

W/E report 33237

# Impact report 2025

Status per 31-12-2025

**W/E consultants**

Utrecht/Eindhoven, 2 juli 2026



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## **Project**

W/E 33237

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# 1 Achmea Impact report

As requested by Achmea | Corporate Finance, W/E consultants have calculated the CO<sub>2</sub> impact indication of the assets which are eligible according to the Green Finance Framework (GFF) as per 31 December 2025, in this report referred to as the assets within the Eligible Green Project Portfolio. This report covers the impact calculations of these current eligible assets.

In this report the carbon impact is calculated per eligible asset category and per criterium in the GFF and reported in the corresponding tables. In 2025, only mortgages for multi family buildings and single family buildings were part of the impact calculations. The outcome of the impact calculations depends on the distribution of the assets over the categories and over the criteria per 31 December 2025. Core indicators are reported in accordance with the GFF and calculated in accordance with 'The Global GHG Accounting and Reporting Standard for the Financial Industry' of PCAF, which was updated in 2022 (Second edition)<sup>1</sup> and 2025 (Third edition)<sup>2</sup>.

The method for calculating the avoided CO<sub>2</sub> emissions is described in chapter 2. The calculated CO<sub>2</sub> emissions attributed to the assets within the Eligible Green Project Portfolio per use function (in Dutch: gebruiksfunctie) can be found in chapter 3. The benchmark CO<sub>2</sub> emissions are calculated and compared to the CO<sub>2</sub> emissions of the eligible assets in chapter 4. The PCAF CO<sub>2</sub> coefficients, the energy use and the label distribution per building type (by the m<sup>2</sup> useful floor area) of the buildings in the Netherlands can be found in chapter 5, the Annex.

The calculated total CO<sub>2</sub> emission reduction compared to the benchmark is -4,324 tonnes CO<sub>2</sub> per year (-14%, please refer to Table 2).

## 1.1 Characteristics Eligible Green Project Portfolio

The first table shows an overview of the assets within the Eligible Green Project Portfolio, with the results shown for each of the Green Finance Framework criteria.

Table 1 Data Achmea's Eligible Green Project Portfolio per GFF criterium.

| Criteria                                                               | Number of properties <sup>3</sup> | Useful floor area [m <sup>2</sup> ] | Eligible portfolio [€ million] | Annual energy consumption [kWh/m <sup>2</sup> ] | Annual reduced CO <sub>2</sub> emissions [tonnes] | Rentable area certified <sup>4</sup> [m <sup>2</sup> ] |
|------------------------------------------------------------------------|-----------------------------------|-------------------------------------|--------------------------------|-------------------------------------------------|---------------------------------------------------|--------------------------------------------------------|
| Buildings registered A≥ labels built before 31st of December 2020      | 11,103                            | 1,493,883                           | 2,740                          | 75.0                                            | -3,193.7                                          | n.a.                                                   |
| Buildings built between 2006-2020 (top 15%) without registered A label | 2,085                             | 317,083                             | 448                            | 77.7                                            | -350.0                                            | n.a.                                                   |
| Buildings built after 31 December 2020 with PED of NZEB -10%           | 558                               | 66,552                              | 174                            | 35.3                                            | -613.9                                            | n.a.                                                   |
| <b>Total</b>                                                           | <b>13,746</b>                     | <b>1,877,518</b>                    | <b>3,361</b>                   | <b>74.0</b>                                     | <b>-4,324</b>                                     | <b>n.a.</b>                                            |

<sup>1</sup> PCAF (2022). 'The Global GHG Accounting and Reporting Standard Part A. Financed Emissions. Second edition.' 'PCAF-Global-GHG-Standard.pdf', December 2022, <https://carbonaccountingfinancials.com/standard>

<sup>2</sup> PCAF (2025). 'The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Third Edition.'

<sup>3</sup> In Dutch: "verblijfsobject"

<sup>4</sup> Rentable area certified to an eligible green building standard

## 1.2 Total CO<sub>2</sub> emission Eligible Green Project Portfolio

The total CO<sub>2</sub> impact indicators of the assets within the Eligible Green Project Portfolio are reported per Green Finance Framework criterium. For each of these criteria, the annual CO<sub>2</sub> emission reductions (compared to a national benchmark) have been calculated (Table 2).

Table 2 CO<sub>2</sub> emissions of all assets within the Eligible Green Project Portfolio compared to benchmark<sup>5</sup>.

|                                                                       | Achmea<br>[tonnes/a] | Benchmark<br>[tonnes/a] | Reduction<br>[tonnes/a] | Reduction<br>[%] |
|-----------------------------------------------------------------------|----------------------|-------------------------|-------------------------|------------------|
| Buildings registered A≥ labels built before 31st of December 2020     | 21,628.1             | 24,821.8                | -3,193.7                | -13%             |
| Building built between 2006-2020 (top 15%) without registered A label | 4,745.1              | 5,262.0                 | -516.9                  | -10%             |
| Buildings built after 31 December 2020 with PED of NZEB -10%          | 499.5                | 1,113.4                 | -613.9                  | -55%             |
| <b>Total</b>                                                          | <b>26,873</b>        | <b>31,197</b>           | <b>-4,324</b>           | <b>-14%</b>      |

<sup>5</sup> In this report, we use metric tonnes (1,000 kilograms).

## 2 Calculation method CO<sub>2</sub> emissions

The method for calculating the financed CO<sub>2</sub> emissions is derived from chapters '5.4 Commercial real estate' and '5.5 mortgages' of the PCAF publication.

The following calculations are made:

- The CO<sub>2</sub> emissions of the buildings that are part of the Eligible Green Project Portfolio.
- The financed CO<sub>2</sub> emissions of these buildings. This is the calculated CO<sub>2</sub> emission per building multiplied by the attribution factor.
- Avoided emissions (Reduction): The comparison of these (financed) CO<sub>2</sub> emissions to a relevant benchmark, in this case, the average CO<sub>2</sub> emissions of a comparable set of buildings in the Netherlands.

The annual CO<sub>2</sub> emissions are calculated using CO<sub>2</sub> coefficients per use function per energy label G-A\*\*\*\* (tonnes/m<sup>2</sup>.a; see Table 6 in the Annex. For these CO<sub>2</sub> coefficients the PCAF carbon emission factors 2025 are used<sup>6</sup> as provided by Achmea together with the relevant data for all eligible assets: use function (multi family building or single family building), useful floor area [m<sup>2</sup>] and the energy label. The emission factors in the PCAF database reflect the CRREM global pathways. See formula [1] in the Annex. The annual energy consumption per use function per energy label is calculated as the sum of the annual electricity use (in kWh) and gas use (in m<sup>3</sup>) per m<sup>2</sup> from the PCAF emission factors as provided by Achmea, see Table 9 in the Annex. The gas use is calculated to the corresponding value in kWh, according to formula [4].

Only buildings with a definitive status of the energy label are reported separately per energy label; the buildings with another energy label status are reported in a separate 'unknown' category in the same table. Energy labels and label status were provided by Achmea. For buildings without an energy label, the calculated energy and CO<sub>2</sub> impact is based on a weighted average emission as provided in the PCAF numbers; the results are included in the 'unknown' category. The useful floor areas of buildings without an energy label were not specified and are based in the calculations on the average useful floor area in the complete Achmea portfolio per category (84.7 and 140.5 m<sup>2</sup> for multi family buildings and single family buildings, respectively).

The financed CO<sub>2</sub> emissions, as calculated according to formula [3] in the Annex, include the attribution factor in the calculations. The attribution factor is the ratio between the outstanding loan amount and the property value at origination, as calculated in formula [2] in the Annex. Per building the calculated CO<sub>2</sub> emission is multiplied by the attribution factor of that building.

To compare the calculated CO<sub>2</sub> emissions to a benchmark, an average CO<sub>2</sub> coefficient [tonnes/m<sup>2</sup>.a] per use function is calculated, using the distribution of energy labels of all registered residential buildings in the Netherlands as derived from the Dutch energy label database EP-online<sup>8</sup>.

The calculations of the (financed) CO<sub>2</sub> emission reduction of the assets within the Eligible Green Project Portfolio compared to the benchmark are made per building and then summed up per use function and then to a total.

### 2.1 Step-by-step

Calculations are made per building and then summed per use function and then total.

<sup>6</sup> PCAF carbon emission factors and energy consumption numbers 2025 are based on CBS energy consumption data which are published on March 26<sup>th</sup>, 2025 (reference year 2023) <https://www.cbs.nl/nl-nl/maatwerk/2025/13/energieleveringen-particuliere-woningen-naar-energielabel>

<sup>8</sup> EP-online database March 2026: <https://www.ep-online.nl/PublicData>

1. Collect the following data for all assets within the Eligible Green Project Portfolio:
  - Use function
  - Gross Carry Amount [euro]
  - Property value [euro]
  - Energy label
  - Useful floor area [m<sup>2</sup>]
2. Collect the CO<sub>2</sub> coefficients and energy consumption per m<sup>2</sup> useful floor area, per energy label (PCAF numbers as provided).
3. Use data from the first steps and the formulas of paragraph 5.4 in the Annex to calculate the energy consumption and CO<sub>2</sub> emissions of all eligible assets (results in chapter 3).
4. Calculate the average CO<sub>2</sub> coefficient [tonnes/m<sup>2</sup>.a] per use function in the Netherlands using the average distribution of the m<sup>2</sup> useful floor area per energy label in the Netherlands and the PCAF CO<sub>2</sub> coefficients per use function and energy label. The average distribution of useful floor area over the energy labels comes from the total of registered energy labels (for the two types of residential buildings).
5. Calculate the benchmark CO<sub>2</sub> emission per building, using the useful floor area of the building and the calculated average CO<sub>2</sub> coefficient for the corresponding use function. See paragraph 4.
6. Sum up all the calculated (financed) CO<sub>2</sub> emissions per building to the CO<sub>2</sub> emissions per use function and the total CO<sub>2</sub> emission.
7. The reduction is calculated by subtracting the CO<sub>2</sub> emissions for the assets within the Eligible Green Project Portfolio from the CO<sub>2</sub> emissions of the average building set (benchmark). A reduction is presented as a negative number.

### 3 CO<sub>2</sub> emissions – Eligible Green Project Portfolio

The CO<sub>2</sub> emissions of buildings are determined based on data of single family and multi family buildings provided by Achmea.

#### 3.1 Energy label distribution

The distribution of useful floor area per use function and per energy label.

Table 3 Useful floor area per use function and per energy label [m<sup>2</sup>]

| Use function            | A++++         | A+++          | A++           | A+            | A                | unknown        | Total            |
|-------------------------|---------------|---------------|---------------|---------------|------------------|----------------|------------------|
| Multi family buildings  | 23,998        | 40,148        | 18,758        | 44,805        | 1,074,786        | 386,385        | <b>1,588,880</b> |
| Single family buildings | 1,605         | 13,282        | 6,388         | 17,108        | 181,730          | 68,524         | <b>288,637</b>   |
| <b>TOTAL</b>            | <b>25,603</b> | <b>53,430</b> | <b>25,146</b> | <b>61,913</b> | <b>1,256,516</b> | <b>454,910</b> | <b>1,877,518</b> |

#### 3.2 Financed CO<sub>2</sub> emissions Eligible Green Project Portfolio

To calculate the CO<sub>2</sub> emissions of all buildings within the Eligible Green Project Portfolio, the data from Table 3 (useful floor area in m<sup>2</sup>) and Table 6 (CO<sub>2</sub> coefficient in tonnes/m<sup>2</sup>.a) are combined and corrected with the attribution factor. The results are given per energy label and use function to be able to follow the calculation.

Table 4 Financed CO<sub>2</sub> emission of all buildings within Eligible Green Project Portfolio [tonnes/a]

| Use function            | A++++      | A+++       | A++        | A+         | A             | unknown      | Total         |
|-------------------------|------------|------------|------------|------------|---------------|--------------|---------------|
| Multi family buildings  | 109        | 176        | 113        | 387        | 9,648         | 3,229        | 13,661        |
| Single family buildings | 7          | 57         | 35         | 107        | 1,590         | 537          | 2,333         |
| <b>TOTAL</b>            | <b>115</b> | <b>234</b> | <b>148</b> | <b>494</b> | <b>11,238</b> | <b>3,766</b> | <b>15,994</b> |

## 4 CO<sub>2</sub> emissions – Benchmark

The CO<sub>2</sub> emissions of the buildings within the Eligible Green Project Portfolio are compared to the benchmark: the average CO<sub>2</sub> emissions of buildings in the Netherlands. Calculations are made per building and then summed per use function and then for all buildings.

The basic principle of calculating the average CO<sub>2</sub> emissions is the same as used for the eligible assets (formula [1] in the Annex). The deciding parameters are the distribution of useful floor area of Dutch buildings per use function over the energy labels and the CO<sub>2</sub> coefficients per use function and energy label in the PCAF data. The difference between the distribution of useful floor area of the Achmea Eligible Green Project Portfolio is compared to the average distribution in the Netherlands. In the Annex data are given of the distribution of useful floor area and the resulting average CO<sub>2</sub> coefficients per use function (see Table 7 and Table 8 in the Annex).

For comparing the financed CO<sub>2</sub> emissions of the Eligible Green Project Portfolio, the calculated 'average' CO<sub>2</sub> emission per building is multiplied by the attribution factor for that building (formulas [1], [3]).

In Table 5 the CO<sub>2</sub> emission of the financed part of the Eligible Green Project Portfolio is compared to an equivalent benchmark building stock (calculated with average CO<sub>2</sub> coefficients for Dutch buildings)

Table 5 Financed CO<sub>2</sub> emission reduction of buildings within Eligible Green Project Portfolio

| Use function            | Benchmark CO <sub>2</sub><br>emission [tonnes/a] | Achmea CO <sub>2</sub><br>emission [tonnes/a] | Reduction CO <sub>2</sub><br>emission [tonnes/a] | [%]        |
|-------------------------|--------------------------------------------------|-----------------------------------------------|--------------------------------------------------|------------|
| Multi family buildings  | 15,753.7                                         | 13,661                                        | 2,092.6                                          | 13%        |
| Single family buildings | 2,837.6                                          | 2,333                                         | 504.3                                            | 18%        |
| <b>TOTAL</b>            | <b>18,591</b>                                    | <b>15,994</b>                                 | <b>2,597</b>                                     | <b>14%</b> |

## 5 Annex

### 5.1 CO<sub>2</sub> coefficients PCAF

PCAF has CO<sub>2</sub> emissions available for several residential and commercial real estate classes (use function) per energy label. Coefficients for multi family buildings and single family buildings are given in Table 6.

Table 6 CO<sub>2</sub> coefficients PCAF<sup>6</sup> [tonnes CO<sub>2</sub>/m<sup>2</sup>.a]

| CRE                     | A++++ | A+++  | A++   | A+    | A     | B     | C     | D     | E     | F     | G     |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Multi family buildings  | 0.006 | 0.008 | 0.008 | 0.011 | 0.015 | 0.020 | 0.023 | 0.026 | 0.027 | 0.028 | 0.029 |
| Single family buildings | 0.007 | 0.007 | 0.009 | 0.013 | 0.015 | 0.018 | 0.020 | 0.022 | 0.022 | 0.023 | 0.022 |

Buildings without an energy label have a modelled CO<sub>2</sub> coefficient of 0.024 and 0.020 tonnes CO<sub>2</sub>/m<sup>2</sup>.a for multi family buildings and single family buildings, respectively.

### 5.2 Distribution m<sup>2</sup> useful floor area over energy labels & CO<sub>2</sub> coefficients NL

Table 7 The current distribution of m<sup>2</sup> useful floor area per use function over the energy labels in the Netherlands [% per use function]. Source: EP-online database for registered energy labels (database per March, 2026).

| CRE                     | A++++ | A+++ | A++  | A+    | A     | B     | C     | D    | E    | F    | G    |
|-------------------------|-------|------|------|-------|-------|-------|-------|------|------|------|------|
| Multi family buildings  | 0.6%  | 5.8% | 5.4% | 10.4% | 30.6% | 14.9% | 18.8% | 6.3% | 3.5% | 1.9% | 2.0% |
| Single family buildings | 3.2%  | 7.9% | 3.6% | 6.7%  | 24.9% | 16.2% | 21.2% | 7.1% | 4.4% | 2.4% | 2.3% |

Table 8 Average CO<sub>2</sub> emission per use function in the Netherlands [tonnes/m<sup>2</sup>.a]

| Use function            | CO <sub>2</sub> emission [tonnes/m <sup>2</sup> .a] |
|-------------------------|-----------------------------------------------------|
| Multi family buildings  | 0.0179                                              |
| Single family buildings | 0.0164                                              |

### 5.3 Energy coefficients PCAF

PCAF has energy consumption values available per use function and per energy label. Coefficients for multi family buildings and single family buildings are given in Table 9.

Table 9 Energy consumption PCAF<sup>6</sup> [kWh/m<sup>2</sup>.a]

| CRE                     | A++++ | A+++ | A++  | A+   | A    | B     | C     | D     | E     | F     | G     |
|-------------------------|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| Multi family buildings  | 29.7  | 39.2 | 40.8 | 55.5 | 79.8 | 105.7 | 121.0 | 139.3 | 144.3 | 147.1 | 152.9 |
| Single family buildings | 31.7  | 33.6 | 44.9 | 68.8 | 75.8 | 95.4  | 104.6 | 113.8 | 118.6 | 119.9 | 116.1 |

Buildings without an energy label have a modelled energy consumption of 125.6 and 103.4 kWh/m<sup>2</sup>.a for multi family buildings and single family buildings, respectively.

## 5.4 Formulas

The following formulas are used to calculate the CO<sub>2</sub> emission of the buildings within the Achmea Eligible Green Project Portfolio. All calculations have been done per building. Summed results per GFF criterium and per use function (and when necessary, per energy label) are presented in the report.

- [1] CO<sub>2</sub> emission = CO<sub>2</sub> coefficient PCAF \* useful floor area
  - > CO<sub>2</sub> emission [tonnes CO<sub>2</sub>/a]
  - > CO<sub>2</sub> coefficient PCAF, as given in Table 6 in the Annex [tonnes CO<sub>2</sub>/m<sup>2</sup>.a]
  - > useful floor area, as given in the Achmea datasheet [m<sup>2</sup>]
  
- [2] Attribution factor = outstanding amount / property value at origination
  - > attribution factor, ratio between outstanding amount and property value at origination [-]
  - > outstanding amount, as is found in the Achmea data as 'Gross Carry Amount' [€]
  - > property value, as can be calculated with the Achmea data:  
= 'CO<sub>2</sub> collateral value' [€]
  
- [3] Financed CO<sub>2</sub> emission = CO<sub>2</sub> emission \* attribution factor
  - > Financed CO<sub>2</sub> emission, as the main result of the calculation [tonnes CO<sub>2</sub>/a]
  
- [4] Gas use in kWh = gas use in m<sup>3</sup> \* Energetic value of Dutch gas / Energy factor
  - > Energetic value of Dutch gas: 35.17 MJ/m<sup>3</sup>
  - > Energy factor: 3.6 MJ/kWh