Financed emissions of Landsbankinn

February 2024

Estimated emissions in 2022
according to PCAF methodology

Deloitte.

Independent Auditor’s Assurance Report

To the Management and the stakeholders of Landsbankinn hf.
We have been engaged by Landsbankinn hf. to provide limited assurance on Landsbankinn’s report of financed emissions for the year 2022 (“the PCAF Report”) according to the PCAF methodology.

Our engagement was performed in order to:

- Assess disclosures presented in Landsbankinn´s report of carbon emissions in loan portfolio for the year 2022.

We express a conclusion providing limited assurance.

Management’s responsibility
The Management of Landsbankinn is responsible for collecting, analysing, aggregating and presenting the information in the report, ensuring that the information is free from material misstatement, whether due to fraud or error.

Our independence and quality control
We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants (IESBA Code), which are based on the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Deloitte ehf. is subject to International Standard on Quality Management (ISQM) 1 and, accordingly, applies a comprehensive quality control system, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Auditor’s responsibility
Our responsibility is to express a limited assurance conclusion on Landsbankinn´s PCAF Report. We have conducted our work in accordance with ISAE 3000 (revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information, to obtain limited assurance about our conclusion. In accordance with the standard we have planned and performed our work to obtain limited assurance about whether the PCAF Report is free from material misstatement.

A limited assurance engagement is less in scope than a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Considering the risk of material misstatement, we planned and performed our work to obtain all information and explanations necessary to support our conclusion.

We performed reviews of data, recalculation of selected key performance indicators, reviews of the underlying data processes as well as interviews with those responsible for producing and preparing the data. Our work has included interviews with key employees of Landsbankinn, inquiries regarding procedures and methods to ensure the appropriateness of the disclosures in Landsbankinn´s PCAF Report. We have assessed processes, tools and controls for gathering, consolidating and aggregating data at Landsbankinn, and performed analytical review procedures and tested data prepared against underlying documentation.

Conclusion
Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Landsbankinn’s PCAF Report for the years 2022 is not prepared, in all material respects, in accordance with the PCAF methodology.

Kópavogi, 1 February 2024

Deloitte ehf.

Birna María Sigurðardóttir

Birna María Sigurðardóttir
State Authorised Public Accountant

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Main conclusions

Main conclusions

Landsbankinn's analysis is based on the Bank's balance sheets for 2022. The Bank's indirect emissions through lending to customers is estimated at 247 $ktCO_2e$[1] and just over 138 $ktCO_2e$ for financing. Total emissions are therefore approximately 385 $ktCO_2e$. Emissions from investment are almost exclusively from sovereign debt and exclude emissions from land use, land-use change and forestry (LULUCF).

Since the publication of the last report on the Bank's financed emissions was published a year ago, baseline data for the relevant emission factors have been updated. We are constantly looking for ways to improve basic and supplementary data for carbon calculations. The new baseline data indicate lower funded emissions than previously estimated so in order to look at previous years compared to 2022, the Bank has recalculated funded emissions in its credit and asset portfolio for the years 2019-2021 (see supporting material).

When setting carbon emission goals for the Bank's credit and asset portfolio, the base year is 2019. Financed emissions from the Bank's credit portfolio in 2022 are ca. 20 $ktCO_2e$ below the base year, which can be attributed to lower emissions from motor vehicle loans. The effects of the COVID-19 pandemic could be felt in 2020, as emissions from corporate loans were reduced by almost a third compared to the previous year.

Estimates of Scope 3 emissions from the Bank's customers are a little higher than in previous reports due to the previously mentioned updating of baseline data. The new data include more variables in Scope 3 than previous data. Emissions are estimated at around 631 $ktCO_2e$ in 2022, compared to around 553 $ktCO_2e$ in 2019. Thus, Scope 3 emissions from customers have increased somewhat more than their Scope 1 and 2 emissions. Scope 3 emissions from customers decreased by a small margin in 2020 and 2021. Other Scope 3 emissions from the Bank's asset portfolio are relatively low compared to emissions from customers, or less than 1.0 $ktCO_2e$.

The Bank's analysis extends to around 93% of loans and receivables due from customers. In 2022, the Bank's five most emission-heavy customers accounted for 40% of the Bank's financed emissions, compared to over 50% in 2019.

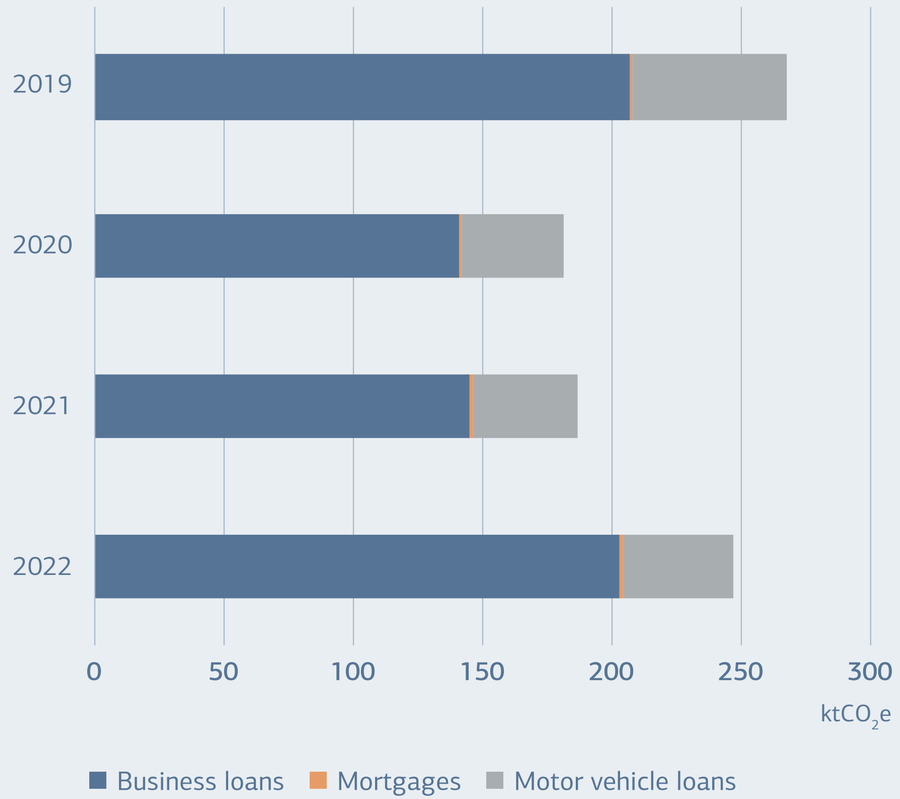
Conclusions show both total emissions and the emission intensity of customers and categories. The emission intensity is estimated emission per borrowed 1 ISK. The emission intensity does not necessarily increase concomitant with total emissions.

1 Kilotonnes of CO_2-equivalent. Because there are many types of greenhouse gases and they vary in intensity, their effects are converted to CO_2-equivalent. One CO_2-equivalent equals one CO_2.

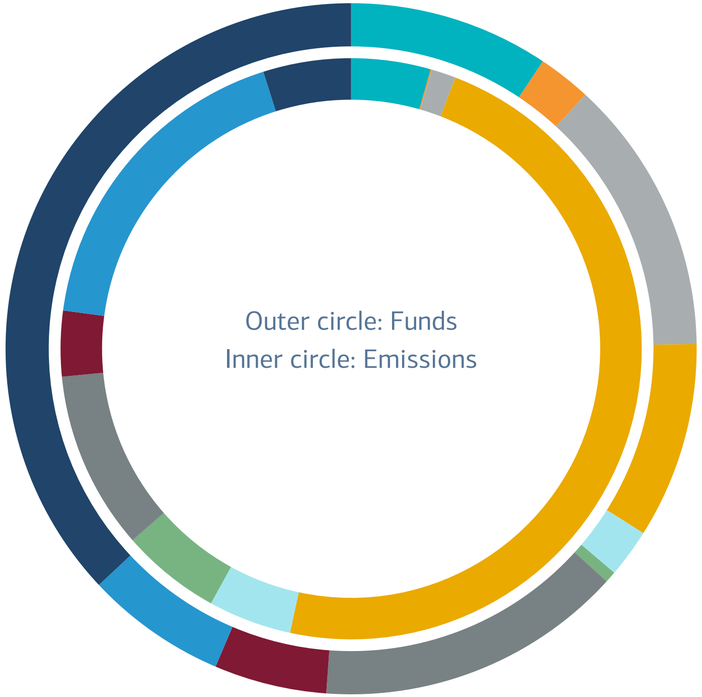
The emission intensity of the Bank's credit and asset portfolio measured 0.25 tCO_2e/ISK million (ISKm) in 2022, which is a negligible change from the two previous years, when it stood at approximately 0.27 tCO_2e/ISKm. Compared to the base year of 2019, however, the rate has decreased by more than a third, mostly due to less emissions from sovereign debt and motor vehicle loans.

The emission intensity of the Bank's corporate customers is 0.29 tCO_2e/ISKm which is an increase of 0.06 tCO_2e/ISKm, or approximately one-fourth, from the previous year. Considering year-to-year changes in the value of companies, the emission intensity is the same as in the base year, i.e. ca. 0.32 tCO_2e/ISKm. This means that there have been virtually no changes to emission intensity from corporate lending although the figures dropped in the intervening years 2020 (0.24) and 2021 (0.26).

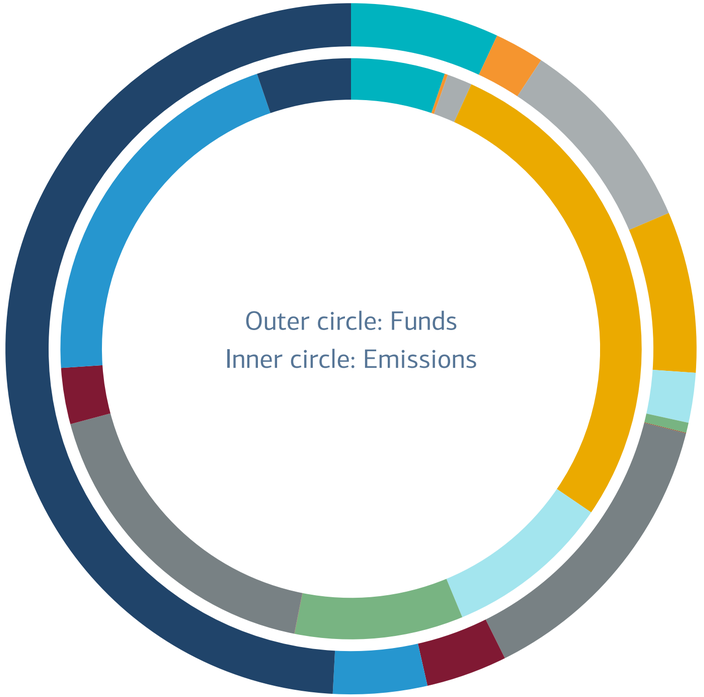
Carbon emissions in Landsbankinn's credit portfolios 2019-2022



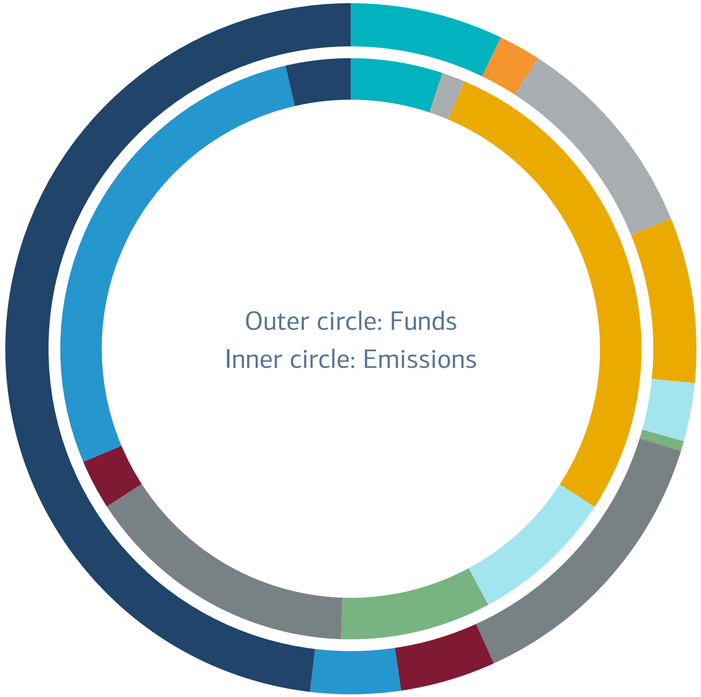
Credit portfolio 2019



Credit portfolio 2021



Credit portfolio 2022



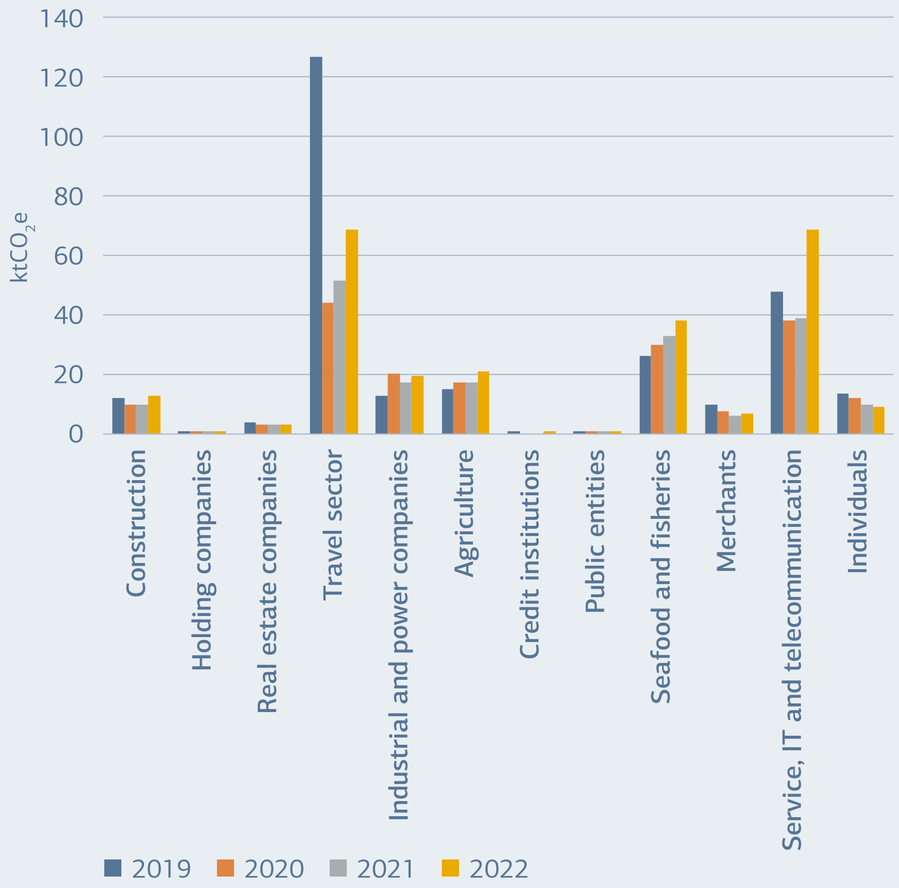
- Construction
- Industrial and power companies
- Seafood and fisheries
- Holding companies
- Agriculture
- Merchants
- Real estate companies
- Credit institutions
- Service, IT and telecommunication
- Travel sector
- Public entities
- Individuals

Sectors with the most carbon emissions

The three sectors in the Bank's credit portfolio with the highest emissions are services, IT & communications, the travel industry, and fisheries. These sectors are responsible for over 70% of estimated total emissions from the Bank's credit portfolio. The travel industry and services, IT and communications are the sectors estimated to have the highest emissions in 2022, or about 69 $ktCO_2e$ each. The travel industry has traditionally had the highest total emissions, although emissions have decreased since 2019, when they stood at close to 130 $ktCO_2e$.

Services, IT & communications have seen an annual increase every year since 2020, when there was a reduction from the previous year, including a considerably large leap of 76% in 2022. Fisheries are the third largest sector in terms of carbon emissions with generally little year-to-year fluctuations. Emissions from the sector in 2022 amounted to approximately 38 $ktCO_2e$. Fisheries are a pivotal part of Icelandic industry and the Bank finances numerous companies in the sector, which represents the largest single corporate borrower by sector in the credit portfolio.

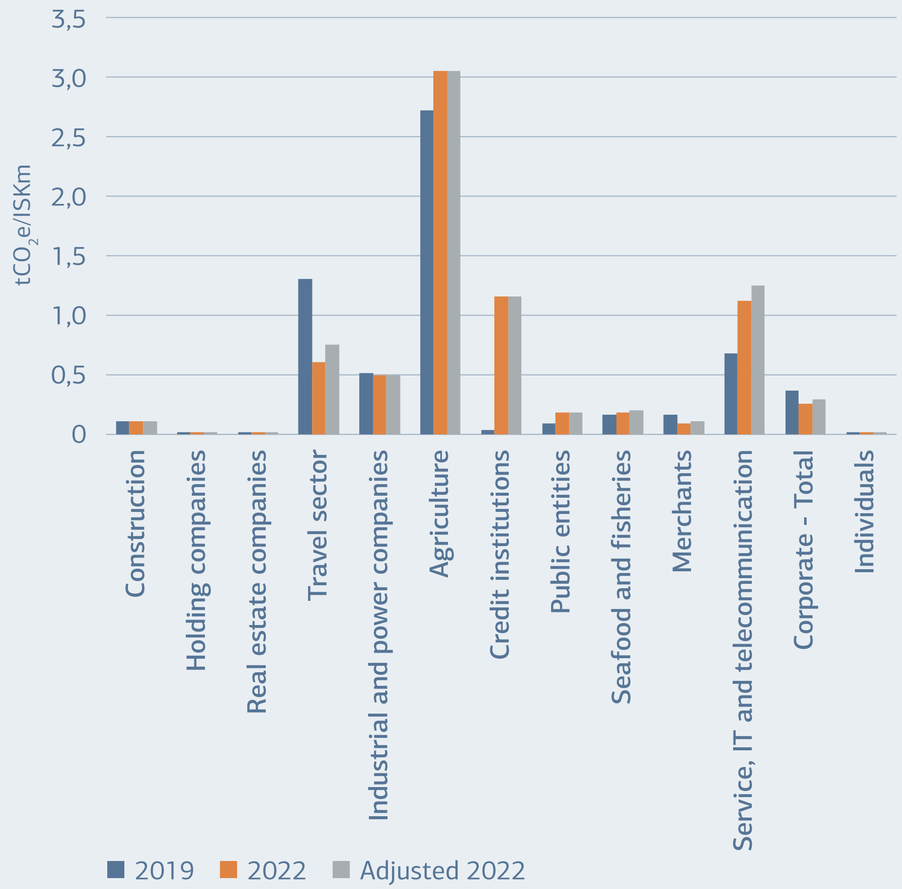
Carbon emissions by sectors



Sectors with the highest emission intensity

Agriculture continues to be estimated as having the highest emission intensity: 3.05 tCO_2e/ISKm in 2022. The sector's emission intensity has increased every year from 2019, when it stood at 2.73 tCO_2e/ISKm. The services, IT & communications sector follows with an emission intensity of 1.14 tCO_2e/ISKm despite being one of the two most emission-heavy sectors. Emissions from other sectors are estimated at less than 1.0 tCO_2e/ISKm with the exception of credit institutions; a sector barely relevant in this comparison, as total lending only amounted to about ISK 2 million and was limited to motor vehicle purchases. It is also evident that emission intensity from the travel industry has decreased, the 2022 estimate of 0.62 tCO_2e/ISKm being about half of the 2019 base year figure of 1.32 tCO_2e/ISKm.

Emission intensity by sectors

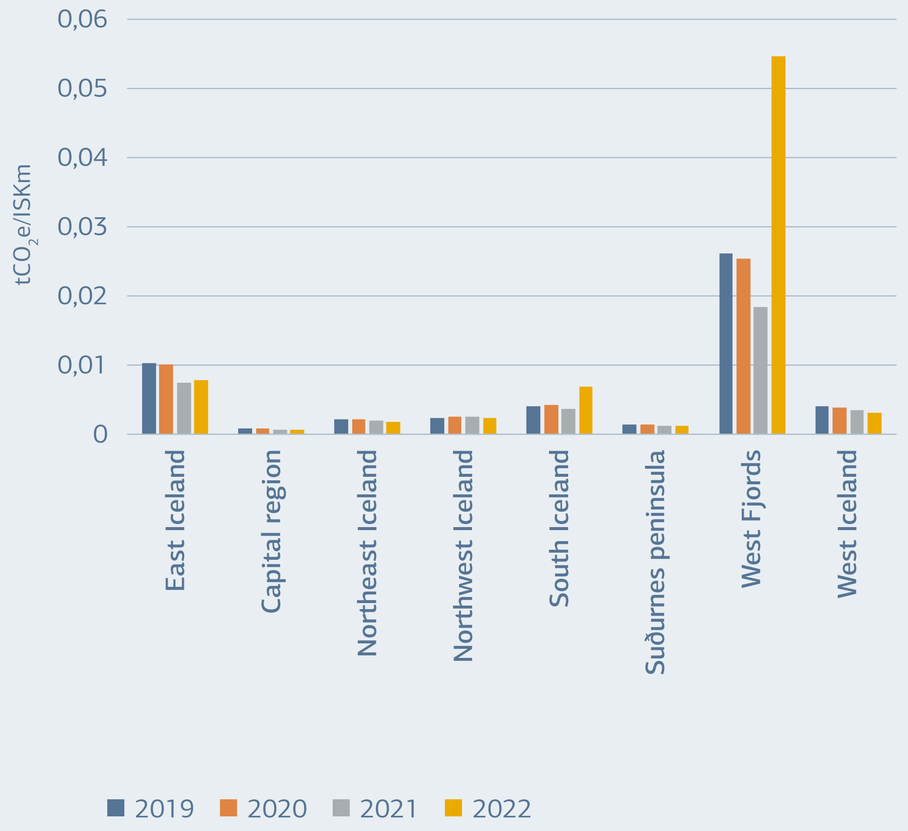


Emission from loans to individuals continues to decrease

Analysis of loans to individuals extends to mortgages and motor vehicle loans only. Mortgages to individuals comprise the largest loan category in the Bank's credit portfolio, or up to 45%. There was a considerable increase in issued mortgages in 2020 and 2021, with book value growing by 65%. The growth rate slowed down in 2022, when it was just about 9%. Despite this increase in mortgages, there has been an overall decrease in emissions from loans to individuals that can be categorised as motor vehicle loans.

The total emissions from mortgages have changed little in recent years, despite the significant increase in the number of issued mortgages, remaining at close to 0.9 $ktCO_2e$. These low emissions can be attributed to the fact that almost all residential buildings in Iceland use 100% renewable energy for electricity and heating and therefore have negligible emissions in a normal year. Despite this high proportion of renewable energy in energy consumption for housing, there are still cases where it is necessary to use fossil fuels temporarily or in full, such as for oil heating and heating from district heating plants. In the Bank's analysis, the country was divided according to the combination of energy sources in each area.

Emission intensity of mortgages by geographic area



Total emissions for the year were estimated at 1.5 $ktCO_2e$, which is a proportionally big increase from the previous year, or close to 57%. In the overall context, this is still a very low figure compared to other loans in the Bank's credit portfolio. This increase can be attributed to a temporary reduction in electricity supply to district heating plants for several months in the first half of 2022. As a result, district heating plants had to use fossil fuels in their operations instead of renewable electricity.

As an example, results of the analysis show that in 2022, the emission intensity of housing mortgages in the Westfjords tripled from the previous year and was up to 87 times higher than the lowest emission intensity in the Capital Region. Emission intensity also increased in East Iceland (5%) and South Iceland (90%), where district heating plants are operated in Seyðisfjörður and the Westman Islands, respectively, but decreased in other parts of the country.

Carbon emissions from motor vehicle loans to individuals have been steadily declining in recent years, decreasing by 5 ktCO2e, or close to 40%, from 2019. This is primarily because individuals have sought out more environmentally friendly options when renewing their vehicles. There have also been constant developments in car manufacturing, with vehicles becoming increasingly fuel-efficient and thus emitting less carbon. This trend is expected to continue in the coming years, as importing vehicles running on fossil fuel will be prohibited after 2030.

This is different for corporate motor vehicle loans, where total carbon emissions increased by a little more than 3 $ktCO_2e$ between 2021 and 2022, although the emission intensity decreased by 19%. This increase in total emissions can be attributed to the 36% increase in corporate motor vehicle loans from the previous year. The reduction in emission intensity can likewise be attributed to more environmentally friendly and fuel-efficient motor vehicles being purchased.

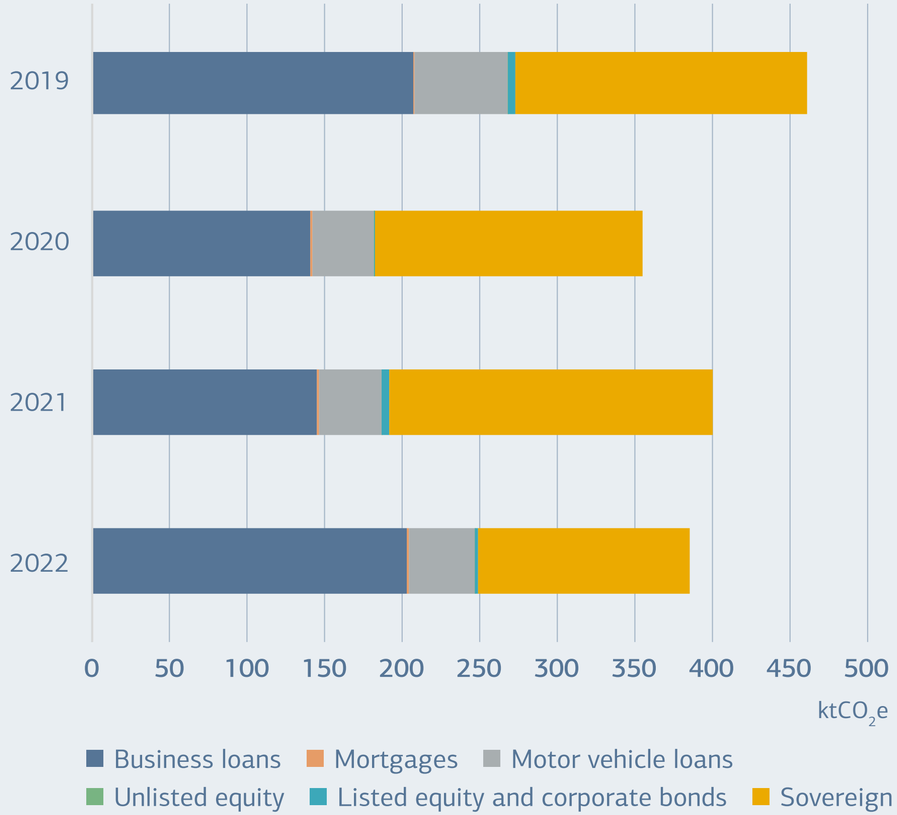
The travel industry is by far the most emission-heavy sector under motor vehicle loans, with just over 29 $ktCO_2e$ of emissions in 2022 compared to just over 26 $ktCO_2e$ in 2021, which amounts to more than 80% of the total emissions from corporate motor vehicle loans.

Sovereign debt is a major contributor to emissions

Financed emissions from the Bank's bond and equity portfolio in 2022 were estimated at 0.23 tCO_2e per ISK million. In comparison, financed emissions in the previous year amounted to 0.42 tCO_2e/ISKm.

There are considerable financed emissions from sovereign debt compared to other classes analysed. Here, the composition of the bonds has a great effect, as the largest percentage of emissions may be traced to Icelandic sovereign bonds. Different countries report carbon emissions differently so the results of the analysis show both carbon emissions with and without LULUCF. There is a reduction in carbon emissions from one year to the next, partly due to the book value of sovereign bonds dropping by more than 20% between 2021 and 2022. Carbon emissions from sovereign debt excluding LULUCF were a little over 136 $ktCO_2e$ in 2022, compared to just under 209 $ktCO_2$ in 2021. The emission intensity of sovereign debt decreases from 1.58 tCO_2e/ISKm in 2021 to 1.29 tCO_2e/ISKm 2022.

Carbon emission* of Landsbankinn's credit and asset portfolios 2019-2022



* excluding LULUCF

It should be kept in mind that carbon emissions from sovereign debt take into account the production emissions of the relevant countries and are only included in Scope 1. Thus it could be argued that there is some double counting of emissions, as factors such as emissions from energy production in the country are taken into account for the production emissions. The emission figures nevertheless provide a general overview and grasp of the actual emissions for these bonds, and help provide an understanding of the big picture.

Opportunities and prospects for the future

Today's rapid technological and social changes present numerous opportunities to reduce carbon emissions. The sectors and companies identified with the highest carbon footprint in the Bank's credit and asset portfolio are connected to the fisheries and transport of cargo and passengers. The operations of both these sectors are largely based on the use of fossil fuels. Considering the Icelandic government's climate policy, fossil fuel use in Iceland is expected to decrease with energy exchange and improved fuel efficiency, and may even be completely eliminated at some point in the future. The Bank will also use the results of this analysis to set clearer and more strategic goals for reducing carbon emissions from its credit and asset portfolio, as well as expanding the services provided to the Bank's customers.

Annual financial statement 2022

	Total assets	In scope	Outside scope	In scope	Financed emissions	Emission intensity	Data quality	Adjusted emission intensity
	ISKm	ISKm	ISKm	Percentage	$ktCO_2e$	tCO_2e/ISKm	Weighted average	tCO_2e/ISKm
Cash and balances with Central Bank	42,216		42,216					
Market bonds and other fixed-income securities	123,185	106,742	16,442	86.7%	136.2	1.28	2.0	1.28
Equity and equity instruments	17,904	16,876	1,028	94.3%	2.1	0.12	3.5	0.15
Derivative contracts	3,088		3,088					
Loans and receivables to credit institutions	28,621		28,621					
Loans and receivables to customers	1,544,360	1,432,381	111,979	92.7%	247.0	0.17	3.8	0.19
Investment in affiliates	6,036		6,036					
PPE	13,055		13,055					
Intangible assets	1,718		1,718					
Tax credits	11		11					
Other assets	6,392		6,392					
Assets undergoing a sales process	396		396					
Total	**1,786,982**	**1,556,000**	**230,983**	**87.1%**	**385.3**	**0.25**	**3.7**	**0.26**

Loans to customers - 2022

	Total assets	In scope	Outside scope	In scope	Financed emissions	Emission intensity	Data quality	Adjusted emission intensity
	ISKm	ISKm	ISKm	Percentage	$ktCO_2e$	tCO_2e/ISKm	Weighted average	tCO_2e/ISKm
Mortgages - Individuals	705,255	673,024	32,231	95.4%	1.48	0.002	4.0	0.002
Motor vehicle loans - Individuals and corporate	49,765	48,793	972	98.0%	42.5	0.87	2.3	0.87
Other loans - Individuals	68,585		68,585					
Other loans - Corporate	720,755	710,565	10,191	98.6%	203.0	0.29	3.8	0.32
Total	**1,544,360**	**1,432,381**	**111,979**	**92.7%**	**247.0**	**0.17**	**3.8**	**0.19**

Methodology

Methodology

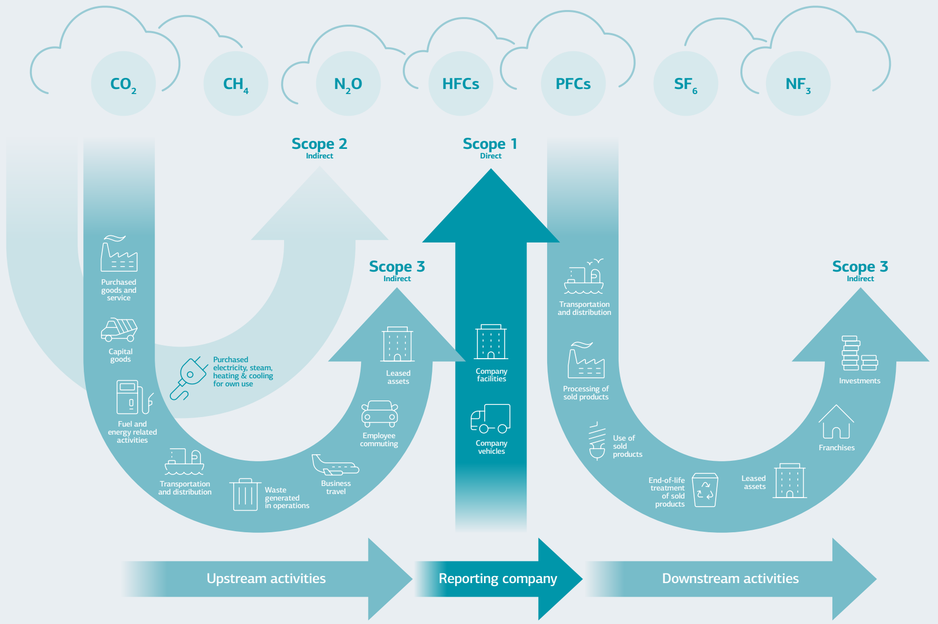
In November 2020, the Global GHG Accounting and Reporting Standard for the Financial Industry was launched by the Partnership for Carbon Accounting Financials (PCAF). It is intended to enable financial undertakings to calculate and assess emissions from their credit and asset portfolios. The PCAF methodology is mostly based on the methodology of Greenhouse Gas (GHG) Protocol, and has been approved as such by GHG Protocol. According to the GHG methodology, emissions are defined as direct or indirect and divided into three different scopes according to their source and location in the value chain.

The three scopes are:

Scope 1: Direct GHG emissions that occur from sources owned or controlled by the reporting company, e.g. from vehicles and machines owned by the company.

Scope 2: Indirect emissions from the generation of energy for the operations of the company, such as electricity and other energy used for heating.

Scope 3: All other indirect emissions that occur in the value chain of the reporting company, such as emissions due to waste and purchased services.



Source: WRI and WBCSD

PCAF requires companies to report their emissions for Scope 1 and 2, but only in part for Scope 3. Scope 3 emissions are only required for a part of companies, i.e. companies in the oil, gas and mining sectors, as well as those engaged in transportation, construction, buildings, materials, and industrial activities. Although emissions analysis is currently only required for these particular classes, Landsbankinn will cover Scope 3 emissions for all classes in its reporting. The Bank will therefore report on emissions for all scopes for its customers and other asset classes, as applicable, according to PCAF classification.

PCAF divides the credit and asset portfolios of financial undertakings into seven asset classes:

- Listed equity and corporate bonds
- Business loans and unlisted equity
- Project finance
- Commercial real estate
- Mortgages
- Motor vehicle loans
- Sovereign debt

Although PCAF has been in rapid development in recent years, methods have not yet been developed to calculate emissions for all asset classes, such as green bonds, derivatives, overdrafts and credit cards of individuals. This, along with lack of data for other categories with defined methodologies, results in a portion of the credit portfolio being reported as out of scope in the results of the analysis.

The analysis of the financed emissions is based on the availability of data needed to perform the calculations. The aim is to use data that are as close as possible to actual data, but in other cases estimated emission values must be used. It was not possible to analyse specifically funded emissions for project finance and commercial real estate due to insufficient data, so instead they are included as business loans in the results.

Data collection and accessibility varies and is one of the main challenges in analysing carbon emissions from companies. This challenge is not limited to any one country, and PCAF has issued a rating scale to assess data quality. The rating is determined by how detailed and close to actual figures the data are. The scale ranges from 1 to 5, with 5 representing the least detailed and reliable data. Data quality is defined according to the methodology, source

and nature of the data. PCAF also maintains a database of emissions figures by class, country and sector. However, the database does not contain emissions figures for Iceland.

Efforts are made to use the emissions figures issued by companies for their activities. In cases where Scope 3-related emission figures from companies clearly indicate that such emissions were not taken into account in terms of fossil fuel use in Scope 1, the figures are recalculated. In cases where companies' emission figures are not available it is necessary to have access to information on financial indicators of companies to assess the Bank's entire credit portfolio. In such cases, emission figures from the PCAF database[2] and economic variables are used as basis. Annual financial statements play a key role in this, and most companies have now issued their statement for 2022. For further information, the results of calculations for 2022, based on statistical data from Statistics Iceland, are provided in the supporting material for this report.

Since the publication of the last report on the Bank's financed emissions a year ago, baseline data for the relevant emission factors have been updated. Work on improving the basic and supplementary data for carbon calculations is on-going. In order to look at previous years compared to 2022, the Bank has recalculated funded emissions in its credit and asset portfolio for the years 2019-2021, the results of which can be found in the supporting material for this report.

The analysis in this report is based on the Bank's consolidated balance sheet for 2022. As the analysis only covers the Bank itself, the variables associated with the Bank's subsidiary, Landsbréf hf., in the balance sheets are not included in the classes analysed.

2 Emission factors for Iceland are not included in the PCAF database, so emission factors for Norway were used instead. Norway is similar to Iceland in many respects, including energy production, with geothermal heat and hydropower used in both countries. The emission factors are defined according to income and economic activities.

Listed equity and corporate bonds

Fjármögnuð
kolefnislosun Landsbankans

Listed equity and corporate bonds

This shows results for the Bank's financed emissions in 2022 for listed equity and corporate bonds according to the balance sheet for the year. Not included are instruments such as green bonds, municipal bonds, securities for hedging, unit shares and derivatives, as PCAF has not yet developed the methodology to assess emissions from such financial instruments. Sovereign debt is also not included here, but is covered in a separate section.

Data on carbon emissions of companies were collected by the following means and in the following order:

a) Via corporate annual or sustainability reports
   - Data rating: 2

b) Via the PCAF database, based on income
   - Data rating: 4

c) Via the PCAF database, based on assets
   - Data rating: 5

In using the PCAF database, the company's registered ÍSAT[3] classification according to Landsbankinn was used.

The following formula was used to calculate emissions of listed companies:

$$Financed\ emissions = \sum_{c} \frac{Outstanding\ amount_c}{EVIC_c} \times Company\ emissions_c$$

c = a company in which investments are made

EVIC[4] stands for enterprise value including cash, where cash is not deducted so the total value will not be a negative figure.

The following formula was used to calculate the emissions of unlisted companies with carbon emissions published in their annual financial statement:

$$Financed\ emissions = \sum_{c} \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \times Company\ emissions_c$$

c = a company in which investments are made

3 An Icelandic classification of economic activities based on the EU's NACE classification
4 Enterprise Value Including Cash

The following formula was used to calculate the emissions of unlisted companies who haven't published their carbon emissions:

$$Financed\ emissions = \sum_{c,n} \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \times Revenue_c \times \frac{GHG\ emissions_n}{Revenue_n}$$

f = a company in which investments are made, n = the appropriate NACE[5] category

The following formula was used to calculate the emissions of unlisted companies who haven't published their carbon emissions and have no or incomplete information on their income in their annual financial statement:

$$Financed\ emissions = \sum_{f,n} Outstanding\ amount_f \times \frac{GHG\ emissions_n}{Assets_n}$$

f = a company in which investments are made, n = the appropriate NACE category

Emission intensity is also recalculated with regard to changes in the value of listed companies from the Bank's base year of 2019. The value of a company is the denominator in the formula, and therefore has an effect according to whether the value decreases or increases. This is done so a more reliable comparison of emission factors between years can be carried out.

The following formula was used to calculate the converted emission factor:

$$Emission\ intensity_{adjusted} = Emission\ intensity_v \times \sum_i \omega_v \times \frac{EVIC_s}{EVIC_v}$$

ω = benchmarks weights, v = base year, s =comparison year

Adjustment factors for listed equity and corporate bonds were as follows:

- Equities: 1.47
- Bond: 1.42

Listed equity and corporate bonds 2022

	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Year	$ktCO_2e$	ISKm	tCO_2e/ISKm	Weighted average	$ktCO_2e$	Weighted average	tCO_2e/ISKm	Percentage
2022	2.0	8,310	0.24	2.0	0.8	2.0	0.30	33.4%

5 Nomenclature of Economic Activities in the European Union

Business loans and unlisted equity

Business loans and unlisted equity

This shows results for the Bank's financed emissions in 2022 for business loans and unlisted equity according to the balance sheets for the year. Motor vehicle loans are not included, but will be covered in a separate section. Loans to the State, municipalities and public institutions are not included in this methodology and are deemed to be out of scope.

Data on carbon emissions of companies were collected by the following means and in the following order:

a) Via corporate annual or sustainability reports
   - Data rating: 2

b) Via the PCAF database, based on income
   - Data rating: 4

c) Via the PCAF database, based on assets
   - Data rating: 5

In using the PCAF database, the company's registered ÍSAT classification, according to Landsbankinn, was used. was used.

For financed emissions from business loans, the calculations noted in the previous section on listed equity and corporate bonds are used.

In addition, the emission factor of listed companies was also converted for 2022 using the same methodology applied for listed equity and corporate bonds. This is done so a more reliable comparison of emission factors between years can be carried out.

The adjustment factor for corporate loans was 1.48.

The following formula was used to calculate outstanding amount of unlisted equity:

$$Financed\ emissions = \frac{\#shares\ of\ financial\ instution_f}{\#total\ shares_c} \times Total\ equity_f$$

f = company

If the number of unlisted equity was unknown or there was no information available regarding equity, the result was deemed to be out of scope.

2022	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity
Sector	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**	**tCO$_2$e/ISKm**
Construction	11.1	99,404	0.11	4.4	89.7	4.4	0.11
Holding companies	0.1	28,168	0.00	4.9	0.1	4.9	0.00
Real estate companies	3.1	139,394	0.02	3.9	11.4	3.9	0.02
Travel industry	39.3	89,581	0.44	3.5	45.0	3.5	0.62
Industrial and power companies	19.5	38,429	0.51	3.2	76.3	3.2	0.51
Agriculture	20.5	6,528	3.14	4.0	22.5	4.0	3.14
Public entities	0.1	324	0.19	4.6	0.3	4.6	0.19
Fisheries	37.7	191,867	0.20	3.8	301.9	3.8	0.20
Trade	5.7	60,056	0.09	3.1	38.0	3.0	0.10
Services, IT and communications	66.0	56,813	1.16	3.6	45.5	3.6	1.29
Total	**203.0**	**710,565**	**0.29**	**3.8**	**630.9**	**3.8**	**0.32**

2022	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Type	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**	**tCO$_2$e/ISKm**	**Percentage**
Unlisted equity	0.1	10,015	0.01	4.5	0.3	4.5	0.01	92.0%

Mortgages

Mortgages

This shows results for the Bank's financed emissions in 2022 for mortgages to individuals according to the balance sheet for the year.

The following formula was used to calculate emissions from mortgages:

$$Financed\ emissions = \sum_{b,p} \frac{Outstanding\ amount_b}{Property\ value_b} \times Estimated\ energy\ consumption_b \times GHG\ emission\ factor_p$$

b = building, p = postal code

An emission factor for Scope 1[6] and 2 for each postal code in the country was calculated according to the proportional division between energy sources within each postal code. The division was based on the Property Register and data from the National Energy Authority.

There are only a few houses in Iceland that only use fossil fuel for heating and/or electricity produced by such means. All other residential buildings in the country utilise renewable energy for general use. Other sources of energy that are used for domestic heating are electricity, geothermal energy and district heating[7]. There are a few houses where wooden pellets are used for heating, but this is an unknown quantity and therefore not included here.

It was assumed that carbon emissions from hot water from geothermal power plants were zero as they were already calculated in the emission factor for the *Environment Agency of Iceland*'s factor for electricity, which was used for the electricity analysis. Emissions from hot water in low-temperature fields were considered negligible, cf. *the report*. The emission factor for district heating was calculated according to annual financial statements and data from the companies in question.

To assess the energy consumption of the housing concerned, data from a *report* by Arion Bank and Mannvit was used, and housing divided by type and building material.

When analysing Scope 3 carbon emissions, emissions from the transport and distribution of the energy in question were considered. Distribution and transmission losses of geothermal energy and electricity were based on a *report* and *energy figures from* the National Energy Authority. The emission factor for transport and production of fossil fuels was according to data from *DEFRA*[8]. The emissions were calculated using similar methodology as used for Scope 1 and 2.

According to *data* from the National Energy Authority, over 91% of Icelandic residential housing was heated with geothermal energy, 6% with electricity, 2.5% with district heating and 0.2% with fossil fuel in 2020.

6 Emissions from fossil fuels are included here if there is only oil heating
7 District heat is generated by a central source where electricity and, as the case may be, fossil fuel is used to heat water that is then distributed for domestic heating.
8 Department for Environment, Food and Rural Affairs

Emissions from housing construction were not calculated as this could result in double counting of emissions. This is related to the fact that these emissions have usually gone through loans that the construction companies have taken out for the construction.

If a mortgage could not be linked to registered housing in the Property Register, e.g. due to incorrect registration or lack of information, the loan in question was assessed as out of scope. Mortgages were also deemed to be out of scope if the housing in question was not considered fully complete in the property register (assessment level 6, 7 or 8 or construction phase B4).

All mortgages are classified as having a data rating of 4.

2022	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3
Type of housing	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**
Single-family home	0.75	150,134	0.005	4.0	0.11	4.0
Apartment building	0.54	415,124	0.001	4.0	0.08	4.0
Semi-detached/row house	0.18	107,765	0.002	4.0	0.02	4.0
Total	**1.48**	**673,024**	**0.002**	**4.0**	**0.21**	**4.0**

2022	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3
Region	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**
East Iceland	0.13	16,726	0.008	4.0	0.01	4.0
Capital Region	0.29	451,624	0.001	4.0	0.02	4.0
Northeast Iceland	0.08	43,996	0.002	4.0	0.01	4.0
Northwest Iceland	0.02	9,458	0.002	4.0	0.00	4.0
South Iceland	0.33	47,158	0.007	4.0	0.06	4.0
Suðurnes peninsula	0.07	65,465	0.001	4.0	0.00	4.0
West Fjords	0.47	8,505	0.055	4.0	0.10	4.0
West Iceland	0.09	30,092	0.003	4.0	0.01	4.0
Total	**1.48**	**673,024**	**0.002**	**4.0**	**0.21**	**4.0**

Motor vehicle loans

Motor vehicle loans

This shows results for the Bank's financed emissions in 2022 for motor vehicle loans[9] to individuals according to the balance sheet for the year. This also includes other loans secured with a mortgage in a car or another vehicle or self-propelling machinery.

To calculate the emissions from mother vehicle loans, the following formula was generally used for road vehicles:

$$Financed\ emissions = \sum_{t} \frac{Outstanding\ amount_t}{Property\ value_t} \times Average\ distance\ traveled_t \times Emission\ factor_t$$

t = vehicle

The following formula was used to calculate emissions from off-road vehicles:

$$Financed\ emissions = \sum_{t,m} \frac{Outstanding\ amount_t}{Porperty\ value_t} \times Average\ emission\ factor_m$$

t = vehicle, m = total average emission

Data on carbon emissions of vehicles were collected by the following means and in the following order:

a) The Icelandic Transport Authority's vehicle registry
   - Data rating: 2

b) The highest carbon emission of the same type of vehicle and fuels from known values in the database[10]
   - Data rating: 4

c) From DEFRA emission factors (recorded as WLTP[11] emission values)
   - Data rating: 5

d) (For vehicles other than standard road vehicles). Average data on the number of heavy machinery from the Occupational Safety and Health Administration and the amount of oil sold to the relevan classes of machinery.
   - Data rating: 5

9 Motor vehicle loans include all heavy machinery and off-road equipment, such as tractors and excavators
10 All 0 values excluded for types of vehicles other than those powered only by electricity.
11 Worldwide Harmonized Light-Duty Test Procedure. The new EU pollution scale for fuel use and vehicle emissions

Driving data were collected by the following means and in the following order:

a) Average vehicle mileage according to the Icelandic Transport Authority (not motorcycles).
   - Data rating: 2

a) The vehicle database *Trafikanalys* in Sweden for motorcycles.
   - Data rating: 5

Each vehicle's data rating was determined based on which was higher, the data rating for the emission factor or driving data.

Other criteria for calculating carbon emissions from motor vehicle loans:

- Rental cars were determined to drive *four times* more than similar privately-owned vehicles.

- There are two procedures to assess emission values of vehicles, NEDC[12] and WLTP. WLTP is newer and will eventually replace NEDC altogether. The analysis was based on the WLTP values of vehicles, while for vehicles that only had a NEDC value, the value was converted to WLTP according to defined *factors* based on the type of vehicle.

- Charging arrangement for electric cars is based on the *report* from Samorka.

All vehicles that in any way use fossil fuels and methane are covered by Scope 1 and therefore only pure electric vehicles are covered by Scope 2. Scope 3 emissions are not calculated here as data and information is lacking.

2022	Financed emissions	Book value	Emission intensity	Data quality
Type	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**
Hybrid vehicles	7.4	13,019	0.57	2.0
Fossil fuel only	35.1	28,569	1.23	2.5
Green vehicles	0.0	7,204	0.00	2.0
Total	**42.5**	**48,793**	**0.87**	**2.3**

12 New European Driving Cycle.

Sovereign debt

Sovereign debt

This shows results for the Bank's financed emissions in 2022 for listed sovereign debt according to the balance sheet for the year.

$$Financed\ emissions = \sum_{l} \frac{Outstanding\ amount_{l}}{PPP^{13}adjusted\ GDP^{14}_{l}} \times Unverified\ country\ emission_{l}^{15}$$

l = country in question

The calculation method for sovereign debt is basically the same as for listed equity and corporate bonds except that instead of using the total value of the company in question, or country in this instance, the country's economy is used. The economies of the countries of the world are different and can depend on both the size of the countries and their economic status. For instance, Iceland's economy is small in a global sense but is nevertheless considered among the most developed in the world. For a real comparison between countries in calculating financed emissions, purchasing power parity adjusted for GDP is used.

Data from the *World Bank's* database was used to gather information on purchasing power parity adjusted for GDP for the countries in question. To carry out the calculations, outstanding amounts had to be converted to US dollars.

The carbon accounting of countries can differ for a variety of reasons so it may be difficult to make an analysis using similarly recorded data. The *United Nations Climate Change* database has information on the carbon emissions of the relevant countries pursuant to the requirements of the UN Framework Convention on Climate Change[16]. However, there is a delay in the availability of these data, as information on the carbon emissions of countries is usually published two years after the fact. Data on the carbon emissions of the relevant countries for 2021 are used, or later preliminary figures, as this is the most recent available data information.

The results show financed emissions from sovereign debt according to emission figures for the relevant countries, with and without LULUCF.

13 PPP stendur fyrir kaupmáttarjafnvægi.
14 VLF stendur fyrir verga landsframleiðslu.
15 Kaupmáttarjafnvægi aðlagað fyrir verga landsframleiðslu er verg landsframleiðsla á hvern íbúa byggt á kaupmáttarjafnvægi. Stærðin er verg landsframleiðsla umreiknuð yfir í alþjóðlega dali með því að notast við kaupmáttarhlutföll. Alþjóðlegur dalur hefur sama kaupmátt yfir landsframleiðslu og Bandaríkjadalur hefur í Bandaríkjunum.
16 United Nations Framework Convention on Climate Change, UNFCCC.

All sovereign bonds using carbon emission statistics for the year corresponding to the United Nations Climate Change database are classified as having the data rating 1. If the statistics from the database that are used are older than the calculation year or newer preliminary figures, the conclusions are classified as having the data rating 2. Here, carbon emissions from sovereign bonds are included in Scope 1.

	Financed emissions			Emission intensity		
2022	**Excluding LULUCF**	**Including LULUCF**	**Book value**	**Excluding LULUCF**	**Including LULUCF**	**Data quality**
Type	$ktCO_2e$	$ktCO_2e$	ISKm	tCO_2e/ISKm	tCO_2e/ISKm	Weighted average
Sovereign debt	**136.2**	**294.2**	**105,293**	**1.29**	**2.79**	**2.0**

Supporting material

Breakdown for 2022 according to NACE

2022		Financed emissions	Book value	Emission intensity	Data q uality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
NACE		$ktCO_2e$	ISKm	tCO_2e/ISKm	Weighted average	$ktCO_2e$	Weighted average	tCO_2e/ISKm	Percentage
A	Agriculture, forestry and fisheries	37.8	95,342	0.40	4.1	101.51	4.1	0.40	100.0%
B	Mining and quarrying and mineral extraction	1.7	405	4.26	4.1	0.61	4.0	4.26	100.0%
C	Production	36.1	127,289	0.28	3.5	296.64	3.5	0.29	100.0%
D	Electric, gas and heating utilities	2.7	14,718	0.18	2.2	1.98	2.2	0.18	100.0%
E	Water supply, sewers, waste treatment and decontamination	3.5	3,426	1.02	4.1	3.90	4.2	1.02	100.0%
F	Construction and infrastructure	12.6	102,364	0.12	4.4	89.75	4.4	0.12	100.0%
G	Wholesale and retail trade, motor vehicle repair	6.8	63,987	0.11	3.1	38.00	3.0	0.11	99.1%
H	Transportation and storage	100.1	32,838	3.05	2.7	39.73	2.7	3.77	100.0%
I	Accommodation and food service activities	2.7	53,809	0.05	4.1	19.67	4.1	0.05	100.0%
J	IT & telecommunication	0.5	13,756	0.04	3.1	4.05	3.1	0.04	100.0%
K	Financial and insurance activities	0.1	28,364	0.00	4.8	0.15	4.8	0.00	100.0%
L	Real estate transactions	3.2	140,871	0.02	3.9	11.75	3.9	0.02	100.0%
M	Professional, scientific and technical activities	0.9	4,128	0.21	4.0	2.10	4.1	0.21	99.8%
N	Leasing activities and various specialised services	27.7	43,389	0.64	2.6	10.31	3.0	0.64	99.9%
O	Public administration and defence; social security	0.0	117	0.18	4.5	0.02	5.0	0.18	1.1%
P	Educational work	0.2	1,021	0.22	4.0	0.74	4.1	0.22	99.2%
Q	Health care and social services	0.1	2,596	0.06	4.1	1.90	4.1	0.06	98.9%
R	Cultural, sports and recreational activities	0.4	8,135	0.05	4.0	4.56	4.0	0.05	99.9%
S	Non-governmental organisations and other service activities	0.9	6,696	0.14	4.2	3.47	4.2	0.14	100.0%
T	Activities of households as employers, provision of services and manufacturing for own use	0.0	6	0.67	2.0	0.00	4.0	0.67	100.0%
	Total - Corporate	**238.1**	**743,256**	**0.32**	**3.7**	**630.9**	**3.8**	**0.35**	**98.6%**
	Individuals	8.9	689,125	0.01	4.0	0.21	4.0	0.01	87.2%
	Total - All	**247.0**	**1,432,381**	**0.17**	**3.8**	**631.1**	**3.9**	**0.19**	**92.7%**

2022	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Sector	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**	**$ktCO_2e$**	**Weighted average**	**tCO_2e/ISKm**	**Percentage**
Construction	12.6	102,364	0.12	4.4	89.75	4.4	0.12	100.0%
Holding companies	0.1	28,168	0.00	4.9	0.11	4.9	0.00	100.0%
Real estate companies	3.1	139,508	0.02	3.9	11.42	3.9	0.02	100.0%
Travel industry	68.6	110,818	0.62	3.2	45.01	3.5	0.77	100.0%
Industrial and power companies	19.8	38,960	0.51	3.2	76.30	3.2	0.51	100.0%
Agriculture	20.7	6,764	3.05	4.1	22.50	4.0	3.05	100.0%
Credit institutions	0.0	2	1.17	2.0			1.17	100.0%
Public entities	0.1	329	0.19	4.6	0.30	4.6	0.19	3.1%
Fisheries	37.8	192,029	0.20	3.8	301.93	3.8	0.20	100.0%
Trade	6.8	63,987	0.11	3.1	38.00	3.0	0.11	99.1%
Services, IT and communications	68.6	60,326	1.14	3.6	45.53	3.6	1.26	100.0%
Total - Corporate	**238.1**	**316,671**	**0.32**	**3.7**	**630.9**	**3.8**	**0.35**	**98.6%**
Individuals	8.9	689,125	0.01	4.0	0.21	4.0	0.01	87.2%
Total - All	**247.0**	**1,432,381**	**0.17**	**3.8**	**631.1**	**3.9**	**0.19**	**92.7%**

Estimated carbon emissions in 2022 according to statistics from Statistics Iceland

These are the results of an analysis of the estimated emissions from the Bank‘s credit and asset portfolio based on statistical information from Statistics Iceland. Results are only compiled for equity and corporate bonds and corporate loans. Loans to individuals have the results detailed in the body of this report as they are not based on statistical information from Statistics Iceland. Scope 3 emission figures from the companies themselves are used without corrections as noted in the chapter on methodology.

Breakdown of equity and corporate bonds in 2022 by sector

2022 - Statistics Iceland	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Type	$ktCO_2e$	ISKm	tCO_2e/ISKm	Weighted average	$ktCO_2e$	Weighted average	tCO_2e/ISKm	Percentage
Listed equity and corporate bonds	1.7	8,310	0.21	2.0	0.6	2.0	0.27	33.4%
Unlisted equities	0.05	10,015	0.00	4.5	0.3	4.5	0.00	92.0%

Breakdown of corporate loans in 2022 by sector

2022 - Statistics Iceland	Financed emissions	Book value	Emission intensity	Data q uality	Scope 3	Data quality - Scope 3	Adjusted emission intensity
Sector	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**	**tCO$_2$e/ISKm**
Construction	13.8	99,404	0.14	4.4	89.7	4.4	0.14
Holding companies	0.1	28,168	0.00	4.9	0.1	4.9	0.00
Real estate companies	1.1	139,394	0.01	3.9	11.4	3.9	0.01
Travel industry	44.4	89,581	0.50	3.5	38.0	3.5	0.68
Industrial and power companies	25.9	38,429	0.67	3.2	76.3	3.2	0.67
Agriculture	34.2	6,528	5.24	4.0	22.5	4.0	5.24
Public entities	0.1	324	0.19	4.6	0.3	4.6	0.19
Fisheries	61.7	191,867	0.32	3.8	301.5	3.8	0.33
Trade	2.3	60,056	0.04	3.1	38.0	3.0	0.04
Services, IT and communications	57.1	56,813	1.01	3.6	42.1	3.6	1.14
Total	**240.5**	**710,565**	**0.34**	**3.8**	**619.9**	**3.8**	**0.37**

Breakdown of credit portfolio in 2022 by sector

2022 - Statistics Iceland	Financed emissions	Book value	Emission i ntensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Sector	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**	**tCO$_2$e/ISKm**	**Percentage**
Construction	15.3	102,364	0.15	4.4	89.75	4.4	0.15	100.0%
Holding companies	0.1	28,168	0.00	4.9	0.11	4.9	0.00	100.0%
Real estate companies	1.1	139,508	0.01	3.9	11.42	3.9	0.01	100.0%
Travel industry	73.7	110,818	0.66	3.2	37.96	3.5	0.81	100.0%
Industrial and power companies	26.2	38,960	0.67	3.2	76.27	3.2	0.67	100.0%
Agriculture	34.3	6,764	5.07	4.1	22.50	4.0	5.07	100.0%
Credit institutions	0.0	2	1.17	2.0			1.17	100.0%
Public entities	0.1	329	0.20	4.6	0.30	4.6	0.20	3.1%
Fisheries	61.8	192,029	0.32	3.8	301.50	3.8	0.33	100.0%
Trade	3.5	63,987	0.05	3.1	38.00	3.0	0.06	99.1%
Services, IT and communications	59.7	60,326	0.99	3.6	42.06	3.6	1.11	100.0%
Total - Corporate	**238.1**	**316,671**	**0.32**	**3.7**	**630.9**	**3.8**	**0.35**	**98.6%**
Individuals	8.9	689,125	0.01	4.0	0.21	4.0	0.01	87.2%
Total - All	**247.0**	**1,432,381**	**0.17**	**3.8**	**631.1**	**3.9**	**0.19**	**92.7%**

Estimated carbon emissions in 2023

Here is a summary of the estimated carbon emissions from the Bank's credit portfolio in 2023, excluding equity and corporate bonds. Emissions are based on the Bank's consolidated results at year-end 2023 and older baseline data. The main baseline data for emissions figures and other indicators for 2023 cannot be used as they have not been published yet. Therefore, the annual financial statement for 2022 and previous emissions figures are used. All results have a data score of 5, the lowest possible rating, due to limited baseline data.

This estimate is only intended to give an idea of likely carbon emissions in 2023, and it will be recalculated at a later date when key baseline data have been updated and made available.

Breakdown of corporate loans in 2023 by sector

2023	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity
Sector	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**	**tCO$_2$e/ISKm**
Construction	15.6	129,120	0.12	5.0	125.7	5.0	0.12
Holding companies	0.1	27,683	0.00	5.0	0.1	5.0	0.00
Real estate companies	4.0	176,297	0.02	5.0	15.0	5.0	0.02
Travel industry	29.3	82,199	0.36	5.0	38.3	5.0	0.51
Industrial and power companies	16.0	31,943	0.50	5.0	59.7	5.0	0.50
Agriculture	20.6	6,910	2.97	5.0	21.8	5.0	2.97
Public entities	0.1	372	0.20	5.0	0.4	5.0	0.20
Fisheries	36.0	190,118	0.19	5.0	307.4	5.0	0.19
Trade	5.8	58,766	0.10	5.0	40.4	5.0	0.10
Services, IT and communications	48.2	58,049	0.83	5.0	39.2	5.0	0.96
Total	**175.6**	**761,457**	**0.23**	**5.0**	**648.1**	**5.0**	**0.26**

Breakdown of mortgages in 2023 by type of housing

2023	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3
Type of housing	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**
Single-family home	0.45	163,121	0.003	5.0	0.04	5.0
Apartment building	0.30	417,871	0.001	5.0	0.03	5.0
Semi-detached/row house	0.13	114,579	0.001	5.0	0.01	5.0
Total	**0.88**	**695,571**	**0.00127**	**5.0**	**0.08**	**5.0**

Breakdown of motor vehicle loans in 2023 by type

2023	Financed emissions	Book value	Emission intensity	Data quality
Type	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**
Hybrid vehicles	8.6	13,490	0.64	5.0
Fossil fuel only	35.5	30,038	1.18	5.0
Green vehicles	0.0	11,854	0.00	5.0
Total	**44.2**	**55,382**	**0.80**	**5.0**

Breakdown of credit portfolio in 2023 by sector

2023	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Sector	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**	**$ktCO_2e$**	**Weighted average**	**tCO_2e/ISKm**	**Percentage**
Construction	16.9	132,172	0.13	5.0	125.71	4.3	0.13	100.0%
Holding companies	0.1	27,717	0.00	5.0	0.12	4.9	0.00	99.9%
Real estate companies	4.1	176,428	0.02	5.0	15.02	4.2	0.02	100.0%
Travel industry	61.8	107,673	0.57	5.0	38.32	3.3	0.69	100.0%
Industrial and power companies	16.3	32,536	0.50	5.0	59.72	4.3	0.50	100.0%
Agriculture	20.7	7,210	2.87	5.0	21.83	3.9	2.87	100.0%
Credit institutions	0.1	376	0.20	5.0	0.37	4.6	0.20	3.3%
Public entities	36.1	190,229	0.19	5.0	307.37	4.2	0.19	100.0%
Fisheries	7.1	63,910	0.11	5.0	40.39	4.2	0.11	99.6%
Trade	50.8	62,100	0.82	5.0	39.23	4.1	0.94	100.0%
Services, IT and communications	68.6	60,326	1.14	5.0	45.53	3.6	1.26	100.0%
Total - Corporate	**282.5**	**860,677**	**0.33**	**5.0**	**693.6**	**5.0**	**0.36**	**98.7%**
Individuals	6.8	712,059	0.01	5.0	0.08	5.0	0.01	86.9%
Total - All	**289.3**	**1,572,735**	**0.18**	**5.0**	**0.0**	**5.0**	**0.20**	**93.0%**

Recalculations for the years 2019 -2021

These are the results of the recalculations of the estimated carbon emissions from the Bank's credit and asset portfolios in 2019-2021.

Breakdown of listed equity and corporate bonds in 2019-2021

		Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Year	Type	$ktCO_2e$	ISKm	tCO_2e/ISKm	Weighted average	$ktCO_2e$	Weighted average	tCO_2e/ISKm	Percentage
2021	Listed equity and corporate bonds	4.6	10,901	0.42	2.1	3.6	2.1	0.46	39.2%
2020	Listed equity and corporate bonds	1.0	8,619	0.12	2.3	1.7	2.3	0.14	28.9%
2019	Listed equity and corporate bonds	4.9	12,677	0.38	2.2	2.0	2.2	0.38	41.4%

Breakdown of unlisted equity in 2019-2021

		Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Year	Type	$ktCO_2e$	ISKm	tCO_2e/ISKm	Weighted average	$ktCO_2e$	Weighted average	tCO_2e/ISKm	Percentage
2021	Unlisted equities	0.2	19,839	0.01	4.8	0.4	4.8	0.01	98.4%
2020	Unlisted equities	0.1	16,999	0.00	4.9	0.2	4.9	0.00	99.6%
2019	Unlisted equities	0.1	16,790	0.01	4.7	0.2	4.7	0.00	99.7%

Breakdown of sovereign bonds in 2019-2021

		Financed emissions			Emission intensity		
		Excluding LULUCF emissions	Including LULUCF emissions	Book value	Excluding LULUCF emissions	Including LULUCF emissions	Data quality
Year	Type	$ktCO_2e$	$ktCO_2e$	ISKm	tCO_2e/ISKm	tCO_2e/ISKm	Weighted average
2021	Sovereign debt	208.8	411.9	132,157	1.58	3.12	1.0
2020	Sovereign debt	172.3	373.8	96,843	1.78	3.86	1.0
2019	Sovereign debt	188.9	215.9	94,195	2.01	2.29	1.0

Breakdown of corporate loans in 2019-2021

2021		Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity
	Sector	$ktCO_2e$	ISKm	tCO_2e/ISKm	Weighted average	$ktCO_2e$	Weighted average	tCO_2e/ISKm
	Construction	8.4	87,686	0.10	4.3	68.1	4.3	0.10
	Holding companies	0.3	30,075	0.01	4.7	0.6	4.7	0.01
	Real estate companies	2.5	120,226	0.02	3.9	9.5	3.9	0.02
	Travel industry	25.3	82,939	0.31	3.5	28.7	3.5	0.43
	Industrial and power companies	16.9	29,601	0.57	3.5	76.4	3.5	0.57
	Agriculture	17.4	5,941	2.92	4.0	19.3	4.0	2.92
	Public entities	0.0	340	0.05	4.2	0.1	4.2	0.05
	Fisheries	32.9	177,271	0.19	3.7	267.2	3.7	0.19
	Trade	4.7	45,754	0.10	3.0	30.1	3.0	0.10
	Services, IT and communications	36.6	53,876	0.68	3.5	30.2	3.5	0.83
	Total	**145.1**	**633,708**	**0.23**	**3.7**	**530.2**	**3.7**	**0.26**

2020	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity
Sector	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**	**tCO$_2$e/ISKm**
Construction	7.9	80,261	0.10	4.2	64.2	4.2	0.10
Holding companies	0.2	31,843	0.01	4.8	0.3	4.8	0.01
Real estate companies	2.9	129,302	0.02	3.7	10.7	3.7	0.02
Travel industry	21.7	82,684	0.26	3.5	21.8	3.5	0.33
Industrial and power companies	20.1	29,810	0.67	3.4	79.3	3.4	0.67
Agriculture	16.8	6,346	2.65	4.0	19.3	4.0	2.65
Public entities	0.0	323	0.08	4.2	0.1	4.2	0.08
Fisheries	29.9	179,504	0.17	3.7	260.3	3.7	0.17
Trade	5.9	50,494	0.12	3.0	40.9	3.0	0.12
Services, IT and communications	35.5	64,572	0.55	3.4	39.7	3.4	0.66
Total	**140.9**	**655,139**	**0.22**	**3.7**	**536.7**	**3.7**	**0.24**

2019	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity
Sector	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**	**tCO$_2$e/ISKm**
Construction	9.8	96,053	0.10	4.3	79.5	4.3	0.10
Holding companies	0.1	25,981	0.00	4.9	0.2	4.9	0.00
Real estate companies	3.5	135,853	0.03	3.7	13.2	3.7	0.03
Travel industry	88.5	80,915	1.09	3.5	50.0	3.5	1.09
Industrial and power companies	11.9	23,354	0.51	3.6	52.7	3.6	0.51
Agriculture	14.7	5,295	2.77	4.0	16.9	4.0	2.77
Credit institutions	0.0	6	0.04	4.0	0.0	4.0	0.04
Public entities	0.0	234	0.09	4.3	0.1	4.3	0.09
Fisheries	26.3	151,112	0.17	3.8	254.4	3.8	0.17
Trade	6.9	52,170	0.13	3.1	46.0	3.1	0.13
Services, IT and communications	45.2	66,570	0.68	3.4	39.8	3.4	0.68
Total	**207.1**	**637,543**	**0.32**	**3.8**	**552.7**	**3.8**	**0.32**

Breakdown of mortgages in 2019-2021

2021	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3
Type of housing	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**	**$ktCO_2e$**	**Weighted average**
Single-family home	0.47	139,540	0.003	4.0	0.04	4.0
Apartment building	0.34	381,265	0.001	4.0	0.03	4.0
Semi-detached/row house	0.13	99,910	0.001	4.0	0.01	4.0
Total	**0.94**	**620,715**	**0.0015**	**4.0**	**0.08**	**4.0**

	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3
Region	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**	**$ktCO_2e$**	**Weighted average**
East Iceland	0.11	14,996	0.007	4.0	0.01	4.0
Capital Region	0.28	422,917	0.001	4.0	0.02	4.0
Northeast Iceland	0.08	39,982	0.002	4.0	0.01	4.0
Northwest Iceland	0.02	8,078	0.002	4.0	0.00	4.0
South Iceland	0.15	42,031	0.004	4.0	0.02	4.0
Suðurnes peninsula	0.07	57,646	0.001	4.0	0.00	4.0
West Fjords	0.14	7,484	0.018	4.0	0.02	4.0
West Iceland	0.09	27,582	0.003	4.0	0.01	4.0
Total	**0.94**	**620,715**	**0.002**	**4.0**	**0.08**	**4.0**

2020	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3
Type of housing	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**
Single-family home	0.48	116,810	0.004	4.0	0.04	4.0
Apartment building	0.31	297,494	0.001	4.0	0.03	4.0
Semi-detached/row house	0.12	78,643	0.002	4.0	0.01	4.0
Total	**0.90**	**493,093**	**0.0018**	**4.0**	**0.08**	**4.0**

	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3
Region	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**
East Iceland	0.13	12,814	0.010	4.0	0.01	4.0
Capital Region	0.25	336,016	0.001	4.0	0.02	4.0
Northeast Iceland	0.07	32,028	0.002	4.0	0.01	4.0
Northwest Iceland	0.02	6,150	0.003	4.0	0.00	4.0
South Iceland	0.14	31,728	0.004	4.0	0.02	4.0
Suðurnes peninsula	0.06	46,131	0.001	4.0	0.00	4.0
West Fjords	0.16	6,244	0.025	4.0	0.02	4.0
West Iceland	0.08	21,981	0.004	4.0	0.01	4.0
Total	**0.90**	**493,093**	**0.002**	**4.0**	**0.08**	**4.0**

2019	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3
Type of housing	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**	**$ktCO_2e$**	**Weighted average**
Single-family home	0.36	86,980	0.004	4.0	0.03	4.0
Apartment building	0.25	231,702	0.001	4.0	0.02	4.0
Semi-detached/row house	0.08	55,492	0.002	4.0	0.01	4.0
Total	**0.69**	**374,175**	**0.0018**	**4.0**	**0.06**	**4.0**

	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3
Region	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**	**$ktCO_2e$**	**Weighted average**
East Iceland	0.11	10,342	0.010	4.0	0.01	4.0
Capital Region	0.18	253,288	0.001	4.0	0.01	4.0
Northeast Iceland	0.05	25,235	0.002	4.0	0.00	4.0
Northwest Iceland	0.01	4,781	0.002	4.0	0.00	4.0
South Iceland	0.10	25,314	0.004	4.0	0.01	4.0
Suðurnes peninsula	0.04	34,288	0.001	4.0	0.00	4.0
West Fjords	0.13	4,873	0.026	4.0	0.02	4.0
West Iceland	0.06	16,053	0.004	4.0	0.00	4.0
Total	**0.69**	**374,175**	**0.002**	**4.0**	**0.06**	**4.0**

Breakdown of motor vehicle loans in 2019-2021

2021	Financed emissions	Book value	Emission intensity	Data quality
Type	**$ktCO_2e$**	**ISKm**	**$tCO2_2e$/ISKm**	**Weighted average**
Hybrid vehicles	3.9	8,008	0.49	2.0
Fossil fuel only	36.7	27,571	1.33	2.4
Green vehicles	0.0	3,645	0.00	2.0
Total	**40.6**	**39,224**	**1.04**	**2.3**

2020	Financed emissions	Book value	Emission intensity	Data quality
Type	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**
Hybrid vehicles	0.9	3,622	0.25	2.0
Fossil fuel only	38.9	31,027	1.25	2.5
Green vehicles	0.0	1,313	0.01	2.2
Total	**39.8**	**35,963**	**1.11**	**2.4**

2019	Financed emissions	Book value	Emission intensity	Data quality
Type	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**
Hybrid vehicles	0.7	2,379	0.29	2.0
Fossil fuel only	59.3	37,051	1.60	2.9
Green vehicles	0.0	691	0.02	2.6
Total	**60.0**	**40,121**	**1.50**	**2.8**

Breakdown of credit portfolios in 2019-2021

2021	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Sector	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**	**$ktCO_2e$**	**Weighted average**	**tCO_2e/ISKm**	**Percentage**
Construction	9.8	89,865	0.11	4.2	68.1	4.3	0.11	100.0%
Holding companies	0.3	30,077	0.01	4.7	0.6	4.7	0.01	100.0%
Real estate companies	2.6	120,326	0.02	3.9	9.5	3.9	0.02	100.0%
Travel industry	51.8	97,489	0.53	3.3	28.7	3.5	0.64	99.9%
Industrial and power companies	17.2	30,117	0.57	3.5	76.4	3.5	0.57	100.0%
Agriculture	17.5	6,157	2.84	4.0	19.3	4.0	2.84	100.0%
Public entities	0.0	347	0.06	4.1	0.1	4.2	0.06	8.9%
Fisheries	33.0	177,430	0.19	3.7	267.2	3.7	0.19	100.0%
Trade	5.8	49,064	0.12	2.9	30.1	3.0	0.12	99.0%
Services, IT and communications	38.8	56,857	0.68	3.5	30.2	3.5	0.83	100.0%
Total - Corporate	**176.9**	**657,730**	**0.27**	**3.7**	**530.2**	**3.7**	**0.30**	**99.4%**
Individuals	9.8	635,917	0.02	4.0	0.1	4.0	0.02	87.6%
Total - All	**186.7**	**1,293,647**	**0.14**	**3.8**	**530.3**	**3.9**	**0.16**	**93.2%**

2020	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Sector	**$ktCO_2e$**	**ISKm**	**tCO_2e/ISKm**	**Weighted average**	**$ktCO_2e$**	**Weighted average**	**tCO_2e/ISKm**	**Percentage**
Construction	9.5	82,336	0.11	4.2	64.2	4.2	0.11	100.0%
Holding companies	0.2	31,850	0.01	4.8	0.3	4.8	0.01	100.0%
Real estate companies	3.0	129,461	0.02	3.7	10.7	3.7	0.02	100.0%
Travel industry	44.5	95,893	0.46	3.3	21.8	3.5	0.52	99.9%
Industrial and power companies	20.4	30,230	0.68	3.4	79.3	3.4	0.68	100.0%
Agriculture	17.0	6,544	2.59	4.0	19.3	4.0	2.59	100.0%
Public entities	0.0	324	0.08	4.2	0.1	4.2	0.08	7.8%
Fisheries	30.0	179,657	0.17	3.7	260.3	3.7	0.17	100.0%
Trade	7.3	52,770	0.14	3.0	40.9	3.0	0.14	98.5%
Services, IT and communications	37.9	67,311	0.56	3.4	39.7	3.4	0.67	99.9%
Total - Corporate	**169.7**	**676,377**	**0.25**	**3.7**	**536.7**	**3.7**	**0.27**	**99.3%**
Individuals	11.9	507,817	0.02	3.9	0.1	4.0	0.02	85.7%
Total - All	**181.6**	**1,184,194**	**0.15**	**3.8**	**536.8**	**3.8**	**0.17**	**93.0%**

2019	Financed emissions	Book value	Emission intensity	Data quality	Scope 3	Data quality - Scope 3	Adjusted emission intensity	In scope
Sector	**ktCO$_2$e**	**ISKm**	**tCO$_2$e/ISKm**	**Weighted average**	**ktCO$_2$e**	**Weighted average**	**tCO$_2$e/ISKm**	**Percentage**
Construction	11.8	98,519	0.12	4.3	79.50	4.3	0.12	100.0%
Holding companies	0.2	26,156	0.01	4.9	0.16	4.9	0.01	100.0%
Real estate companies	3.6	136,007	0.03	3.7	13.19	3.7	0.03	100.0%
Travel industry	127.3	96,499	1.32	3.3	50.05	3.5	1.32	99.8%
Industrial and power companies	12.4	23,829	0.52	3.6	52.69	3.6	0.52	100.0%
Agriculture	14.8	5,446	2.73	4.0	16.86	4.0	2.73	100.0%
Credit institutions	0.0	6	0.04	4.0	0.00	4.0	0.04	100.0%
Public entities	0.0	235	0.10	4.3	0.11	4.3	0.10	5.7%
Fisheries	26.5	151,298	0.18	3.8	254.36	3.8	0.18	100.0%
Trade	9.8	55,421	0.18	3.1	45.98	3.1	0.18	91.6%
Services, IT and communications	48.2	69,474	0.69	3.4	39.80	3.4	0.69	99.8%
Total - Corporate	**254.7**	**662,891**	**0.38**	**3.7**	**552.7**	**3.8**	**0.38**	**98.6%**
Individuals	13.1	388,947	0.03	4.0	0.06	4.0	0.03	83.1%
Total - All	**267.8**	**1,051,838**	**0.25**	**3.8**	**552.8**	**3.9**	**0.25**	**92.3%**