

Impact assessment Eligible Green Loan Portfolio Argenta

Project: Impact assessment Eligible Green Loan Portfolio Argenta the Netherlands

Subject: Reduced CO₂-emission calculation

Date: January 2022

Status: Final



CFP Green Buildings has been asked to compare the greenhouse gas emissions¹ of a specific, energy-efficient group of residential real estate (in this document indicated as Eligible Green Loan Portfolio^{2,3}) to that of a comparable group of residential real estate with an average energy efficiency (indicated as "Reference" or "Reference Group"⁴). The objective of this analysis is to report the positive impact of the sustainable residential real estate of Argenta. The sustainable residential real estate of Argenta complies with the criteria of the EU Taxonomy Delegated Regulation from June 2021. This document outlines the results of this analysis.

Preface

Argenta Bank- en Verzekeringsgroep (Argenta Group) provides retail financial services for families in Belgium and the Netherlands, through Argenta Spaarbank (banking) and Argenta Assuranties (insurance).

Founded in 1956, Argenta is today Belgian's fifth largest banking institution by customer deposits, with over 1.7 million customers. Its product offering that focusses on simplicity and long-term relationships of trust with the clients builds on four pillars:

- Savings
- Lending
- Insurance
- Investments

The group operates in Belgium through an extensive network of local self-employed, tied agents.

Mission and Vision

Argenta wants to assist families and individuals in living financially healthy lives in a simple, honest and close-at-hand way. Additionally, this mission takes into account the company values, that have marked Argenta's strategy and corporate culture from the outset:

- Simple, 'no frills'
- Honest
- Close-at-Hand
- Enterprising and Independent
- Future-oriented and Safe

¹ Greenhouse gas emissions are calculated in CO₂-equivalent, which will be referred to as CO₂ throughout this document.

² When referring to the Eligible Asset Portfolio in this document, we refer to Dutch Residential Green Buildings only.

³ The Eligible Green Loan Portfolio consists of 11.918 objects. The Eligible Green Loan Portfolio represents 9,9% of the total outstanding amount of the total portfolio as mentioned above.

⁴ The Reference Group is an anonymised portfolio from several clients from CFP Green Buildings, which contains about 140.000 comparable buildings.

Argenta is an independent bank-insurer with an excellent customer service and long-term relationships with all its stakeholders.

It is a solid and stable institution with strong capital and liquidity ratios and sound risk and investment policies. The rapid digital evolution goes hand-in-hand with special attention to cyber security and data protection.

In Belgium, Argenta wants to be easily accessible through its self-employed distribution partners but also digitally with a range of retail banking and insurance products tailored to individuals and families. In the Netherlands, distribution takes place digitally and through independent distribution channels, with a focus on mortgage loans. In Luxembourg, Argenta manages investment funds.

Building year and energy label comparison

Assets in the Eligible Green Loan Portfolio should have an energy label A or belong to the top 15% of the national or regional building stock expressed as operational Primary Energy Demand, as required by the EU taxonomy.

The building year is used as a criterion to determine the top 15%. Over time, the Dutch Building Regulations require higher energy efficiency and improved sustainability for new buildings. Therefore, the year of construction is used as a criterion to define the Argenta Eligible Green Loan Portfolio. 11,7% of the total Dutch housing stock is built since 2006.⁵ Hence, the selected year of construction to determine the top 15% is 2006. This way, the buildings in the Argenta Eligible Green Loan Portfolio belong to the top 15% of most energy-efficient buildings of the Dutch real estate market.

Additionally, buildings built before 2006 with an energy label A deliver a substantial contribution to climate change mitigation, according to the EU Taxonomy. Figure 1 shows the distribution of the energy labels of the Eligible Green Loan Portfolio and the registered energy labels in the Netherlands for residential buildings. In the Argenta Eligible Green Loan Portfolio, all objects built before 2006 have a registered energy label A. As per the end of 2020, there are 1.217.535 registered energy labels with an A rating in the Netherlands.⁶

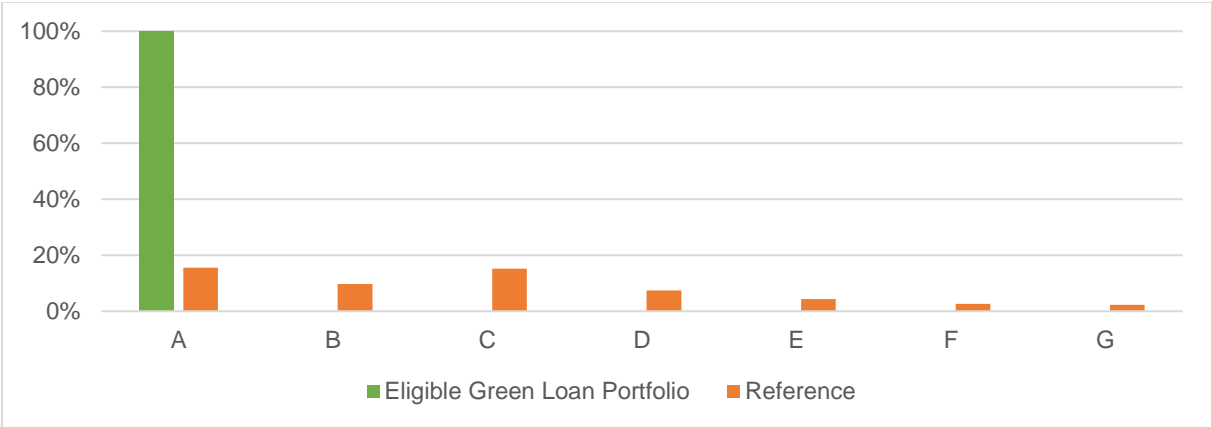


Figure 1: Distribution of provisional and registered energy labels Eligible Green Loan Portfolio and residential buildings in the Netherlands

⁵ All residential buildings built since 2006 either have a registered energy label A or would have gotten a provisional energy label A. Provisional energy labels were calculated based on building characteristics.

⁶ Source: EP-Online for EPC labels <http://www.ep-online.nl/>

Methodology

The CO₂-emissions of the 11.918 eligible objects are determined by using the calculated energy consumption of these objects. The energy usage is based on algorithms and benchmarks from the expert system of CFP Green Buildings. This is the largest building database in the Netherlands with actual data on energy consumption and building characteristics. In this study, the calculated energy consumption of the Reference Group was determined based on data from Centraal Bureau Statistiek⁷ (CBS) and CFP. The Reference Group is a group of residential buildings with comparable floor area and average energy efficiency.

The total energy consumption can be converted to CO₂ emissions by using standard conversion factors. The Dutch government created a widely accepted and uniform list with grid emission factors: www.co2emissiefactoren.nl. In line with PCAF⁸, the grid emissions related to the direct emissions are used, which is also known as Tank-To-Wheel (TTW⁶). Whenever the origin of the consumed electricity is unknown, the emission factor for electricity from an undefined energy source should be used. The factor for electricity is updated regularly to reflect changes in the Dutch electricity mix. This leads to the following emission factors:

	CO₂-emissions⁹	
Natural gas	1,785	kg/m ³
Electricity	0,405	kg/kWh

Table 1: Dutch CO₂-emission factors

9.642 objects in the Eligible Green Loan Portfolio have a registered energy label A. As described in the methodology report, buildings constructed in and after 2006 belong to the top 15% of the national building stock, expressed as operational Primary Energy Demand. The portfolio includes 7.916 objects constructed in or after 2006. The objects with a registered EPC A should be excluded from this group to avoid double counting, and results in 2.276 eligible assets. By combining both criteria (EPC A and top 15% of the national building stock expressed as PED), the total amount of assets in the Eligible Green Loan Portfolio is 11.918.

Energy consumption

Table 2 shows the calculated energy consumption of the Eligible Green Loan Portfolio. The calculated annual energy consumption is 42 million kWh of electricity and 14 million m³ of natural gas. To calculate the total energy consumption in kWh, the natural gas consumption in m³ needs to be converted to kWh¹⁰, giving a consumption of 79 kWh per m². The total calculated energy consumption is 103 kWh per m².

	<i>Electricity consumption</i>		<i>Natural gas consumption</i>	
	(x1000 kWh)	(kWh/m ²)	(x1000 m ³)	(m ³ /m ²)
<i>Buildings built since 2006 (top 15%)</i>	26.892	24	8.926	8
<i>Buildings with a registered EPC A built before 2006</i>	15.192	25	5.095	9
<i>Buildings built since 2006 and buildings with a registered EPC A</i>	42.084	25	14.021	8

Table 2: Calculated energy consumption Eligible Green Loan Portfolio

⁷ Source: the Dutch national statistical office: <https://www.cbs.nl/en-gb>

⁸ Partnership for Carbon Accounting Financials (PCAF) is a global partnership of financial institutions that work together to develop and implement a harmonized approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.

⁹ Source: <https://www.co2emissiefactoren.nl> using TTW emissions.

¹⁰ Conversionfactor for natural gas: 1 m³ = 9,769 kWh

CO₂-emission

Table 3 shows the CO₂-emissions of the Eligible Green Loan Portfolio and the Reference Group, based on the calculated energy consumption. The total CO₂-emissions of the Eligible Green Loan Portfolio is 42.071 tons CO₂ per year. The annual CO₂-emission for the Reference Group is 58.661 tons.

	<i>GHG emission Eligible Green Loan Portfolio (ton CO₂e)</i>	<i>GHG emission Reference (ton CO₂e)</i>	<i>GHG emissions Reduced (ton CO₂e)</i>
<i>Buildings built since 2006 (top 15%)</i>	26.823	38.195	11.372
<i>Buildings with a registered EPC A built before 2006</i>	15.248	20.466	5.218
<i>Buildings built since 2006 and buildings with a registered EPC A</i>	42.071	58.661	16.590

Table 3: CO₂-emission Eligible Green Loan Portfolio compared to the Reference Group

Conclusion

The following conclusions are drawn from this study:

- The buildings in the Eligible Green Loan Portfolio emit 16.590 tons of CO₂ per year less than the Reference Group, which is a difference of 28%.
- The total energy consumption is calculated at 103 kWh/m².
- All buildings in the Eligible Green Loan Portfolio deliver a substantial contribution to climate change mitigation following the EU Taxonomy definition, either by having an EPC class A rating or belonging to the top 15% of the national building stock expressed as operational PED.