32	52.77
L0151	Woonstichting 'thuis	56.25	54.22	55.23
L0309	Woonstichting Triada	54.33	53.30	53.81

<b>Code</b>	<b>Name of Association</b>	<b>External sustainability performance</b>	<b>Internal sustainability performance</b>	<b>Total Sustainability score</b>
L1893	Woonstichting Valburg	57.97	52.40	55.19
L0661	Woonstichting VechtHorst	58.07	56.17	57.12
L0333	Woonstichting Vooruitgang	57.81	45.70	51.75
L0331	Woonstichting Vryleve	45.59	52.33	48.96
L1857	Wovesto	56.56	55.66	56.11
L1581	Zeeuwland	55.49	48.81	52.15

#### Annex 4: List of 91 elected associations for a 2017 sustainable social housing bond (ranked according to total sustainability score)

		Association name	Quadrant	External Sustainability Performance	Internal Sustainability Performance	Total sustainability score
1	L1543	Vallei Wonen	3	63.19	54.42	58.81
2	L1471	Stichting Woonwijze	2	63.94	52.03	57.98
3	L1164	Woningbouwvereniging St. Willibrordus	4	65.80	50.12	57.96
4	L1878	Woningstichting Leusden	2	61.45	54.11	57.78
5	L1670	Oosterpoort Wooncombinatie	2	57.10	58.43	57.76
6	L1100	Stichting Wonen Midden-Delfland	2	64.19	50.68	57.44
7	L1865	Woningstichting Putten	3	60.60	54.20	57.40
8	L0386	Woningstichting Naarden	4	63.83	50.82	57.32
		Stichting Woningcorporaties Het Gooi en				
9	L1875	Omstreken	3	61.41	53.08	57.24
10	L0936	Stichting Eemland Wonen	1	64.58	49.80	57.19
11	L0661	Woonstichting VechtHorst	3	58.07	56.17	57.12
12	L1716	Viveste	3	63.20	50.70	56.95
		IJsselsteinse Woningbouwvereniging				
13	L0317	(Provides)	2	61.38	52.39	56.89
14	L1693	Woningstichting Nijkerk	3	56.13	57.22	56.68
15	L0383	Stichting Dudok Wonen	1	61.91	51.43	56.67
16	L1836	Stichting Heuvelrug Wonen	3	64.34	48.98	56.66
17	L1239	Stichting IJsseldal Wonen	2	56.75	56.48	56.61
18	L0590	Rondom Wonen	3	58.76	54.10	56.43
19	L1910	Stichting WBO Wonen	4	59.89	52.95	56.42
20	L1236	Woonstichting St. Joseph	3	58.57	54.06	56.31
21	L0672	Woningstichting Volksbelang	2	60.39	51.87	56.13
22	L2092	Noordwijkse Woningstichting	3	61.49	50.77	56.13
23	L1413	Woningstichting Hellendoorn	2	57.69	54.53	56.11
24	L1857	Wovesto	3	56.56	55.66	56.11
25	L0643	Bouwvereniging Huis en Erf	2	58.65	53.56	56.11
26	L0782	Woningstichting Brummen	2	56.72	55.13	55.92
27	L0369	Stichting UWON	2	57.97	53.50	55.74
28	L0347	Stichting Viverion	2	58.62	52.69	55.66
29	L1745	Stichting Goed Wonen	2	58.84	52.44	55.64
30	L0272	Wassenaarsche Bouwstichting	4	63.70	47.43	55.56
31	L2051	Stichting Woonstede	2	56.76	54.11	55.44

		Association name	Quadrant	External Sustainability Performance	Internal Sustainability Performance	Total sustainability score
32	L1436	Stichting Dunavie	4	59.27	51.50	55.38
33	L0835	Wooncorporatie ProWonen	2	56.26	54.27	55.27
34	L0305	Woningbouwvereniging Langedijk Woningbouwvereniging Oostzaanse	3	58.98	51.54	55.26
35	L0757	Volkshuisvesting	3	65.03	45.44	55.23
36	L0151	Woonstichting 'thuis	2	56.25	54.22	55.23
37	L1893	Woonstichting Valburg	2	57.97	52.40	55.19
38	L0886	Stichting Area	2	55.70	54.45	55.07
39	L0343	Stichting KleurrijkWonen	3	53.65	56.45	55.05
40	L0157	Woningstichting Stek	3	56.88	53.20	55.04
41	L1596	Wonen Wijdmeren	3	61.29	48.64	54.97
42	L2104	Stichting Woningbedrijf Warnsveld	4	56.51	53.40	54.96
43	L2101	Stichting Goed Wonen Liempde	3	58.57	51.27	54.92
44	L0238	Woningstichting Voerendaal	3	58.96	50.83	54.90
45	L2044	Stichting Wonen Wierden-Enter	2	59.89	49.89	54.89
46	L0979	de Woningstichting	1	54.94	54.74	54.84
47	L1395	Woningbouwvereniging Maarn	3	64.34	45.27	54.80
48	L0254	Woningstichting Heteren	2	57.97	51.21	54.59
49	L1525	Stichting Woningbeheer De Vooruitgang	3	57.55	51.60	54.58
50	L1794	Woningstichting de Zaligheden	3	59.63	49.30	54.47
51	L0765	Stichting Wonen Delden	3	59.39	49.44	54.41
52	L2082	Woningstichting Barneveld	3	57.26	51.45	54.35
53	L1892	Woningbouwvereniging Oudewater	3	57.81	50.71	54.26
54	L0623	Woningstichting 'Warmunda'	3	57.81	50.72	54.26
55	L0923	Bouwvereniging Woningbelang	2	56.67	51.71	54.19
56	L0705	Veenendaalse Woningstichting	1	59.80	48.43	54.11
57	L1506	Woningstichting SallandWonen	3	56.78	51.30	54.04
58	L1464	Stichting Woonbedrijf SWS.Hhvl	4	54.24	53.47	53.85
59	L0176	BrabantWonen	1	53.62	53.98	53.80
60	L0602	Woonstichting SSW	3	61.47	46.04	53.76
61	L0439	Stichting Rhiant	3	56.10	51.32	53.71
62	L0637	Stichting De Seyster Veste	3	56.63	50.74	53.69
63	L1533	Stichting WOONopMAAT	1	56.05	51.25	53.65
64	L0766	Stichting GroenWest	2	56.31	50.96	53.64
65	L0630	Brederode Wonen	2	60.89	46.04	53.47
66	L0734	Patrimonium woonstichting	1	59.78	47.15	53.47
67	L2099	Woonstichting De Marken	4	53.13	53.80	53.47

		Association name	Quadrant	External Sustainability Performance	Internal Sustainability Performance	Total sustainability score
68	L0837	Jutphaas Wonen	3	53.33	53.53	53.43
69	L0533	Woningbouwvereniging Laren	1	62.11	44.44	53.27
70	L1781	Stichting Thuisvester	2	53.70	52.63	53.16
71	L1491	Woningstichting Kessel	4	53.12	53.06	53.09
72	L0029	Stichting deltaWonen	1	55.73	50.40	53.06
73	L0446	Woningstichting De Goede Woning	2	54.22	51.88	53.05
74	L0943	Stichting Woongoed Middelburg	1	56.70	49.17	52.94
75	L0641	Stichting Destion	2	55.27	50.40	52.84
76	L0540	Stichting QuaWonen	2	54.57	50.93	52.75
77	L0379	Woningbouwvereniging Arnhem	4	56.79	48.04	52.41
78	L1584	Bouwvereniging Ambt Delden	2	59.39	45.30	52.34
79	L1524	Rijnhart Wonen	2	55.61	48.48	52.05
80	L0543	R&B Wonen	2	54.72	49.30	52.01
81	L0267	Stichting Trivire	1	52.37	49.78	51.07
82	L1847	Woningbouwvereniging Compaen	1	53.66	48.47	51.07
83	L0077	Stichting Wold en Waard	2	54.03	47.73	50.88
84	L2072	Waterweg Wonen	1	52.90	47.22	50.06
85	L1247	Woningstichting Obbicht en Papenhoven	1	47.26	52.64	49.95
86	L0056	Stichting Woningbouw Achtkarspelen	1	50.88	48.91	49.89
87	L1663	WoonFriesland	1	50.78	48.77	49.78
88	L0676	Stichting Wonen Zuidwest Friesland	1	52.64	45.74	49.19
89	L0841	Woningstichting De Voorzorg	1	49.94	47.31	48.62
90	L0017	Woningstichting Rochdale	1	53.42	42.84	48.13
		Woningstichting Samenwerking				
91	L0371	Vlaardingen	1	52.90	39.97	46.43