



BANCA ETICA'S CARBON FOOTPRINT ACCOUNTING

September 2023

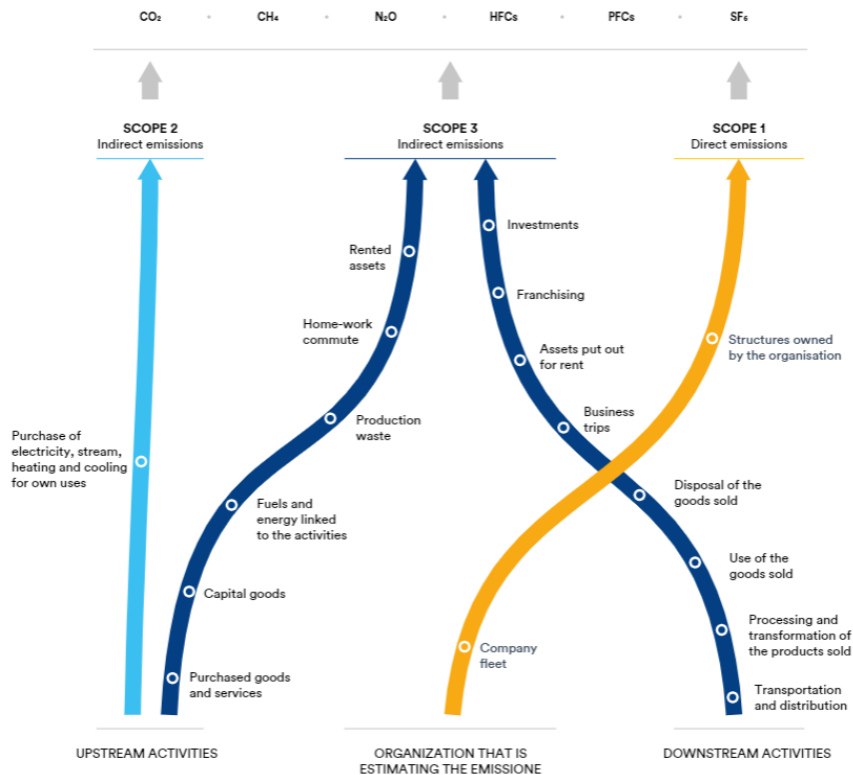
Introduction

Banca Etica is a cooperative bank that operates in Italy and Spain. It was founded by a group of individuals and organisations committed to creating a credit institution based on the principles of ethical finance: transparency, participation, sobriety, efficiency, and consideration of the non-economic impacts of economic actions.

The carbon footprint is a measure used to estimate the direct or indirect greenhouse gas emissions associated with a product, service, organization, event, or individual, typically expressed in tonnes of CO₂ equivalent (tCO₂e), which represents greenhouse gases equivalent to CO₂ in terms of impact on global warming.

Banca Etica reports data on the climate impact of its activities, considering both the emissions it directly produces and those generated by the investments and loans it grants.

Being a member of the Global Alliance for Banking on Values (GABV), Banca Etica is dedicated to revealing the climate impact of its loan and investment portfolio as part of the Climate Change Commitment (3C Initiative).



Source: GHG protocol

Total greenhouse gas emissions

This year, Banca Etica published its fourth [Impact Report](#), which includes a chapter that applies the PCAF standard to Carbon Footprint accounting.

Banca Etica has comprehensively evaluated Scope 1 and 2 emissions. For Scope 3 downstream indirect emissions, Banca Etica evaluated 91.2% of its assets. In total, Banca Etica's assets emitted 313 thousand tonnes of CO₂ equivalent.

Direct and indirect emissions produced by Banca Etica in 2022		
Category	tCO ₂ e	Notes
SCOPE 1: Direct emissions		
Company facilities - heating	8.7	
Company vehicles	10.2	
SCOPE 2: Electricity use		
Purchased energy (<i>market based</i>)	30.8	
SCOPE 3: Indirect emissions		
Paper	4.9	
Business travel	81.9	
Employee commuting	198.0	
Working from home	88.0	
Loans and investments:	312,973.3	
<i>Sovereign bonds</i>	218,127.7	100% of sovereign bonds and 47% of total assets
<i>Corporate/SME loans estimated</i>	65,472.4	93.5% of corporate loans and 26.8% of total assets
<i>Corporate/SME loans reported</i>	8,946.1	
<i>Mortgages</i>	18,407.8	100% of Mortgages and 15.9% of total assets
<i>other investments</i>	2,020.3	92.3% of other investments and 1.5% of total assets
Total Emissions	313,395.8	Emissions per €M of loans & investments 113.6 tCO₂e/M€
Emissions avoided due to loans	69,540.4	
Emissions avoided due to hybrid working	152.0	
Total emissions avoided	69,692.4	

Following the PCAF method, these estimates exclude Scope 3 upstream emissions of financed institutions, except in the case of sovereign bonds, where they are included. For completeness, we report that these would add an extra:

- 77,652 tCO₂e for Corporate/SME loans.

The methodology used to calculate the emission factors is certainly crucial for the estimation of the Footprint. In the following chapters, we present methodologies and estimates for the covered assets.

Scope 3 emissions: **Sovereign bonds**

By 2022, sovereign bonds make up 47% of Banca Etica's assets. Estimates suggest that they emit 218,127.7 tonnes of CO₂e (Scope 1, Scope 2, and Scope 3 combined). Italian bonds, which account for 93.7% of the total amount held by the bank, contribute to the majority (91.3%) of emissions. This is because the emission factor of Italian bonds is relatively low compared to other countries with higher fossil fuel usage rates in their energy mixes.

To estimate the emissions, emission factors provided by PCAF in methodology option 1a (Verified GHG emissions of the country are available. These GHG emissions are reported by the country itself and can be extracted from UNFCCC) have been used this year. As a result of this methodology change, the value of emissions attributed to sovereign bonds increased by 4,636%. Under the revised PCAF standard methodology, CO₂ emissions related to debt held by the bank are considered as a share of total national emissions, whereas previously bank-related emissions were considered as a share of public sector emissions only.

Emissions produced by sovereign bonds held by Banca Etica in 2022		
Country	Total amount held at 31.12 (M€)	Emissions (tCO ₂ e)
Croatia	11.3	3,481.2
France	10.2	2,348.1
Germany	19.8	4,590.5
Italy	1,216.5	199,046.6
Portugal	14.3	3,539.3
Spain	25.8	5,122.0
Total	1,297.9	218,127.7

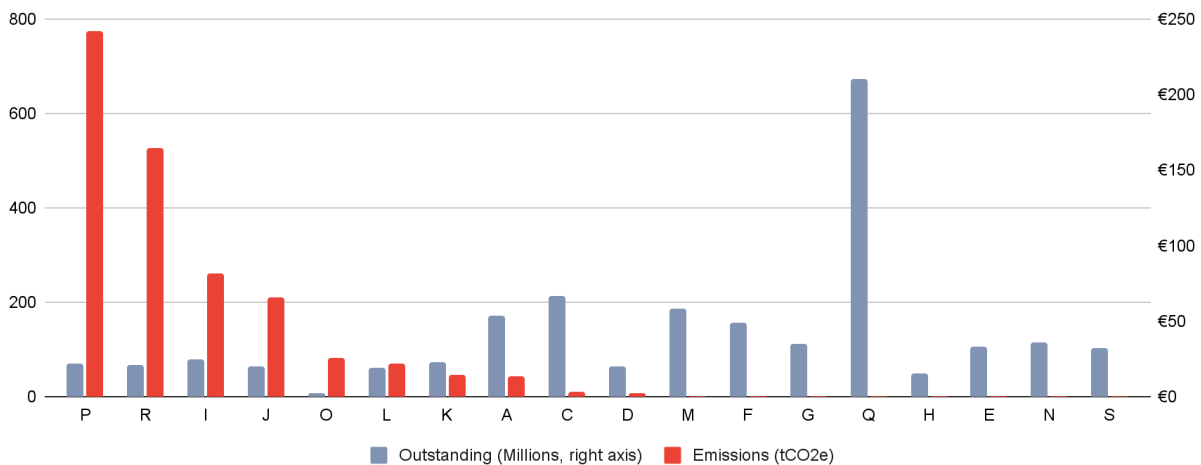
Scope 3 emissions: **Corporate/SME loans**

We estimated the emissions generated by corporate and SME loans, which represent 26.8% of Banca Etica's assets in 2022, using the emission factors provided by PCAF. This was done following methodology option 3c (Outstanding amount in the company is known. Emission factors for the sector per unit of revenue - e.g., tCO₂e per euro or dollar of revenue earned in a sector - and asset turnover ratios for the sector are known).

For a few organisations (which represent 3.6% of our Corporate/SME loans outstanding balance), we did not need to estimate their emissions as they reported them through our Socio-Environmental Questionnaire. In this case, we followed methodology option 1b (Outstanding amount in the company and total company equity plus debt are known. Unverified emissions calculated by the company are available).

In 2022, the CO₂ emissions resulting from Corporate/SME loans were 74,418.5 tonnes CO₂e. The sectors that contributed the most to total loan emissions were Agriculture, Forestry and Fishing for 57%, Manufacturing for 14%, and Energy for 9%.

Emissions from corporate/SME loans for NACE sector and outstanding at 31.12.2022



The methodology adopted leads to overestimated figures because it considers the agricultural and energy sector's emissions in its sectoral average, which is typically high. However, Banca Etica mainly finances companies that use organic farming techniques, which are often less polluting, and finances companies that produce energy exclusively from renewable sources.

Banca Etica also estimated Scope 3 Upstream emissions, which were not included in the total corporate/SME loans emissions. The total Scope 3 Upstream emissions add up to 77,652 tCO₂e.

Avoided emissions. An in-depth study based on information collected by Banca Etica as part of the Social and Environmental Assessment enables the quantification of activities financed that have resulted in the mitigation of climate-changing emissions. These activities can be classified into three categories: installation of new renewable energy production plants from renewable sources (which account for most of the avoided emissions), energy-saving activities, and impacts from energy efficiency actions related to the use of 'Superbonus 110' tax credits.

Source of emissions avoided	Clients	Emissions avoided (tCO ₂ e)
Renewable energy plants	16	53,509.5
Energy efficiency	3	964.8
Tax credits related activities	272	15,066.1
Total	291	69,540.4

Scope 3 emissions: **Mortgages**

Emissions from mortgages in 2022			
Type of building	Outstanding at 31.12 (M€)	Number of buildings	tCO ₂ e
Residential buildings	439.9	4,537	18,406.8

Due to insufficient information on the precise features of properties, such as square metres and number of rooms, emission factors provided by PCAF were utilised to estimate emissions from mortgages. Specifically, we employed emission factors relating to the functional unit of dwellings, with a resulting data quality score of 5 (methodology option 3: estimated building energy consumption per building based on building type and location specific statistical data and the number of buildings available. Emissions are calculated using estimated building energy consumption and average emission factors specific to the respective energy source). Out of 4,537 properties considered, the total emissions amount to 18,406.8 tonnes CO₂e.

In this way, 100% of mortgages, representing 15.9% of total assets, were covered.

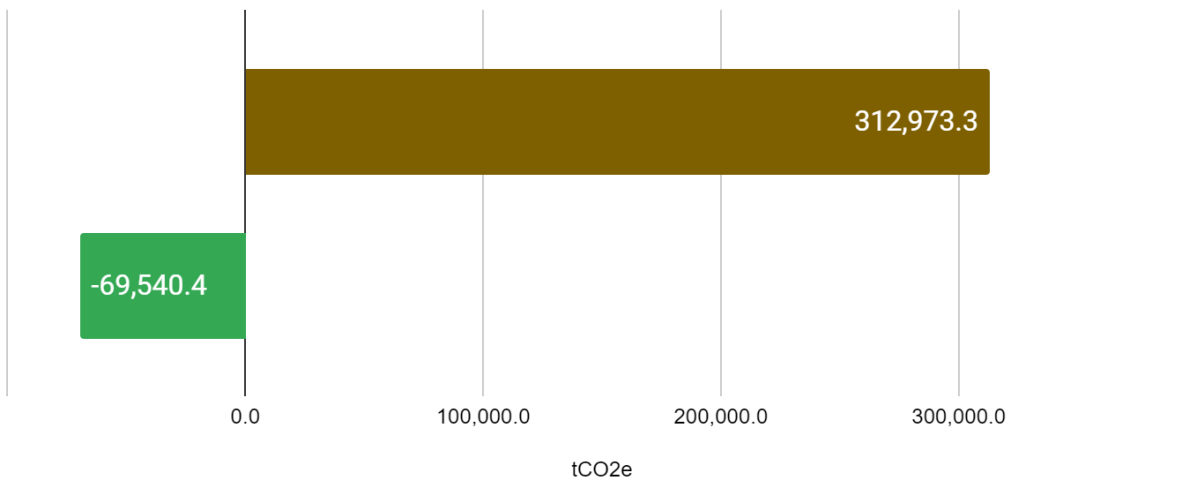
Scope 3: **Avoided emissions**

Total avoided emissions by Banca Etica's loans in 2022 were 69,540 tCO₂e.

Regarding the estimation of the avoided emissions, we have taken into account the loans provided by Banca Etica to organisations that have declared their intention to use the loan to carry out energy efficiency projects or to establish renewable energy plants.

The energy savings data resulting from our loans, which clients estimated in kWh, were multiplied by an emission factor based on the Italian Ministry of Environment's national energy mix. This yielded the tonnes of CO₂e avoided. To convert kW data on recently installed renewable energy units given by customers, we utilised the PVGIS platform of the European Union, which was converted based on the municipality where the green energy plants were installed.

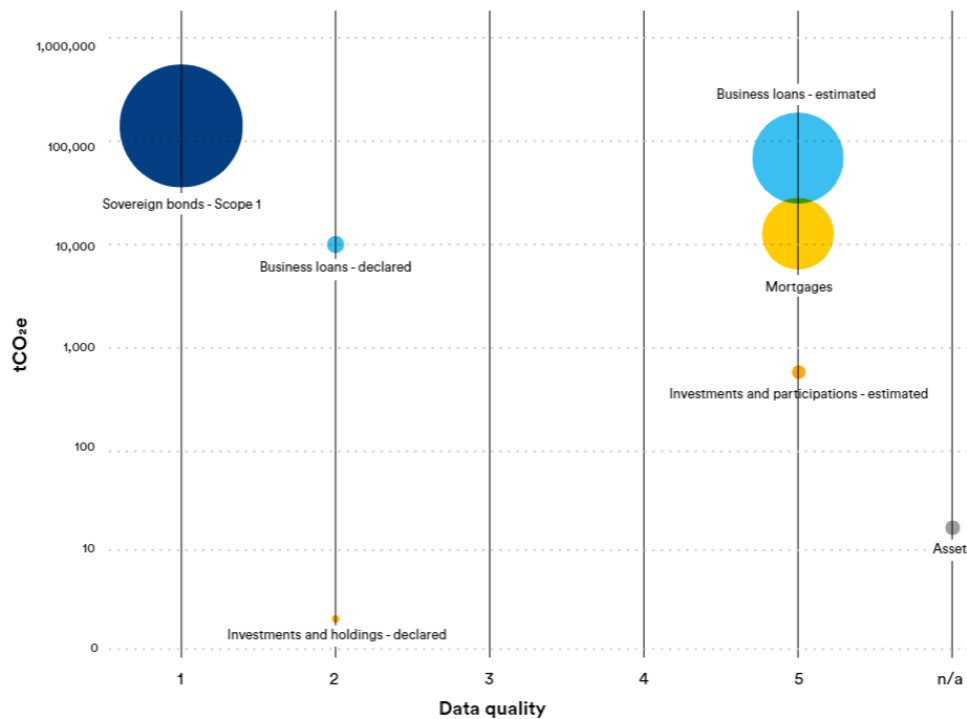
Greenhouse gas emissions of assets (tCO₂e) - 2022



Data quality of scope 3 emissions

According to the PCAF methodology classification, a scoring of data quality was assigned to each different kind of estimate. The highest levels of emissions data quality are for sovereign bonds Scope 1, that have a score 1 level of data quality, and for business loans and investments and holdings (declared data), which have a score 2 level. The remaining data, mortgages, business loans and investments and holdings (estimated data) emissions, have a score 5 level of data quality. For the funds no data quality level was assigned, as it was not covered by the PCAF methodology.

Data quality according to the PCAF methodology - 2022



References:

PCAF (2022). *The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition.*