Arion Bank's financed emissions 2021
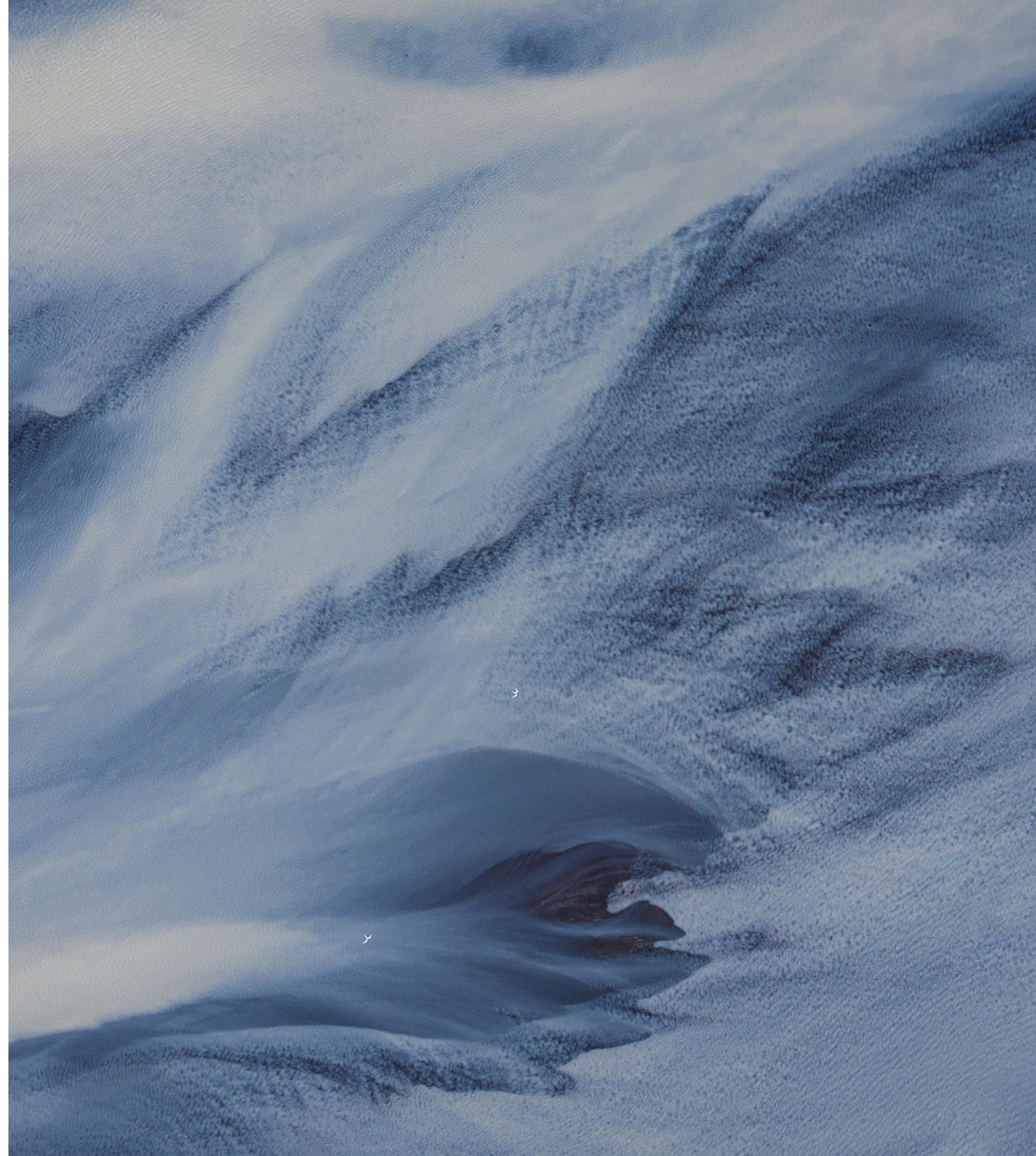
Analysis according to the Partnership for
Carbon Accounting Financial's methodology

Contents

CEO's address

In order to limit global warming, substantial changes need to be made on a global scale and significant reductions in greenhouse emissions are required. Iceland is a signatory to the Paris Agreement and the authorities have set ambitious goals on becoming carbon neutral by 2040. Achieving these climate targets is far from straightforward and in fact it is not entirely clear how these goals can be reached in the 18 years we have until the appointed deadline. However, this does not mean we should simply give up – far from it. We know that the transition to clean energy is the key to success and that protecting biodiversity and nature is critical. It is important that business and industry are on board and make a contribution so that our goals are achieved since this is the area with the greatest potential to make positive changes and have a meaningful impact.

Environment and climate policy
Arion Bank has adopted an environment and climate policy and set goals for the next few years. These goals include reducing emissions from our own activities by 55% between 2015 and 2030. We are making good progress, and by the end of 2021 we had reduced emissions from the Bank's real estate and vehicles by 38%. The environmental impact of the Bank's activities matters, and we want to serve as a role model in this respect. However, the main impact we have is in terms of lending and investment. We are therefore committed to supporting and encouraging our customers, both retail and corporate, to choose green solutions and to take environmental and climate issues into consideration in their decisions and future plans.

Green financing framework
The Bank has published a green financing framework and issued green bonds based on this framework. We offer our customers green corporate loans and encourage individuals and companies to make the transition to clean energy by offering better rates on loans for vehicles which run on renewables. Arion Bank was the first Icelandic bank to offer green mortgages for properties which had been environmentally certified. We were also the first bank in Iceland to offer green deposits. Stefnir, the Bank's subsidiary, offers four funds whose aim is to have a positive environmental and social impact, and the Bank's asset management division places a strong emphasis on responsible investment. The positive customer response to the Bank's green products has been hugely encouraging, and we will continue to be guided by environmental and climate principles when developing our services.

A key step in our sustainability journey is to assess the carbon emissions produced by our lending and investments – the carbon footprint of financed emissions – and we are now publishing the results of these calculations for the first time. In 2021 we became signatories to the Partnership for Carbon Accounting Financial (PCAF), a global partnership of financial institutions that work together to develop and implement a harmonized approach to assess and disclose greenhouse gas emissions. In the analysis we adopt the PCAF methodology and the invaluable knowledge we have acquired through being signatories.

Data gathering
The main challenge in analyzing financed emissions is the fact that emissions figures for individual companies are not always available, and therefore the analysis is mainly based on approximation. Efforts will be made to collect more precise data for next year's report, and I expect that over the next few years more companies will recognize the benefits of publishing their environmental accounts and their general performance in terms of sustainability. However, despite certain shortcomings, the report certainly reveals the status of greenhouse gas emissions in various sectors and the results will subsequently be used to present goals on reducing emissions in our loan portfolio and investments.

I hope that we at Arion Bank can continue to support our customers towards a greener and more sustainable future and that we as a society can achieve our environmental and climate goals.

Benedikt Gíslason,
Arion Bank's CEO

Financed emissions at Arion Bank

Financed emissions at Arion Bank

Arion Bank is a signatory to the *Partnership for Carbon Accounting Financials (PCAF)* which 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 which they finance through their loans and investments.
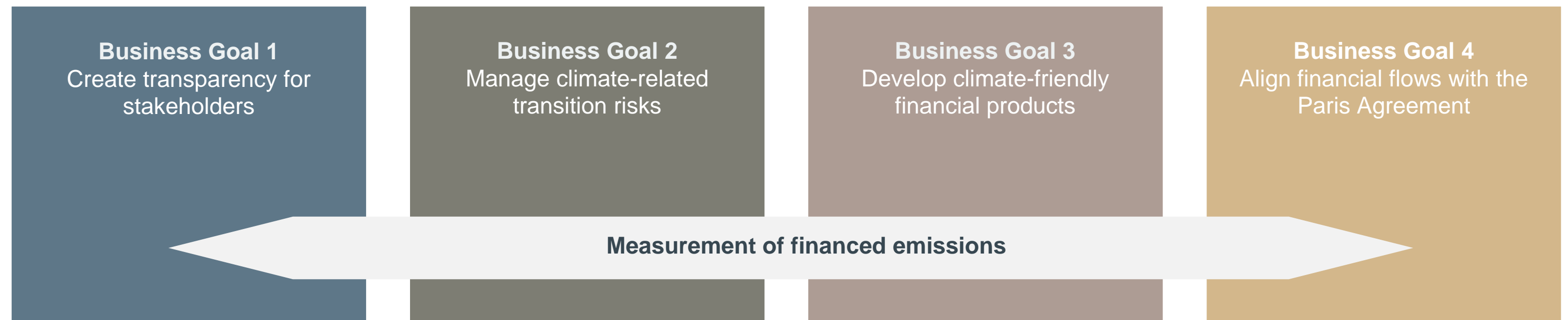
In this report Arion Bank is now publishing for the first time the results of an analysis of financed emissions at Arion Bank based on PCAF methodology. The analysis represents an assessment of the carbon footprint for which the Arion Bank Group is responsible through its lending and investments based on the 2021 balance sheet.

Arion Bank strives to support its customers on their sustainability journey and the results of the analysis indicate the main areas of potential for reducing GHG over the coming years and decades.

Knowledge of the carbon footprint of the Bank's lending and investment is a critical part of managing climate risk and setting environmental and climate goals.

The analysis is based on the data available at the time the analysis was conducted. The methodology and collection of data is explained in more detail in the relevant chapters for each asset class.

Knowing financed emissions can help financial institutions to set multiple goals

Business Goal 1 Create transparency for stakeholders	Business Goal 2 Manage climate-related transition risks	Business Goal 3 Develop climate-friendly financial products	Business Goal 4 Align financial flows with the Paris Agreement

Measurement of financed emissions

Source: PCAF Global GHG accounting and reporting standard for the financial industry

Main results

Main results

Arion Bank's total emission in 2021 (ktCO$_2$e)

2,5 0,4 10,4 1,2

Other sectors
Transportation
Wholesale and retail trades
Agriculture
Industry, energy and manufacturing
Fishing industry
Real estate and construction

265,2
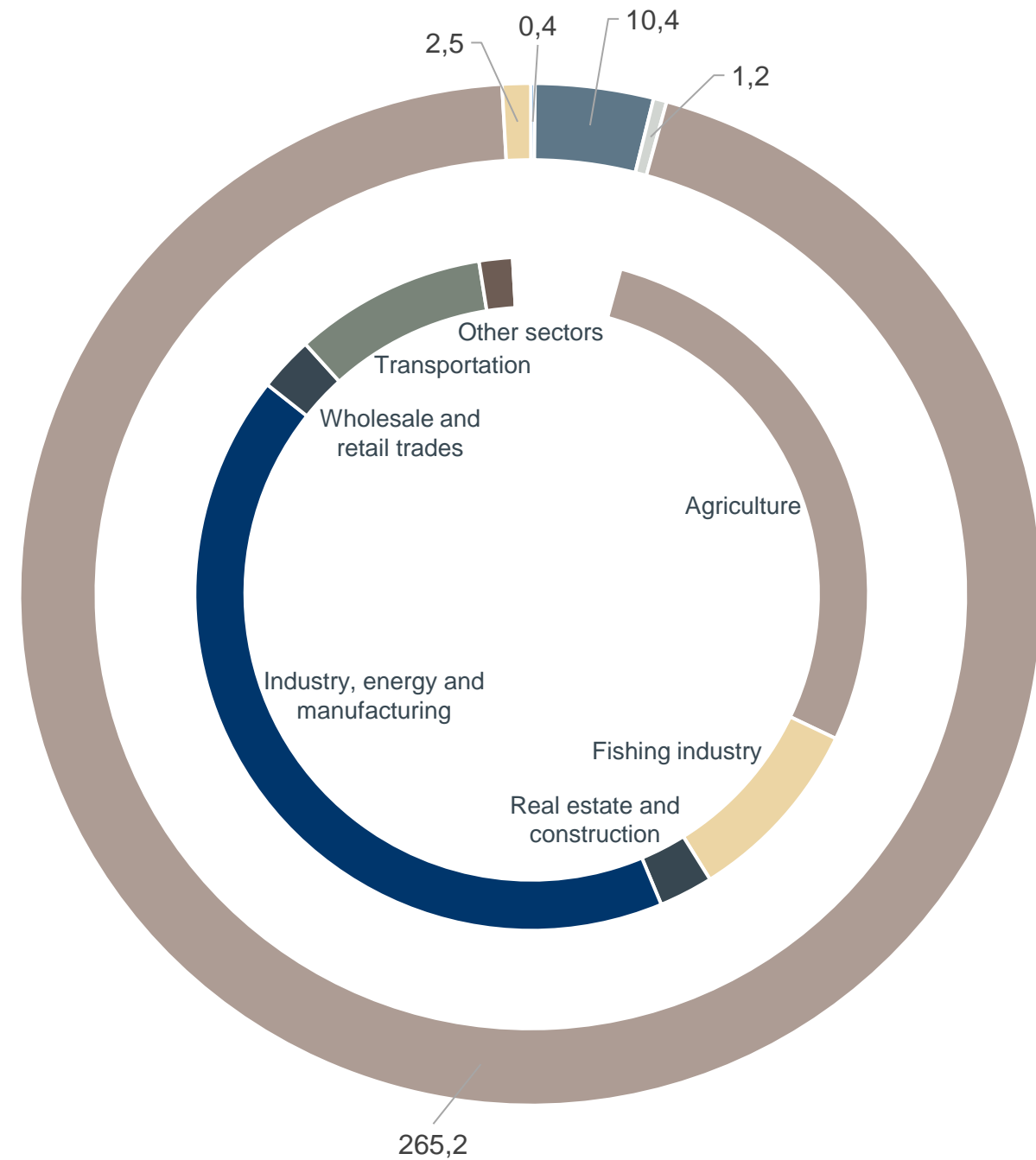
Total financed emissions in 2021 (ktCO$_2$e)
- The Bank's operations (scope 1, 2 and 3)
- Motor vehicle loans
- Mortgages loans to individuals
- Business loans
- Investments

Outer circle shows the Bank's total financed emission
Inner circle shows the financed emissions of the corporate loan portfolio, categorized by sector.

Estimated indirect emissions at Arion Bank in 2021 from lending and investment were approximately 280 ktCO$_2$e . These emissions were almost entirely from the Bank's loan portfolio, i.e. primarily from corporate loans, or 95% of the Bank's financed emissions in 2021.
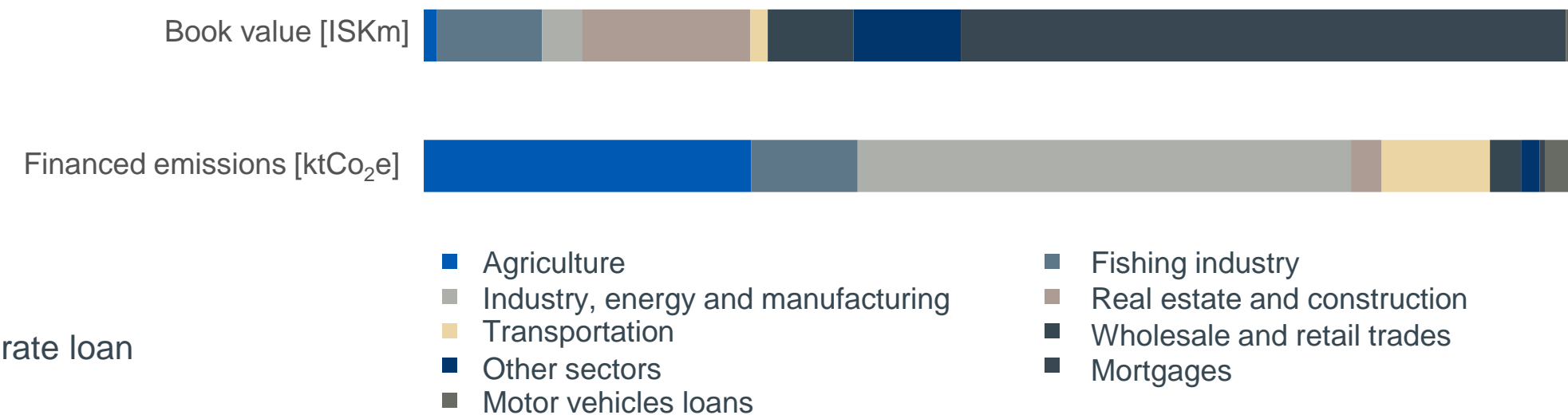
Industry, energy and manufacturing had the highest GHG emissions
The results revealed that the sector which generated the highest emissions in the loan portfolio was industry, energy and manufacturing with emissions of 117.4 ktCO$_2$e. This category is the sixth largest sector in terms of the loan amount but has the second highest emission intensity or 4.3 tCO$_2$e/ISKm.

An opportunity to further reduce GHG emissions
These results are not unexpected as they match the sectors that the Environment Agency of Iceland estimates have the highest emissions in Iceland, i.e. industry and material use. Emissions from energy production do not represent, however, a significant proportion of the Bank's indirect emissions. Instead, the main sources of emissions in this category at Arion Bank are industry, manufacturing and waste management. There are great opportunities to reduce greenhouse gas emissions in this area, such as by improving the recycling ratio of recycling centers, technological developments, and increased use of renewable energy in the manufacturing process.

Distribution of loan portfolio by book value of loans and financed emissions

Book value [ISKm]

Financed emissions [ktCo$_2$e]

- Agriculture
- Industry, energy and manufacturing
- Transportation
- Other sectors
- Motor vehicles loans
- Fishing industry
- Real estate and construction
- Wholesale and retail trades
- Mortgages

The Bank's total financed emissions in 2021 was

279,4 ktCO$_2$e

Indirect financed emissions due to the Bank's loan portfolio and investments was

776x

higher than emissions from the Bank's operation in 2021.

92,5%
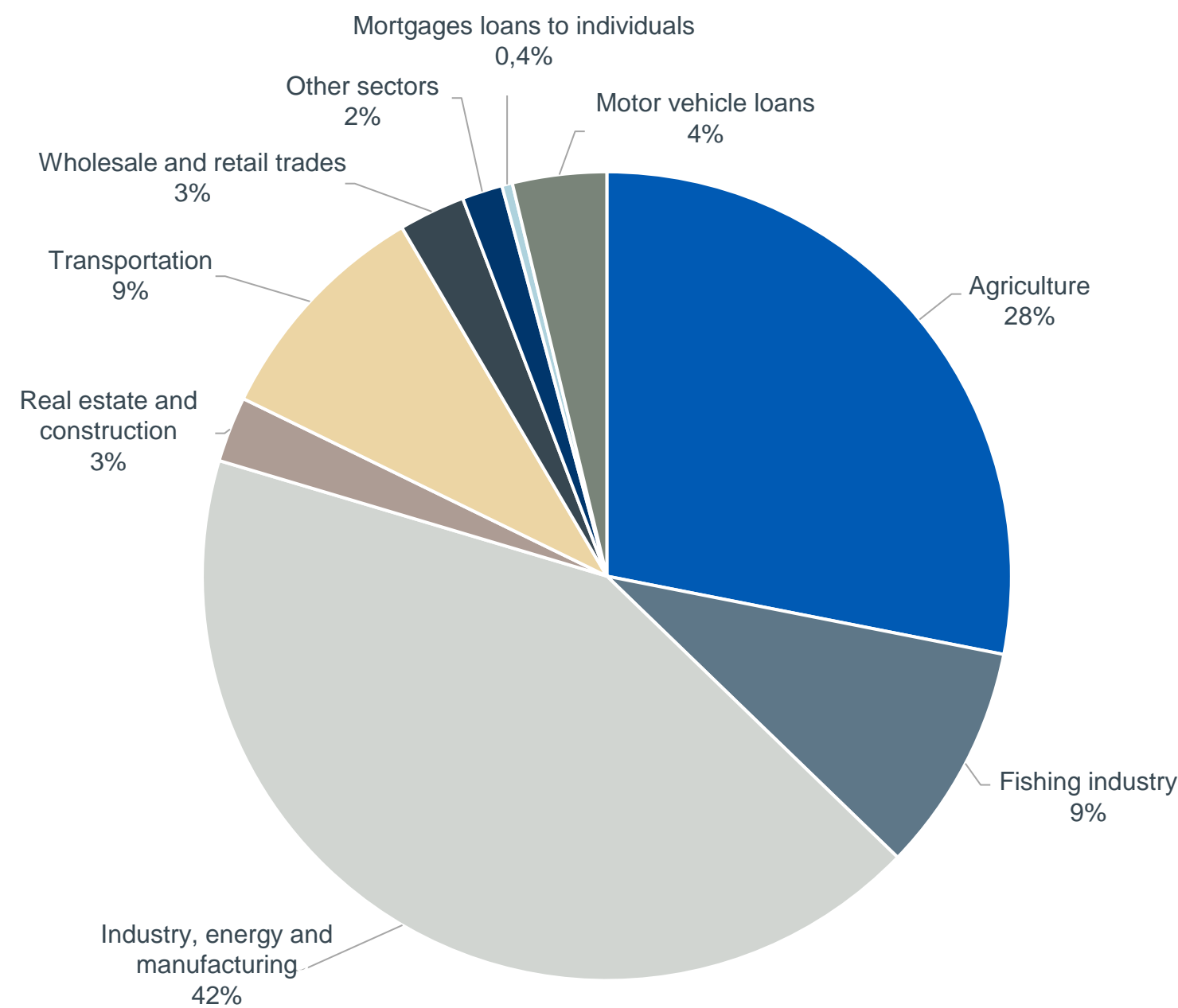
of the total loan portfolio has been measured.

17,8%

of the total investment portfolio has been measured.

Main results
continuation

Arion Bank's emissions from loan portfolio in 2021

Pie chart segments:
- Mortgages loans to individuals 0,4%
- Other sectors 2%
- Wholesale and retail trades 3%
- Transportation 9%
- Real estate and construction 3%
- Industry, energy and manufacturing 42%
- Motor vehicle loans 4%
- Agriculture 28%
- Fishing industry 9%

The sector producing the highest emissions is agriculture, where estimated emissions amount to 78,1 ktCO$_2$e. Agriculture is the category with the highest emission intensity, or 7,9 tCO$_2$e/ISKm, which means that in Arion Bank's loan book in 2021, loans to agriculture had the highest carbon emission value per loaned króna. It should be borne in mind that data on agriculture is mainly acquired from the PCAF database and the data does therefore not originate in Iceland. Nevertheless there are opportunities to reduce emissions in this important sector in the future in Iceland and to take various mitigation measures, e.g. by increasing forestry, soil reclamation and wetland restoration.

Less oil usage in the fishing industry and room for improvement
The sectors with the highest amount of loans from the Bank are seafood, with financed emissions of 25,1 ktCO$_2$e, and real estate and construction, with emissions of 7,0 ktCO$_2$e. The seafood industry in Iceland has significantly reduced its oil consumption in recent years and decades, and with new and improved technology, the decrease is likely to accelerate and gradually the use of fossil fuels in the industry will be phased out. As far as buildings are concerned, there is a constant emphasis on better quality and more environmentally friendly building materials and enhanced energy savings. In Iceland 99,98% of the energy used for heating buildings and lighting is renewable energy. Although it is always important to use energy sparingly, the main areas for potential improvements and lower emissions are arguably in building materials. It will be interesting to follow developments over the next few years in new construction projects in Iceland and hopefully efforts will be made to ensure that more environmentally certified buildings are constructed.

Diminishing emissions from vehicles
The loan category second to corporate loans in terms of financed emissions is motor vehicle loans with financed emissions of 10,4 ktCO$_2$e. From 2030 it will no longer be possible to import vehicles which run on fossil fuels to Iceland, and it can therefore be assumed that emissions from vehicles will decrease significantly over the next few years.

Estimated financed emissions of mortgages to retail customers are approximately 1,2 ktCO$_2$e which is a very small figure in relative terms considering that this loan category represents around 50% of the total loan portfolio. The emissions intensity of mortgages is also by far the lowest compared with other asset classes at the Bank, or 0,003 tCO$_2$e/ISKm. The low carbon footprint of our mortgages is due to our renewable energy sources, geothermal and hydropower.

Financed emissions of Arion Bank's Group asset portfolio amount to 2,5 ktCO$_2$e and emissions intensity is 0,04 tCO$_2$e/ISKm. Most of the Bank's investments in companies at year-end 2021 have a low carbon footprint and would not be considered polluting industries. The majority of emissions in this category originates from companies involved in air passenger transportation to and from Iceland. Other sectors which are major contributors to these emissions are seafood and shipping.

Financed emissions 2021

	Total assets	In scope	Out of scope	Financed emission	Intensity	Data quality
	ISKm	ISKm	ISKm	ktCO$_2$e	tCO$_2$e/ISKm	Weighted average
Cash and balances with Central Banl	69.057		69.057			
Loans to credit institutions	30.272		30.272			
Loans to customers	936.237	866.223	70.014	276,8	0,32	3,96
Financial instruments	225.657	40.119	185.538	2,5	0,06	2,26
Investment property	6.560		6.560			
Investments in associates	668		668			
Intangible assets	9.463		9.463			
Tax assets	2		2			
Assets and disposal groups held for sale	16.047		16.047			
Other assets	19.901		19.901			
Total assets	**1.313.864**	**906.341**	**407.523**	**279,4**	**0,31**	**3,89**

Loans to customers		Individuals	Corporates	Individuals	Corporates			
Overdrafts	31.476		15.978	13.691	1.807	21,5	1,35	4,42
Credit cards	14.446		1.364	13.037	45	15,5	11,36	4,51
Mortgages	504.877	452.582	40.965	10.875	455	28,2	0,06	3,92
Construction loans	17.775		17.775	-	-0	2,6	0,15	4,19
Capital lease	8.294	4.042	2.176	409	1.667	5,0	0,81	2,18
Other loans	359.369	9.004	322.335	22.858	5.172	204,0	0,62	4,02
Total	**936.237**	**465.628**	**400.595**	**60.870**	**9.144**	**276,8**	**0,32**	**3,96**

Methodology

Partnership for Carbon
Accounting Financials
(PCAF)

Methodology

Asset classes

PCAF divides the loan and asset portfolios of financial institutions into six asset classes:

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

The analysis of financed emissions relies on the data to which the Bank has access and is to a considerable extent based on expected emission factors because the actual emissions have not been measured.

Due to limited data when analyzing the loan book, all Arion Bank loans, which under PCAF would otherwise be classed as project finance and loans with mortgages in commercial real estate, were classed as business loans and unlisted equity.

Listed equity and corporate bonds

Business loans and unlisted equity

Project finance

Commercial real estate

Mortgages

Motor vehicle loans

Method for analyzing financed emissions

Financed emissions is a term used for indirect emissions of greenhouse gases from investments and/or lending by financial institutions. Financed emissions are estimated from the multiple of the ratio of the outstanding amount to the underlying value and the company's total carbon emissions. The outstanding amount is the sum of financing of the relevant company from Arion Bank and the Bank's shareholding in the company if relevant.

The equation to estimate the financed emissions of lending or investment is shown below in its basic form, but this may be subject to change depending on the type of assets:

$$Financed\ emission = \sum_a \frac{Outstanding\ amount_a}{Underlying\ value_a} \cdot Emissions_a$$

$$with\ a = asset$$

Methodology
Scope of analysis

The PCAF methodology is based, among other things, on the Greenhouse Gas Protocol which issues standardized guidelines to assess direct and indirect carbon emissions of companies and institutions. The Greenhouse Gas Protocol defines direct and indirect emissions from companies according to the source of emissions and where it takes place in the supply chain.

- **Scope 1:** Direct greenhouse gas emission that occur from sources owned or controlled by the reporting company – i.e., emission from combustion in owned or controlled boilers, furnaces, vehicles, etc.

- **Scope 2:** Indirect greenhouse gas emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company.

- **Scope 3:** All other indirect greenhouse gas emissions that occur in the value chain of the reporting company.

Arion Bank reports its results on emissions under Scopes 1 and 2 from borrowers and investees, and they come under Scope 3 at the Bank. PCAF only requires that Scope 3 emissions be published for companies in the oil, gas and mining industries but the Bank has no customers in this category at the present.

The PCAF methodology is new and under constant development. Currently there is no defined methodology for assessing the carbon footprint for some asset classes. Examples of such classes are:

- Overdrafts and credit cards used by individuals

- Government bonds

- Derivatives

These loans and investments are labelled **not included in scope** in the results of this report. Also not included in scope are loans and investments where it was not possible to calculate the carbon footprint due to a lack of information.

Overview of GHG Protocol scope 1, 2 and 3 across the value chain
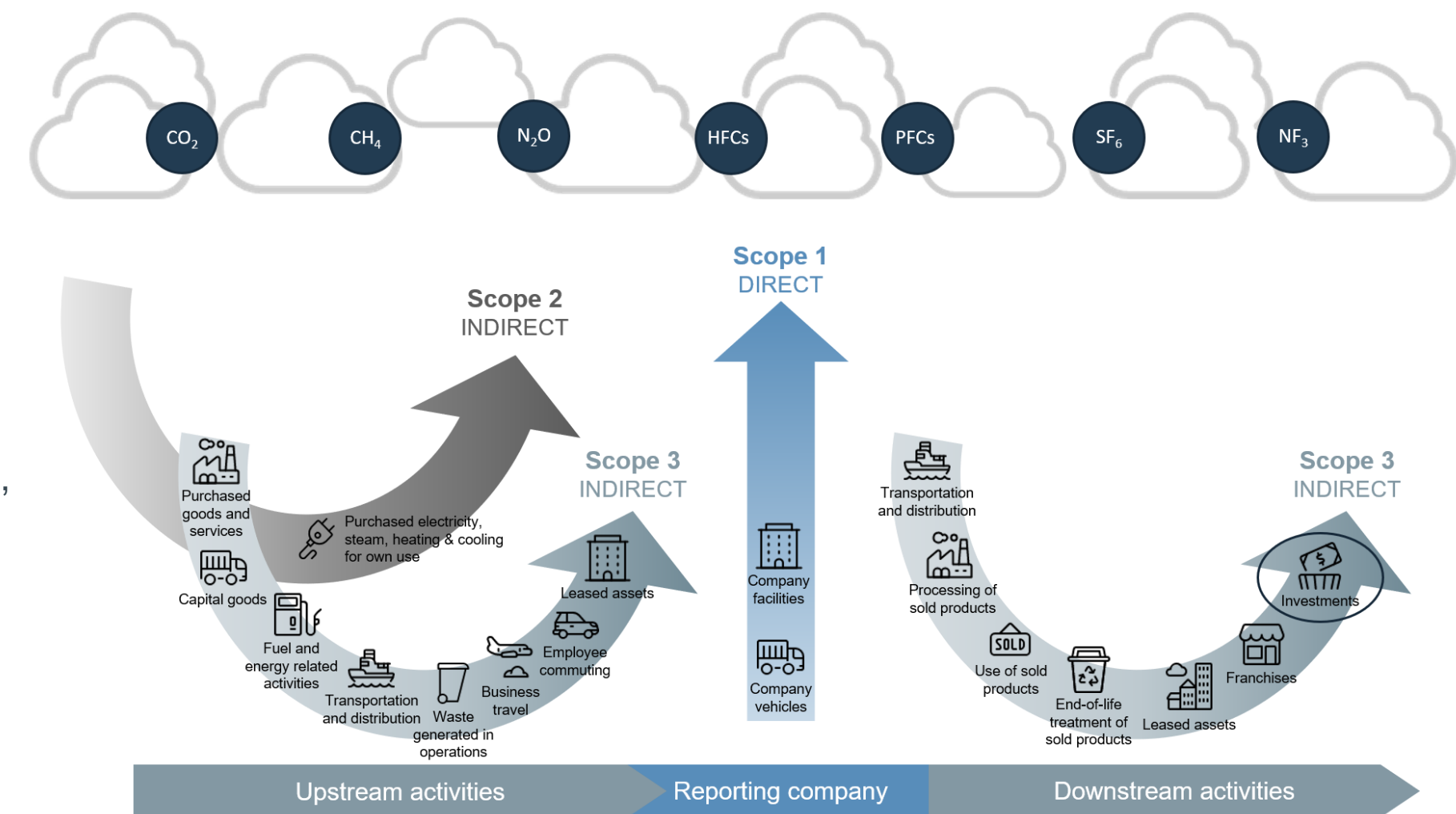
Source: WRI and WBCSD
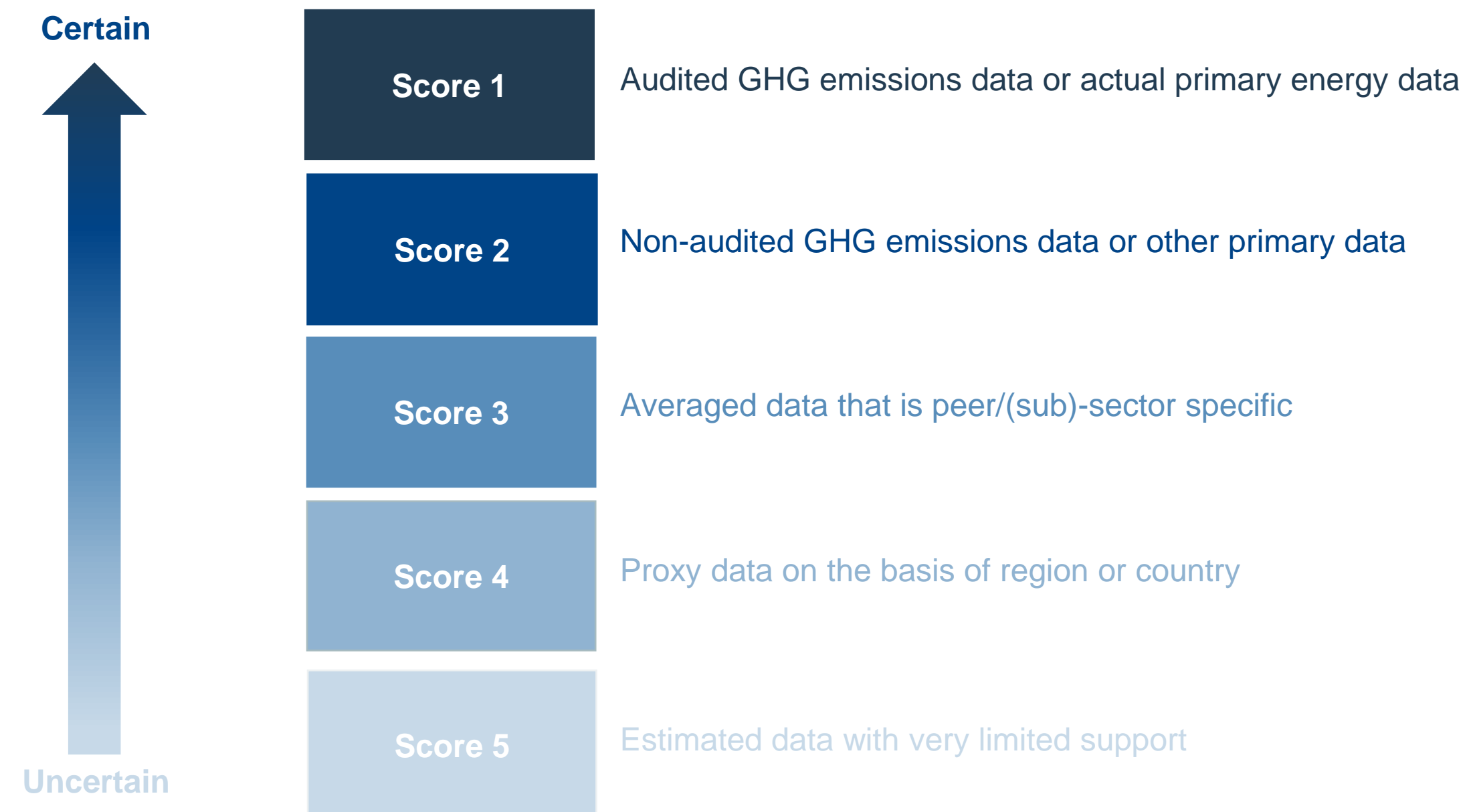
Collecting information and data quality

Methodology

A basic prerequisite for analyzing a carbon footprint is information on financial factors and, as applicable, carbon emissions taken from a company's annual financial statements. Most companies have published their annual financial statements for 2021, and a small percentage of those companies published figures on the carbon emissions from their activities.

The main challenge is collecting data on carbon emissions for individual companies and sectors. These challenges are global and PCAF has therefore devised a data quality hierarchy. The hierarchy has scores ranging from 1-5, where the most reliable data scores 1 and the least reliable scores 5. PCAF defines data quality according to methodology, origin and nature of data used in calculations, which vary for each asset class.

By issuing this report Arion Bank is taking the first steps in calculating carbon emissions for the Bank's loan portfolio and investments, despite the limited access to quality data. The results are thus to a great extent an approximation of the real carbon footprint, but they do give an indication of where there are opportunities to make improvements in the portfolio.

Over the next few years the Bank will build on the work behind this report and try its outmost to improve both the methodology and the quality of the data used in order to improve the accuracy of the results.

Certain

Score 1	Audited GHG emissions data or actual primary energy data
Score 2	Non-audited GHG emissions data or other primary data
Score 3	Averaged data that is peer/(sub)-sector specific
Score 4	Proxy data on the basis of region or country
Score 5	Estimated data with very limited support

Uncertain

Methodology and detailed results according to asset class

Listed equity and corporate bonds

The results show the financed emissions of listed equity and corporate bonds in the balance sheet of the Arion Bank Group at year-end 2021. Green bonds, government bonds, unit shares, securities used as hedges and derivatives are not included here as the methodology used to calculate the financed emissions of such financial products is still being developed.

The following equation was used to calculate the financed emissions of listed companies.

$$Financed\ emission = \sum_c \frac{Outstanding\ amount_c}{EVIC_c} \cdot Company\ emissions_c$$

$$with\ c = borrower\ or\ investee\ company$$

Where the enterprise value including cash (EVIC) is composed of:

- Market capitalization of general shares at the end of the accounting year
- Market capitalization of preferred shares at the end of the accounting year
- Book value of total debt
- Non-controlling interests (minority interests)

So that the enterprise value is not negative, cash is not included.

The following equation was used to calculate the financed emissions of unlisted companies with corporate bonds.

$$Financed\ emission = \sum_c \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \cdot Company\ emissions_c$$

$$with\ c = borrower\ or\ investee\ company$$

Data on the carbon emissions of companies and sectors was used in calculations in the following order depending on availability:

Data quality[a]

From the company's sustainability reporting	2
From statistical data from Statistics Iceland[b]	4
From the PCAF database[c]	5

Certain ↑ / Uncertain

For those companies which do not publish carbon accounting, the estimated carbon emissions are based on the registered ÍSAT sector classification of the company.

Financed emissions from listed equity and corporate bonds

	In scope	Book value	Financed emissions	Intensity	Data quality
	%	ISKm	ktCO$_2$e	tCO$_2$e/ISKm	Weighted average
Listed shares	99,0	7.629	1,46	0,19	2,03
Listed bond	17,9	27.121	0,06	0,002	2,01
Total	**21,9**	**34.750**	**1,52**	**0,04**	**2,01**

[a] Ratings for data quality depend on the methodology used in calculations and where the data on carbon emissions is obtained.
[b] Emission factors were estimated using published data on the total operating income of the Icelandic economy and greenhouse gas emissions according to ÍSAT classification of economic activities. To estimate a company's total emissions, the ÍSAT carbon emission factor was multiplied by the total operating income of the company. The analysis used the most recent data on the total operating income and emission factors of the Icelandic economy from 2019. The emission factors of Statistics Iceland cannot be broken down according to Scopes 1,2 and 3 which has an impact on the quality of calculations.
[c] There is limited information on emission factors for Iceland in the PCAF database. Instead the analysis used emission factors for Norway. Norway uses renewable energy sources such as geothermal and hydropower to generate energy. According to European Environment Agency, the proportion of renewable energy in Norway was under 80%, compared with 85% in Iceland 2020.

Business loans and unlisted equity

The following equation was used to calculate the financed emissions of business loans and unlisted equity.

$$Financed\ emission = \sum_c \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \cdot Company\ emissions_c$$

$$with\ c = borrower\ or\ investee\ compan$$

The following equation was used to calculate the financed emissions of listed companies:

$$Financed\ emission = \sum_c \frac{Outstanding\ amount_c}{EVIC_c} \cdot Company\ emissions_c$$

$$with\ c = borrower\ or\ investee\ company$$

When collecting data and information on carbon emissions of companies the Bank has loaned to, the same method was used as for listed equity and corporate bonds, with the exception that another option was added because of the companies which had not published their annual financial statements for 2021. In those cases it was obviously not possible to obtain financial information on the company for that year.

Data on emissions figures was used in calculations in the following order:

1. From the company's sustainability reporting

2. From statistical data from Statistics Iceland

3. From the PCAF database

4. Based on the emissions intesity of the sector[e]

The results show the estimated financed emissions of business loans and unlisted equity owned by Arion Bank Group at the end of 2021.

[d] EVIC is defined in more detail in the section on listed equity and corporate bonds

[e] A minority of companies have not submitted annual financial statements for 2021 to the register of annual financial statements. For these companies financed emission were estimated from outstanding loan amounts and the results of the average emissions intensity of the sector of those companies which had submitted annual statements for 2021. The data quality of these companies was given the lowest rating, 5.

Financed emissions from business loans and unlisted equity

	In scope	Book value	Financed emissions	Intensity	Data quality
	%	ISKm	ktCO$_2$e	tCO$_2$e/ISKm	Weighted average
Business loans	96,8	396.557	265,23	0,67	4,14
Unlisted equity	73,5	5.369	1,00	0,19	3,84
Total	**96,4**	**401.926**	**266,23**	**0,66**	**4,14**

Sector	In scope	Book value	Book value	Intensity	Data quality
	%	ISKm	ktCO$_2$e	tCO$_2$e/ISKm	Weighted average
Agriculture	96,4	9.886	78,07	7,90	5,00
Financial and insurance services	96,4	47.067	2,25	0,05	5,00
Fishing industry	99,9	78.612	25,38	0,32	4,29
Industry, energy and manufacturing	95,6	29.781	117,72	3,95	3,52
Information and communication technology	98,9	18.054	0,37	0,02	3,39
Public administration, human health and social act.	31,8	2.198	0,25	0,11	5,00
Real estate and construction	98,3	126.065	7,27	0,06	4,01
Services	81,4	13.027	1,67	0,13	4,45
Transportation	95,5	13.072	25,87	1,98	2,72
Wholesale and retail trades	98,8	64.164	7,38	0,12	4,15
Total	**96,4**	**401.926**	**266,23**	**0,66**	**4,14**

Mortgages

The results show financed emissions of Arion Bank's mortgage portfolio. The calculations apply to carbon emissions from the energy consumption of real estate under Scope 1 and Scope 2. The results show the estimated emissions for retail mortgages at the end of 2021.

The following equation was used to calculate the financed emissions of mortgages:

$$Financed\ emission$$
$$= \sum_{b,e} \frac{Outstanding\ amount_b}{Property\ value_b} \cdot Energy\ consumption_b \cdot Emission\ factor_e$$

$$with\ b = building\ and\ e = energy\ source$$

In 2021 Arion Bank published a report containing an analysis by the engineering firm Mannvit which analyzed what could be classed as green real estate in the Bank's loan portfolio. It was assumed that the Bank's real estate portfolio reflected the real estate market in Iceland in general. The methodology in the report was used to determine the estimated energy consumption of real estate per square metre, based on the requirements made in the building regulations in force at the time the property was constructed, which has an impact on the calculated energy consumption of the property.

Calculations used the emission factors for the production and distribution of electricity and the processing and distribution of water from Orkuveita Reykjavíkur for 2021.

Calculations used the emission factors for the production and distribution of electricity and the processing and distribution of water from Orkuveita Reykjavíkur for 2021. A total of 99.98% of the energy used for electricity and heating in Iceland is from renewable energy sources. Therefore the energy used in the generation of electricity for residential property and to heat residential property comes from renewable sources and their emission factors are very low compared with factors in other countries. According to data from Orkustofnun from 2020, 69% of energy production in Iceland is hydropower and 31% is geothermal.

Financed emissions of retail mortgages

House type	Book value	Financed emissions	Intensity	Data quality
	ISKm	ktCO$_2$e	tCO$_2$e/ISKm	Weighted average
Single family home	130.561	0,50	0,004	4
Terraced house	116.705	0,35	0,003	4
Apartment	204.432	0,32	0,002	4
Other	884	0,002	0,002	4
Total	**452.582**	**1,17**	**0,003**	**4**

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[f] The value of real estate is based on the data from the National Land Registry of Iceland before 2021 or the fair value of the property.

Motor vehicle loans

The results show financed carbon emissions of leases and motor vehicle loans to individuals and companies. The types of vehicles included in the calculations are:

- Passenger cars
- Medium/heavy commercial vehicles
- Light commercial vehicles (vans)
- Buses

Calculations of financed emissions of the Bank's leases and motor vehicles loans at the end of 2021 cover approximately 83% of the total book value of the asset class. Excavators, heavy machinery and motorbikes are not included due to limited information.

Assessments of the carbon emissions take Scopes 1 and 2 into consideration. Included under Scope 1 are direct emissions from the combustion of fossil fuels in vehicles. In the case of hybrid vehicles, which have both an electric motor and a petrol or diesel engine, and electric vehicles which are solely powered by electricity, indirect emissions from electricity production come under Scope 2. Indirect emissions from electricity generation is not included since the vast majority of electricity in Iceland is generated by hydropower and geothermal power and carbon emissions under Scope 2 are therefore very limited.

The following equation was used to calculate financed emissions of motor vehicles loans:

$$Financed\ emissions = \sum_{v} \frac{Outstanding\ amount_v}{Total\ value_v} \times Vehicle\ emissions_v$$
$$with\ v = vehicle$$

Different methods were used to calculate emissions from vehicles depending on how much information was available for each vehicle.

Methods and data on vehicle emissions were used in the following order:

1. **From the vehicles regestry of the Icelandic Transport Authority**
   a) Greenhouse gas emission are stated per driven kilometre of each vehicle based on its registration number (CO_2e/km). To calculate a vehicle's emissions, the emission factor[g] was multiplied by the average annual mileage of the vehicle[h].

2. **From the PCAF database**
   a) If information on the manufacturer and sub-category of the vehicle was available as well as the emission factor (CO_2e/km) of the vehicle in the PCAF database, the vehicle's emissions were calculated by multiplying the emission factor by the average annual mileage of the vehicle.
   b) If access to information on a vehicle was limited, the vehicle's emissions were calculated by using the average annual carbon emissions (CO_2e/year) from that type of vehicle (passenger car, medium/heavy commercial vehicle, light commercial vehicle or bus).

Financed emissions of motor vehicle loans

	Book value	Financed emissions	Intensity	Data quality
	ISKm	ktCO$_2$e	tCO$_2$e/ISKm	Weighted average
Fossil vehicles	10.271	9,37	0,91	2,24
Hybrid vehicles	4.252	1,07	0,25	2,00
Green vehicles	2.560	0,01	0,002	2,00
Total	**17.083**	**10,44**	**0,61**	**2,15**

[g] From 2018 the emissions value for all new cars is supposed to be calculated using WLTP. For vehicles manufactured before that date, emissions are calculated according to NEDC, which is a less accurate method. Calculations used the WLTP emissions value for all types of vehicles where it was recorded. If only the NEDC value was available it was multiplied by 1.23 since the WLTP value is approximately 23% higher than the NEDC value, which is the same value that PCAF uses for its database.

[h] Information on the average mileage of vehicles by power source and type was obtained from the Icelandic Transport Authority for 2021.

[i] Electric vehicles and vehicles who run on methane or hydrogen are categorized as green vehicles.

Further reading

NACE code

NACE	Book value	Financed emission	Intensity	Data quality
	ISKm	ktCO$_2$e	tCO$_2$e/ISKm	Weighted average
A – Agriculture, forestry and fishing	55.574	94,0	1,69	4,4
B – Mining and quarrying	94	0,0	0,14	4,0
C - Manufacturing	53.133	55,2	1,04	3,9
D – Electricity, gas, steam and air conditioning supply	725	0,2	0,31	4,3
E – Water supply; Sewerage, waste mangement and remedations activities	5.922	71,0	11,99	4,0
F - Construction	31.662	6,2	0,20	4,1
G – Wholesale and retail trade; repair of motor vehicles and motorcycles	22.005	3,5	0,16	3,9
H – Transportation and storage	13.072	25,9	1,98	2,7
I – Accommodation and food service activities	41.289	3,9	0,09	4,3
J – Information and communication	17.984	0,4	0,02	3,4
K – Financial and insurance activities	47.064	2,2	0,05	5,0
L – Real estate activities	93.650	0,7	0,01	4,0
M – Professional, scientific and technical activities	3.771	0,5	0,13	4,4
N – Administrative and support service activities	5.185	0,8	0,15	4,3
P - Education	854	0,1	0,08	5,0
Q – Human health and social work activities	1.168	0,2	0,14	5,0
R – Arts, enterainment and recreation	2.440	0,3	0,13	5,0
S – Other service activities	965	0,1	0,07	4,3
Total	**396.557**	**265,2**	**0,67**	**4,1**

Glossary

Direct emissions (Scope 1):
Emissions from the company's core activities, such as heavy machinery and vehicles.

Financed emissions:
Financed emissions is a term used for indirect emissions of greenhouse gases from investments and/or lending by financial institutions. Financed emissions are estimated from the multiple of the ratio of the outstanding amount to the underlying value and the company's total carbon emissions.

Greenhouse Gas Protocol (GHG protocol):
A global standardized framework for companies to report the extent of carbon emissions from operations according to Scopes 1, 2, and 3.

ÍSAT classification of economic activities:
The Icelandic classification of economic activities is based on the Statistical Classification of Economic Activities in the European Union. The purpose of the classification is to distinguish between different classes of economic activity and to bring together related sectors.

Carbon neutrality:
According to the definition in the Paris Agreement: *Carbon neutrality means having a balance between emitting carbon and absorbing carbon from the atmosphere in carbon sinks.*

Climate risk:
The financial risk due to climate change, whether this refers to the risks associated with developing society towards a green economy, or natural risks, such as changes in weather conditions, acidification of the ocean or floods.

Emission intensity:
Emission per a specific unit, e.g. revenue, produced good, square metre or number of employees.

Emission factor:
Factor used to calculate greenhouse emissions per specific unit, e.g. gCO_2/km.

New European Driving Cycle (NEDC):
European Union drive cycle test from 1992 which provides the authorities and consumers with information on vehicles' fuel consumption and emissions.

Indirect emissions (Scopes 2 and 3):
Scope 2 includes indirect emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company. Scope 3 includes indirect emissions in the company's value chain, both on the resource and output sides.

Partnership for Carbon Accounting Financials (PCAF):
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 lending and investments.

Worldwide Harmonised Light Vehicle Test Procedure (WLTP):
A new and more detailed European Union standard of drive cycle tests from 2018 which provides the authorities and consumers with information on vehicles' fuel consumption and emissions.