de volksbank

Green Bond Impact Report 2023

Introduction

De Volksbank aims to meet the specific financial needs of its customers in a people-oriented, efficient and sustainable manner. Our mission is 'banking with a human touch'. We achieve this by creating value for all our stakeholders: our customers, society, our employees and our shareholder. We aim for optimum shared value rather than maximisation of a single value. Together with our brands we strive for a strong customer relationship and increasing our social impact.

De Volksbank is the fourth largest retail bank operating in the Dutch market, with more than 3.2 million customers. We offer simple and transparent mortgage, savings and payment products to private individuals, self-employed persons and smaller companies. We also offer insurance and investment products.

At year-end 2023, we were at 75% towards our goal to obtain a climate-neutral balance sheet, which means that at this point we have reached our interim target of at least 75% by 2025. Our KPI 'climate-neutral balance sheet' consists of an estimation of the emissions avoided with our activities and the emissions caused by us. These calculations are based on the Partnership for Carbon Accounting Financials (PCAF) methodology and cover scope 1, 2 and 3 emissions. De Volksbank is the first bank in the Netherlands with approved Science Based Targets for our scope 1, 2 and 3 emissions.

The latter includes emission reduction targets on mortgages (real estate), renewable energy (power), and investments covering relevant balance sheet categories.

This Green Bond Impact Report 2023 reflects the environmental impact reporting requirements as stated in the Green Bond Framework de Volksbank 2023[1]. We updated our Framework in September 2023 and was externally assessed by ISS Corporate Solutions. The assessment consists of four core elements to determine the sustainability quality of the framework, (1) the framework benchmarked against the ICMA Green Bond Principles, (2) the contribution to the UN SDGs, (3) alignment with EU Taxonomy on a best-efforts basis and (4) the link between the transactions and our overall ESG profile.

In this Green Bond Impact Report 2023, de Volksbank N.V. reports on the non-financial impact during the financial year 2023, in respect of the bond issued under the Green Bond Framework. This Impact Report compares the GHG emissions of the Eligible Green Loan Portfolio in tons of CO_2 equivalents to that of a comparable group of real estate with an average energy-efficiency. The 2023 impact assessment further describes the environmental impact of the green buildings within the Eligible Green Loan Portfolio compared to the reference group. Moreover, a recalculation of the impact assessment of 2022 has been made and is included in the appendix. The electricity consumption was incorrectly estimated, resulting in the actual usage being lower than what was initially reported. Apart from this Impact Report, EY performed a limited assurance engagement on the Green Bond Allocation Report over the year 2023 which contains allocation reporting on a portfolio level.

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Impact Report

De Volksbank aims to provide an annual non-financial impact report on climate impact associated to the Eligible Project Categories of the Eligible Green Loans. The impact report includes:

Green Buildings:

- Estimated annual primary energy consumption in kWh/m²
- Estimated annual reduced and/or avoided emissions in tons of CO_2 equivalents

This Green Bond Impact Report, as well as the Green Bond Allocation report, is available on our website: Green Bonds | De Volksbank

Impact Eligible Green Loan Portfolio

The impact of the Eligible Green Loan Portfolio is fully attributable to the Eligible Project Category Green Buildings, as the Green Loan Portfolio only consists of Green Buildings. Calculations are made by CFP Green Buildings, an external consultant who issued the Impact Assessment of de Volksbank Eligible Green Loan Portfolio, detailing the environmental impact and methodology of the Eligible Green Loan Portfolio as per 31 December 2023. The full report can be found on page 6. The entire Eligible Green Loan Portfolio is situated in the Netherlands.

- Total emissions of the Eligible Green Loan Portfolio per € million is 12,33 ton CO_2e
- Less emissions, compared to the benchmark, per invested € million is 5,66 ton CO_2e
- The buildings in the Eligible Green Loan Portfolio are estimated to emit 41,092 tons of CO_2 per year less than the Reference Group, which is a difference of 31,4%
- The total average estimated energy consumption of the Eligible Green Loan Portfolio is calculated at 95/ kWh/m²/per year.
- All buildings in the Eligible Green Loan Portfolio deliver a substantial contribution to climate change mitigation following the EU taxonomy definition, by having an EPC class A rating or higher, or alternatively, belong to the top 15% of the Dutch building stock based on Primary Energy Demand.

Table 1: Portfolio-based Green Bond Report

Eligible Project Category	Number of buildings	Signed Amount (EUR)	Eligibility for Green Bonds	Building Area in m²	Less GHG Emissions in tCO_2e
Green Buildings	30,630	7,264,284,685	100%	4,535,972	41,092
Total	30,630	7,264,284,685	100%		

Figure 1. Less emissions in CO_2 equivalents, per invested million euros

Climate Impact

We want to make a positive contribution to the climate by limiting our direct and indirect emissions, actively supporting our customers to reduce their negative climate impact, and collaborating with partners to develop industry standards for impact measurement. We also need to adapt to the already changing climate and be aware of the financial implications of climate change on our business. As a bank, we have a significant (indirect) impact on the climate. We measure our indirect impact by means of our goal of obtaining a climate-neutral balance sheet by 2030. We have set portfolio targets on the most relevant assets in terms of size and emissions. The targets are recalibrated annually to align with the annual update of the operational plans and to ensure effective steering. We monitor the emissions and progress made towards the portfolio targets on a monthly basis and discuss the progress on a quarterly basis in the Social Impact Committee to ensure appropriate measures are taken to achieve our targets. We have also set Science Based Targets for our buildings and car fleet, as well as for our mortgage, investments and sustainable energy portfolios. These Science Based Targets are ambitious in accordance with a 1.5°C emission reduction pathway, and with emission reduction targets substantiate both our goal of obtaining a climate-neutral balance sheet by 2030 and our ambition to achieve net zero emissions.

Net Zero

Based on our Climate Action Plan, we will embark on a path to modify our strategic KPI from a climate-neutral balance sheet by 2030, to a net zero balance sheet by 2050. We do so to align more with the target setting and terminology that has been developed since launching our target on obtaining a climate-neutral balance sheet. Net zero means the CO_2e emissions from our balance sheet have to be greatly reduced in line with a 1.5°C scenario. The Science Based Targets on our mortgage portfolio and investments will provide a meaningful method to align with a 1.5°C scenario. Net zero requires reducing CO_2e emissions to as close to zero as possible. We do not expect to be able to completely reduce all emissions to zero by 2050. Therefore, to reach net zero any residual emissions will have to be removed from the atmosphere by financing projects that have been set up specifically for this purpose. Avoided emissions do not play a direct role, as opposed to our goal of obtaining a climate-neutral balance sheet. In line with our role of frontrunner over the years, we are now exploring the possibilities for nature-based solutions for carbon removal.

Figure 2. Climate-neutral balance sheet 2023

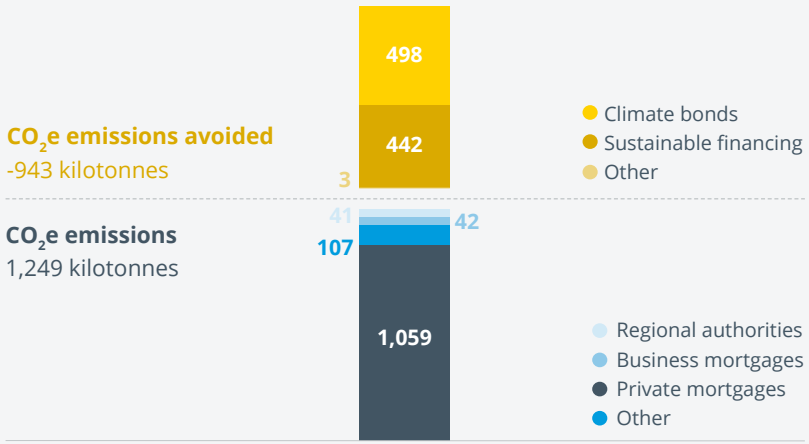
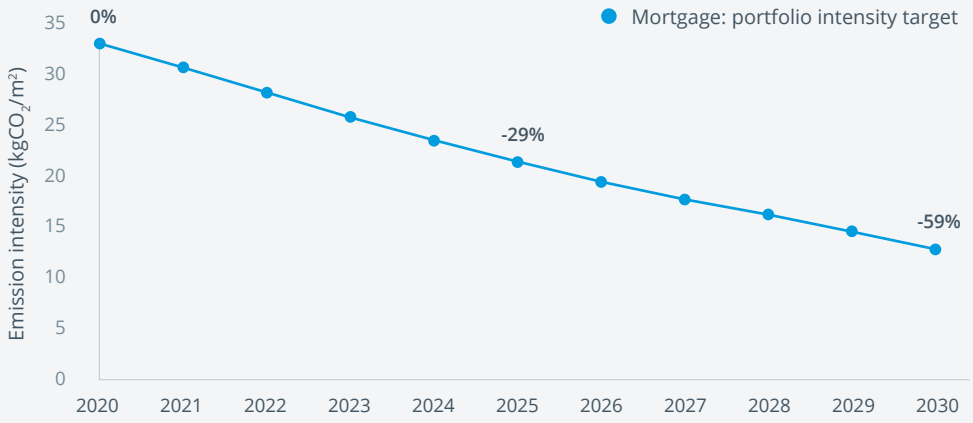


Figure 3. Mortgage portfolio intensity target

An intensity target is a normalized metric that sets an organisation's emissions target relative to an economic or operational variable. Intensity targets allow an organization to set emissions reduction targets while accounting for economic growth



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Impact Assessment Eligible Green Loan Portfolio de Volksbank

Project: 2023 Green Bond Impact Report de Volksbank

Subject: Less CO_2 emissions compared to benchmark

Date: 20-9-2024

Status: Final

CFP Green Buildings has been asked to compare the greenhouse gas emissions[1] 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"). The objective of this analysis is to demonstrate that the selected buildings belong to the topmost sustainable buildings in the Netherlands.

In this document, the results of this analysis are shown. The Eligible Green Loan Portfolio of de Volksbank complies with the technical screening criteria of the EU Taxonomy Delegated Regulation from June 2021. This document outlines the results of this analysis.

The Eligible Green Loan Portfolio

All the assets in the Eligible Green Loan Portfolio are built before 2021, have a valid and definitive energy label A as per the end of 2023, or by belonging to the top 15% of the national building stock expressed as operational PED, as required by the 2023 Green Bond Framework of de Volksbank[4].

As per the end of 2022, there are 1,541,218 registered energy labels with an A rating in the Netherlands[5].

For the selection of the top 15%, the year that a new building code was introduced is used as a criterion, as described in the Green Residential Buildings Methodology Assessment Document of February 2024[6]. This is because the Dutch Building Regulation sets out energy efficiency requirements for different building types. For example, the Dutch Building Code 2000 requires an EPC score of at least 1.0. Over time the Dutch Building Regulation becomes more stringent regarding energy-efficiency and sustainability requirements for new buildings. The year a new building code was introduced and therefore used as a selection criterion for the top 15% is 2006. Approximately 12.28% of the Dutch housing stock are residential buildings built between 2006 and year-end 2020. This way, the buildings in de Volksbank's Eligible Green Asset Portfolio belong to the top 15% of most energy-efficient buildings of the Dutch residential real estate market.

[1] Greenhouse gas emissions are calculated in CO_2-equivalent, which will be referred to as CO_2 throughout this document.
[2] When referring to the Eligible Green Loan Portfolio in this document, we refer to Dutch Residential Green Buildings only.
[3] The Eligible Green Loan Portfolio consists of 30,630 objects.
[4] The eligible green assets have been selected by the Volksbank and determined based on reference date 31-12-2023.
[5] Source: EP-Online for EPC labels http://www.ep-online.nl/.
[6] Source: verslag_volksbank_2024_v2.indd (devolksbank.nl).

Methodology

The GHG emissions associated with the 30,630 eligible objects, as selected by de Volksbank, have been calculated based on estimates of the annual energy consumption (natural gas and electricity) multiplied with GHG emission factor indicating the average emissions per unit of energy consumption.

The energy usage is based on algorithms and benchmarks from the expert system of CFP Green Buildings. CFP's Expert system is a database consisting of actual energy data of buildings. A section of this anonymised data provides live energy data derived from CFP's Energy Monitoring projects. Moreover, public big data, for example yearly updated average energy usage of homes in the Netherlands provided by Statistics Netherlands (CBS), is used to improve and check the benchmarking.

In this study, the calculated energy consumption of the Reference Group was determined based on data from CBS, RVO, Kadaster and CFP[7]. The Reference Group is a group of residential buildings with comparable floor area to the the Volksbank portfolio and with an average energy efficiency.

The total energy consumption can be converted to GHG emissions by using GHG conversion / emission factors. We have applied GHG emissions factors indicating the average emissions per unit of energy consumption for all energy consumed on the Dutch energy grid. This is in accordance with the generally accepted PCAF[8] methodology. The used emission factors originate from www.co2emissiefactoren.nl. This is a collaboration of multiple parties, including the Ministry for Economic Affairs and Climate policy, that regularly publishes updated GHG emission factors which have been reviewed by experts. Which has become a widely trusted source for valid and reliable GHG emission factors for the Dutch context. Because of continuous changes in Dutch electricity mix, the factor for electricity is updated. The applied methodology is in line with the location-based approach as specified in the GHG-protocol.

This leads to the following emission factors:

Applied GHG emission factors[9]		
Natural gas	1.779	kg CO_2e /m^3
Electricity	0.270	kg CO_2e /kWh

Table 1: Dutch GHG-emission factors

In addition, table 2 shows the distribution of the assets in de Volksbank's green residential building portfolio among eligibility criteria:

1. Residential buildings with an A-label.
2. Buildings in the top 15% of the national stock, as described in the Green Residential Buildings Methodology Assessment Document of February 2024[10].

Criteria	Objects
Buildings with an A-label[11]	23,634
Buildings built between 2006-2020 (Top 15%)[12]	6,996

Table 2: Assets in the Green Building Portfolio

Energy consumption

Table 3 shows the calculated energy consumption per year of the Eligible Green Loan Portfolio. The calculated annual energy consumption is 125 million kWh of electricity

[7] The Reference Group has the same floor area as the eligible objects. The CO_2-emissions are calculated by CFP algorithms taking into account the energy usage of all residential buildings in the Netherlands.
[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] Source: verslag_volksbank_2024_v2.indd (devolksbank.nl).
[11] This category includes buildings with building year before 2021.
[12] This category has no registered labels.

and 31.4 million m^3 of natural gas. To calculate the total energy consumption in kWh, the natural gas consumption in m^3 needs to be converted to kWh[13], giving a consumption of 68 kWh per m^2. The total calculated energy consumption is 95 kWh per m^2.

Estimated positive impact

Table 4 shows the estimated carbon footprint of the Eligible Green Loan Portfolio and the Reference Group. The total estimated annual GHG emissions associated with the Eligible Green Loan Portfolio are 89,590 tonnes CO_2e per year, compared to 130,681 tonnes CO_2e per year for the Reference Group. Resulting in less GHG emissions of 41,092 tonnes of CO_2e for 2023.

	Electricity consumption		Natural gas consumption		
	(x1000 kWh)	(kWh/m^2)	(x1000 m^3)	(m^3/m^2)	(kWh/m^2)
Buildings with an A-label	94,337	27.8	24,462	7.2	70.5
Buildings built between 2006-2020 (Top 15%)[14]	30,609	26.7	6,934	6.1	59.2
Total Eligible Green Loan portfolio	124,946	27.5	31,396	6.9	67.6

Table 3: Calculated energy consumption Eligible Green Loan Portfolio

	#	m^2	GHG emissions EGLP (tonnes CO_2e)	GHG emissions reference (tonnes CO_2e)	GHG emissions less (tonnes CO_2e)
Buildings with an A-label	23,634	3,391,193	68,989	97,700	28,711
Buildings built between 2006-2020 (Top 15%)	6,996	1,114,779	20,600	32,981	12,381
Total Eligible Green Loan portfolio (EGLP)	30,630	4,535,972	89,590	130,681	41,092

Table 4: CO_2-emission Eligible Green Loan Portfolio (EGLP) compared to the Reference Group

[13] Conversion factor for natural gas: 1 m^3 = 9.769 kWh.

[14] Buildings without an energy label.

Conclusion

The following conclusions are drawn from this study:

- The buildings in the Eligible Green Loan Portfolio are estimated to emit 41,092 tonnes of CO_2 per year less than the Reference Group, which is a difference of 31,4%
- The total average estimated energy consumption is calculated at 95 kWh /m^2/per year[15].
- 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 higher or by belonging to the top 15% of the national building stock expressed as operational PED[16].

[15] The total average estimated energy consumption is not only based on primary energy demand of the building, but also on the estimated actual usage.

[16] In last year's report, an incorrect estimation was made mainly regarding electricity consumption, resulting in the actual usage being lower than what was reported.

Appendix

Energy consumption 2022

As an incorrect estimation was made in the report of 2022, the figures are now recalculated. In this recalculation, the same square meters, building years and energy labels per asset are used as in the report of 2022. This to make sure that it is an accurate recalculation of the portfolio. The CFP Green Buildings Tool continuously improves its calculation methods and algorithms when new data or insights become available. The most recent algorithms of September 2024 are used in this recalculation.

Table 5 shows the recalculated energy consumption of the Eligible Green Loan Portfolio for the year 2022. The recalculated annual energy consumption is approximately 98,8 million kWh of electricity and 24,5 million m^3 of natural gas. To calculate the total energy consumption in kWh, the natural gas consumption in m^3 needs to be converted to kWh, giving a consumption of 70,8 kWh per m^2. The total recalculated energy consumption is 100 kWh per m^2.

Estimated positive impact 2022

Table 6 shows the recalculated carbon footprint of the Eligible Green Loan Portfolio and the Reference Group, based on the recalculated energy consumption. The total estimated annual GHG emissions associated with the Eligible Green Loan Portfolio are 72,234 tonnes CO_2e per year, compared to 101,212 tonnes CO_2e per year for the Reference Group. Resulting in less GHG emissions of 28,978 tonnes of CO_2 for 2022.

	Electricity consumption		Natural gas consumption		
	(x1000 kWh)	(kWh/m^2)	(x1000 m^3)	(m^3/m^2)	(kWh/m^2)
Total Eligible Green Loan portfolio	98,823	29,29	24,453	7,25	70,8

Table 5: Recalculated energy consumption Eligible Green Loan Portfolio

	#	m^2	GHG emissions EGLP (tonnes CO_2e)	GHG emissions reference (tonnes CO_2e)	GHG emissions less (tonnes CO_2e)
Total Eligible Green Loan portfolio (EGLP)	23,484	3,374,295	72,234	101,212	28,978

Table 6: Recalculated CO_2-emission Eligible Green Loan Portfolio (EGLP) compared to the Reference Group