

# **Climate target methodologies**

## **for the lending portfolio**

**December 2024**

## About this document

The purpose of this document is to provide an overview of the methodologies underpinning the targets described in the document entitled “Climate targets and actions for the lending portfolio”, which can be found on [Nordea.com](https://www.nordea.com). The document addresses sectors where the Nordea Group has set climate targets in line with its commitment to the Net-Zero Banking Alliance (NZBA). This publication has been prepared for information purposes only.

A separate “Financed emissions methodology for the lending portfolio” document can be found on [Nordea.com](https://www.nordea.com). Further information on our work regarding climate change and sustainability is provided in our annual report.

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# 1 Target methodology overview

Our objective is to become a bank with net-zero emissions by 2050 at the latest. To reach this goal, we have set a mid-term target to reduce carbon emissions in our lending portfolio by 40–50% by the end of 2030. We have also set supporting sector-specific targets for the lending portfolio. This document describes the scope, boundaries and methodology applied for these targets. The methodology follows the UN Environment Programme Finance Initiative’s Guidelines for Climate Target Setting for Banks<sup>1</sup> and is aligned with our commitment to the Net-Zero Banking Alliance (NZBA). The emission target methodologies are based on Part A (Financed Emissions) of The Global GHG Accounting & Reporting Standard for the Financial Industry by the Partnership for Carbon Accounting Financials (PCAF) and Finans Danmark’s Framework for Financed Emissions Accounting.

## Climate targets

The NZBA Guidelines require banks to set interim 2030 targets and long-term 2050 net zero targets that are aligned with no-/low-overshoot 1.5°C transition pathways. Sectoral pathways define the steps that specific sectors should take to reduce greenhouse gas emissions sufficiently to remain within scientifically calculated carbon budgets. Our climate targets aim to translate these top-down pathways into concrete benchmarks to ensure alignment across sectors and portfolios.

We have set the following climate targets for our lending portfolio.

<b>Sector</b>	<b>Sub-sector(s)</b>	<b>Emission boundaries</b>	<b>Metric</b>	<b>Benchmark scenario</b>	<b>Base year</b>	<b>Target year<sup>2</sup></b>	<b>Target</b>
<b>Portfolio-wide</b>	Selected PCAF asset classes <sup>3</sup>	1, 2	tCO <sub>2</sub> e	IPCC SR15 (2018)	2019	2030	-40–50%
<b>Residential Real Estate</b>	Households and Tenant-owner associations	1, 2	kgCO <sub>2</sub> e/m <sup>2</sup>	Utility sector NDC, CRREM	2019	2030	-40–50%
<b>Shipping</b>	Vessels	1	AER gCO <sub>2</sub> /dwt-nm	Poseidon Principles (IMO 2050 <sup>4</sup> )	2019	2030	-30%
<b>Motor Vehicles</b>	Cars and vans	1	gCO <sub>2</sub> e/km	IEA NZE	2022	2030	-40%
<b>Agriculture</b>	Crops, plantation and hunting, and Animal husbandry	1, 2	tCO <sub>2</sub> e/EURm	National sector targets SBTi FLAG <sup>4</sup>	2021	2030	-40–50%
<b>Power Production</b>	Electricity generation	1, 2	gCO <sub>2</sub> e/kWh	SBTi 1.5°C IEA NZE	2021	2030	-70%
<b>Oil &amp; Gas</b>	Exploration and production	1, 2, 3	tCO <sub>2</sub> e <sup>5</sup>	IEA NZE	2019	2030	-55%
<b>Offshore</b>	Drilling rigs and Offshore service vessels within Oil & Gas and Shipping	-	EURm	-	2019	2025	-100%
<b>Mining</b>	Thermal peat mining	-	EURm	IEA NZE <sup>5</sup>	2022	2025	-100%
	Thermal coal mining	-	EURm	IEA NZE <sup>5</sup>	<i>Full phase-out already achieved in 2021</i>		

<sup>1</sup> [Guidelines for Climate Target Setting for Banks](#), United Nation Environment Programme Finance Initiative, April 2021.

<sup>2</sup> Target year indicates “by the end of [year]”

<sup>3</sup> The PCAF asset classes in scope are as follows: business loans, mortgages (residential real estate), commercial real estate and motor vehicles. Shipping (financing of vessels, Poseidon Principles scope), using Finans Danmark’s Framework for Financed Emissions Accounting, is also included.

<sup>4</sup> [International Maritime Organization \(IMO\) Strategy on Reduction of GHG Emissions from Ships](#), adopted in 2018. This IMO Strategy was updated and replaced in July 2023, after our sector target had been set.

<sup>5</sup> National sector targets and the Science Based Targets initiative Forestry, Land and Agriculture (FLAG) guidance include both greenhouse gas emission reductions and carbon removals.

<sup>5</sup>Including methane emissions expressed as CO<sub>2</sub> equivalents for scopes 1 and 2.

Table 1: Overview of climate targets to reduce financed emissions in the lending portfolio

## 1.1 Scope and materiality

The sectors in scope were selected based on their climate vulnerability and contribution to our total financed emissions profile.

The selection is aligned with the list of carbon-intensive sectors presented in the Guidelines for Climate Target Setting for Banks (hereafter “the NZBA Guidelines”), which we helped develop together with the United Nations Environment Programme Finance Initiative (UNEP FI), signatories to the Collective Commitment for Climate Action, and NZBA members. According to the NZBA Guidelines, a substantial majority of the aforementioned sectors must have sector-level targets in place by April 2024.

## 1.2 Measurement and target metrics


### Measurement of financed emissions

The methodologies in Part A (Financed Emissions) of the PCAF Standard apply the same general attribution principles across all asset classes.

1. Financed emissions are calculated by multiplying an attribution factor (specific to that asset class) by the emissions of the borrower or investee.
2. The attribution factor is defined as the share of total annual greenhouse gas (GHG) emissions of the borrower or investee that is allocated to the loan(s) or investment(s).
3. The attribution factor is calculated by dividing the share of the outstanding amount of loans and investments of the financial institution by the total equity and debt of the company, project, etc. to which the financial institution has lent money or in which it has invested capital.

$$\text{Financed emissions} = \sum_i \text{Attribution factor}_i \times \text{Emissions}_i$$

(with i = borrower or investee)



$$\frac{\text{Outstanding amount}_i}{\text{Total equity} + \text{debt}_i}$$

More details on our PCAF-compliant financed emissions methodology for non-investment portfolios can be found in the separate “Financed emissions methodology for the lending portfolio” document on Nordea.com.

### Target metrics

In accordance with the NZBA Guidelines, our two main metrics for setting climate targets are absolute financed emissions and sector-specific emission intensity based on physical metrics<sup>6</sup>. Where data is unavailable or where the targeted emission reduction can be more easily measured otherwise, a different metric can be considered as long as the impact is reduced emissions.

## 1.3 Target-setting methods and benchmark scenarios

### Net zero benchmark scenarios

We have committed to reach net zero by 2050 at the latest, in line with the Paris Agreement goal to limit global temperature increase to a maximum of 1.5°C above pre-industrial levels, while supporting the real economy transition. Our choice of benchmark scenarios was driven by our commitment to net zero and the availability of pathways and scenarios for different sectors. It was further informed by the NZBA Guidelines and the Guidance on Use of Sectoral Pathways for Financial institutions<sup>7</sup> developed by the Glasgow Financial Alliance for Net Zero (GFANZ). The NZBA and GFANZ make it clear that banks should use widely accepted science-based decarbonisation scenarios to set both long-term and

<sup>6</sup> For example, floor area in square metres (m<sup>2</sup>) or distance in nautical miles or kilometres.

<sup>7</sup> [Guidance on Use of Sectoral Pathways for Financial Institutions](#), GFANZ, 2022.

interim targets aligned with the temperature goal of the Paris Agreement. The scenarios selected are thus “no-overshoot” or “low-overshoot” scenarios of 1.5°C above pre-industrial levels and rely conservatively on negative emissions technologies.

Half of our sector targets are based on the International Energy Agency’s Net Zero Emissions by 2050 (IEA NZE) Scenario<sup>8</sup>, which focuses on reaching net-zero CO<sub>2</sub> emissions from energy and industrial sources. The Scenario is consistent with limiting the global temperature rise to 1.5°C, with a 50% probability of no temperature overshoot, in line with the Intergovernmental Panel on Climate Change (IPCC) Special Report on the impacts of global warming of 1.5°C. It provides a comprehensive and consistent analysis of the real economy transition, investment needs and key milestones, and covers almost all<sup>9</sup> sectors and sub-sectors that are relevant for financial institutions.

Where the oil and gas and agriculture sectors are concerned, we also refer to the One Earth Climate Model (OECM), an “integrated energy assessment model for developing industry-specific 1.5°C pathways with high technical resolution for the finance sector”. The OECM was developed by the Institute for Sustainable Futures within the University of Technology Sydney (UTS)<sup>10</sup> and commissioned by the Net-Zero Asset Owner Alliance (of which Nordea Life & Pension is a member).

We have used other benchmark scenarios where more detailed sector, GHG or geographic granularity was needed compared with the IEA NZE Scenario. These scenarios are the P1–P3 pathways from the IPCC Special Report on 1.5°C; the International Maritime Organization’s 2018 Strategy on Reduction of GHG Emissions from Ships; the Carbon Risk Real Estate Monitor (CRREM) pathways for the Nordic region; Danish and Finnish national targets; and the Science Based Targets initiative (SBTi) Forest, Land and Agriculture (FLAG) pathway.

### Target-setting methods

We apply both contraction and convergence approaches to setting climate targets for our lending portfolio. The choice of approach depends on the sector and the availability of target-setting tools.

1. **Contraction**, where all companies in scope reduce their absolute emissions or economic emission intensity at the same rate, irrespective of initial emissions performance, and do not have to converge to a common emissions value at a certain point in time. The contraction approach can be used with sector-specific or global emissions scenarios. The SBTi endorses the following two contraction approach methods:
  - a. the Absolute Contraction Approach, where the target is determined to keep the company below or on a par with the chosen science- and/or policy-based absolute emissions pathway.
  - b. the Economic Intensity Contraction Approach, where economic intensity targets (emission reductions based on global GDP shares) are determined to bring the company into line with relevant science- and/or policy-based absolute emissions pathways<sup>11</sup>.
2. **Convergence**, where all companies within a given sector reduce their emission intensity to a common value by some future year as dictated by a global emissions pathway. The reduction allocated to portfolios varies depending on their initial carbon intensity and growth rate relative to others in the sector. The convergence approach can only be used with sector-specific emissions scenarios and physical intensity metrics (e.g. GHG tonnes per tonne of product or MWh generated). Where relevant, we use the SBTi Sectoral Decarbonisation Approach (SDA) to set GHG reduction pathways based on specific temperature targets and corresponding carbon budgets. The SDA is intended to be used in energy-intensive sectors which share homogenous profiles of economic activity and ensuing GHG emissions, measured by a physical indicator. We

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<sup>8</sup> [Net Zero by 2050: A Roadmap for the Global Energy Sector](#), IEA, 2021.

<sup>9</sup> The IEA models the aluminium production and agriculture sectors but reports them under “other” industry.

<sup>10</sup> [Energies 2022 15\(9\), 3289](#).

<sup>11</sup> Adapted from [Foundations of Science-based Target Setting](#), Version 1.0, Science Based Targets initiative, April 2019.

also use the Poseidon Principles, the CRREM and selected Nordic climate legislation to set sector targets.

## **1.4 Governance**

### **Approvals**

The targets are approved by the Group CEO in the Group Leadership Team and reviewed by the Board Operations and Sustainability Committee.

### **Reporting**

Progress towards the targets is reported annually as part of the Group annual report.

### **Target reviews and recalculations**

The targets must be reviewed, and if necessary revised, at least every five years to ensure consistency with the latest scientific findings. Moreover, they must be recalculated and revised as needed to reflect significant changes that might compromise their relevance or consistency, e.g. material portfolio changes or methodological developments. In line with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard<sup>12</sup> requirement, we have defined the circumstances under which base year financed emissions and hence targets must be recalculated. We have two separate recalculation guidelines, covering total financed emissions targets and sector-specific emissions targets, respectively. Both guidelines define the significant threshold triggering a recalculation as >5%.

In order to accurately track progress towards our emission intensity targets and ensure the highest possible quality of information and transparency over time, our base year financed emissions starting point (i.e. 2019) must be adjusted if there are significant changes. The latter may be i) significant structural changes (i.e. acquisitions and divestitures), ii) significant impacts due to changes in GHG emission estimation models, or iii) significant improvements or errors in the data. We may also choose to recalculate our base year emissions for changes deemed less significant to ensure the consistency, comparability and relevance of the reported emissions data over time. More details on our recalculation guidelines can be found in the separate "Financed emissions methodology for the lending portfolio" document on Nordea.com.

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<sup>12</sup> [Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#), Greenhouse Gas Protocol, 2011.

## 2 Portfolio target

*Our lending portfolio scope 1 and 2 emissions derive mainly from Nordic economies' emissions but also derive from elsewhere in the EU and beyond. As such, they are a subset of all the global emission reductions needed. The Paris Agreement aims to limit the rise in the mean global temperature to well below 2°C, preferably to 1.5°C, above pre-industrial levels. To achieve this, global GHG emissions must be halved by end of 2030 and on a path to reach net zero by 2050 at the latest.*

### Climate target

Reduce absolute financed emissions in our lending portfolio by 40–50% by end of 2030 compared with 2019.

### Scope and boundaries

The target covers on-balance sheet lending across the following PCAF asset classes: business loans, mortgages (residential real estate), motor vehicles and commercial real estate. Shipping (financing of vessels within the scope of the Poseidon Principles), using Finans Danmark's Framework for Financed Emissions Accounting, is also included.

The emissions covered are scope 1 and 2 emissions across the asset classes in scope. The scope covered around 87% of our loans to the public in 2019.

### Measurement

The target was measured using an absolute financed emissions metric (tCO<sub>2</sub>e). The base year for the target is 2019.

### Target-setting method and benchmark scenario(s)

The target was set using an absolute contraction approach, comparing absolute emissions from our lending portfolio with two global benchmark scenarios for absolute emission reductions required across the economy. The benchmark scenarios selected at the time of target setting were the IPCC Special Report on 1.5°C no- and low-overshoot scenarios and the UNEP Emissions Gap Report 2019.

The selected IPCC scenarios outline absolute CO<sub>2</sub> emission reductions of 40–59% by 2030 relative to 2010 levels, with emissions in 2019 held to be at a similar or slightly higher level than in 2010. The IPCC report also concludes that pathways limiting global warming to 1.5°C with no or limited overshoot involve steep reductions in methane and black carbon emissions, albeit at a slower pace than for CO<sub>2</sub>. In its recent AR6 report<sup>13</sup>, the IPCC states that limiting global warming with a 50% probability of no or limited overshoot would require global GHG emissions to be reduced by 43% between 2019 and 2030.

The UNEP Emissions Gap Report 2019 concludes that, by 2030, GHG emissions will need to be 55% lower than in 2018 to limit global warming to 1.5°C, and 37% lower (median estimate) to limit global warming to 1.8°C. The 2022 update of the report states that limiting global warming to 1.5°C will require current GHG emissions to be reduced by 45% by 2030.

The SBTi models a cross-sector emissions pathway covering CO<sub>2</sub>, methane and nitrous oxide emissions, and finds that it would reduce emissions by at least 42% by 2030 and 90% by 2050 relative to 2020 levels<sup>14</sup>.

Taking into account these benchmark scenarios, we considered a reduction target of 40–50% between 2019 and 2030 to be in the 1.5°C-to-well-below-2°C range of alignment. We incorporated these scenarios for both our intermediate 2030 target and our 2050 net-zero emissions target.

<sup>13</sup> [IPCC Sixth Assessment Report \(third instalment\): Climate Change 2022: Mitigation of Climate Change](#), IPCC, 2022.

<sup>14</sup> [Pathways to Net-Zero, SBTi Technical Summary](#), Version 1.0, October 2021.

### 3 Sector-specific emission targets

The following section describes the sector-specific methodologies applied for the target setting.

#### 3.1 Residential Real Estate

The property industry is accountable for around 38% of energy consumption and 29% of all GHG emissions in the EU<sup>15</sup>. Scope 1 and 2 emissions from real estate correspond to buildings' direct and indirect emissions from electricity and heat production. The PCAF carbon accounting standard divides buildings into two asset classes, each with building-specific accounting rules: mortgages (residential real estate) and commercial real estate.

##### Climate target

Reduce physical emission intensity in our Residential Real Estate portfolio by 40–50% by the end of 2030 compared with 2019.

##### Scope and boundaries

The target covers real estate-secured lending to private individuals and tenant-owner associations across Denmark, Finland, Norway and Sweden.

The emissions covered are property scope 1 and 2 emissions from the in-use phase of buildings. Scope 3 emissions are out of scope due to a lack of robust data and methodology.

##### Measurement

The target was measured using a physical emission intensity metric (kgCO<sub>2</sub>e/m<sup>2</sup>). Emission intensity was measured by dividing our total sector financed emissions by the total financed floor area, as recommended by the SBTi. The sector financed emissions were calculated by multiplying property scope 1 and 2 emissions by an attribution factor as in the PCAF Standard. Similarly, the financed floor area was calculated by multiplying the property floor area by the attribution factor. The latter was calculated as the ratio of the current outstanding lending amount to the oldest available property value. Each property's value was used as the denominator in the attribution factor equation for all subsequent years until the repayment of the outstanding balance or refinancing of the loan.

The base year for the target is 2019.

##### Target-setting method and benchmark scenario(s)

The target was set according to the SDA, with external benchmark scenarios from the CRREM, which provide country- and building type-specific 1.5°C-aligned decarbonisation pathways. At the time the sector target was set, the latest available CRREM country pathways<sup>16</sup> – weighted against our known financed floor area per country – indicated that our financed residential properties in the Nordics would have to decarbonise by at least 45% between 2019 and 2030. The weighted CRREM pathway will be updated as more financed floor area data becomes available.

Most properties in the Nordics rely on utilities for heating, cooling and electricity. Therefore, the decarbonisation of Nordic utility sectors will have a direct impact on the decarbonisation of buildings. Nordic utility sectors' and countries' Nationally Determined Contributions (NDCs) towards global decarbonisation thus indicate a secondary decarbonisation pathway for Nordic buildings. Weighted against the country share of buildings connected to the utility grid and against our known financed floor area per country, these NDCs suggest that our financed residential properties would need to decarbonise by 54% between 2019 and 2030.

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<sup>15</sup> [CRREM 2023](#).

<sup>16</sup> [CRREM Global Pathways V1.093](#).



## 3.2 Shipping

*In 2022 international shipping accounted for around 2% of global energy-related CO<sub>2</sub> emissions<sup>17</sup>. Shipping transports over 80% of global trade<sup>18</sup> and remains the most carbon-efficient transport mode for goods.*

### Climate target

Reduce physical emission intensity in our Shipping portfolio by 30% by the end of 2030 compared with 2019.

### Scope and boundaries

The target covers lending secured by vessel mortgages in accordance with the scope of the Poseidon Principles reporting. The Poseidon Principles apply wherever a vessel falls under the purview of the International Maritime Organization (IMO)<sup>19</sup>.

The emissions covered are scope 1 only. These emissions are based on each vessel's fuel use and thus cover the most material emissions from the sector<sup>20</sup>.

### Measurement

The target was measured in line with the Poseidon Principles practices. The physical emission intensity of our Shipping portfolio was calculated using the Annual Efficiency Ratio (AER) metric, where carbon intensity is a quotient of fuel consumption by distance travelled times dead weight tonnage (dwt) over a calendar year:

$$AER_i = \frac{\sum_i CO_{2i}}{\sum_i dwt \times nm_i}$$

Here, CO<sub>2i</sub> denotes the carbon emissions for voyage i computed using the fuel consumption and carbon factor of each type of fuel; dwt is the deadweight at maximum summer draught of the vessel; and nm<sub>i</sub> is the distance in nautical miles travelled on voyage i. For additional information on the calculation methodology, see the Poseidon Principles technical guidance<sup>21</sup>.

The base year for the target is 2019.

### Target-setting method and benchmark scenario(s)

The target was set using the Poseidon Principles trajectories, which are aligned with the benchmark scenario employed by the IMO Strategy adopted in 2018. This trajectory targets an absolute 50% reduction in global GHG emissions from international shipping by 2050 relative to 2008 levels. New trajectories in line with net zero commitments by 2050 are expected to be adopted by the Poseidon Principles signatories once publicly available and approved by the latter<sup>22</sup>. In July 2023 the IMO adopted a new strategy for the reduction of GHG emissions from ships<sup>23</sup> that officially revokes the IMO Strategy adopted in 2018. We aim to review our target in the light of the benchmark scenario updates in the new strategy.

<sup>17</sup> [International Shipping](#), IEA.

<sup>18</sup> [Review of maritime transport](#), United Nations Conference on Trade and Development (UNCTAD), 2023.

<sup>19</sup> E.g., vessels of 5,000 gross tonnage and above which have an established Poseidon Principles trajectory and whose carbon intensity can be measured with data from the IMO Data Collection System.

<sup>20</sup> See e.g. [Carbon performance assessment of international shipping: note on methodology](#), Transition Pathway Initiative, December 2020.

<sup>21</sup> [A global framework for responsible ship finance](#), Version 4.2, Poseidon Principles, April 2023.

<sup>22</sup> [Annual Disclosure Report 2022](#), Poseidon Principles, p. 14.

<sup>23</sup> [2023 IMO strategy on reduction of GHG emissions from ships](#).

### 3.3 Motor Vehicles – Cars and vans

*Passenger cars and vans are responsible for more than 25% of global oil use and around 10% of global energy-related CO<sub>2</sub> emissions.<sup>24</sup> In the Nordics, they account for 10–20% of total CO<sub>2</sub> emissions.<sup>25</sup> According to the IEA NZE 2050 Scenario, growth in the market share of zero-emission vehicles will need to accelerate and the fuel economy of conventional vehicles will need to be improved.*

#### **Climate target**

Reduce physical emission intensity in our Cars and vans portfolio by over 40% by the end of 2030 compared with 2022.

#### **Scope and boundaries**

The target covers the financing of passenger car and vans, including both lending and leasing to private and corporate customers.

The emissions covered are scope 1, stemming from the use of the vehicle (tank-to-wheel).

#### **Measurement**

The target was measured using the physical emission intensity metric gCO<sub>2</sub>e/km, which is in line with industry practice and focuses on the actual use of the vehicle. Actual vehicle emissions were sourced and combined with national averages for kilometres driven to calculate the emissions of the stock of vehicles that we finance. Where actual vehicle emissions were not found, estimates were applied.

The base year for the target is 2022.

#### **Target-setting method and benchmark scenario(s)**

The target was set using the IEA NZE 2050 Scenario, which requires annual emission reductions of 6% by end of 2030 for cars and vans. By ensuring our entire vehicle stock is in scope and using a contraction approach, we aim to be in line with the IEA Scenario.

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<sup>24</sup> [Tracking Clean Energy Progress 2023](#), IEA, July 2023.

<sup>25</sup> Nordea estimate based on [the 2023 National Inventory Submissions](#) received under the United Nations Framework Convention on Climate Change (UNFCCC).

### 3.4 Agriculture

*Agriculture accounts for approximately half of the 23% of net anthropogenic GHG emissions that come from the land sector, which includes land use, land use change and forestry<sup>26</sup>. Carbon dioxide, methane and nitrous oxide emissions in agriculture are largely caused by biological processes, and mitigation is more complex than for emissions related to fuel and energy use – but key to fulfilling the Paris Agreement. The sector is also important in terms of climate mitigation, as carbon removal, including through capture and storage in soils and agroecosystems, has been identified as essential to achieving net zero targets. In addition to its impact on the climate, agriculture is closely linked to other key elements of sustainable development, such as biodiversity and human rights.*

#### **Climate target**

Reduce the economic emission intensity in our Agriculture lending portfolio by 40–50% by the end of 2030 compared with 2021.

#### **Scope and boundaries**

The target covers business loans in the Agriculture sub-categories Crops, plantation and hunting and Animal husbandry in Denmark, Finland, Norway and Sweden.

The target covers scope 1 and 2 emissions and includes carbon removal, for example by means of biochar and increased soil carbon sequestration. Over time, as carbon removal accounting methodologies are developed and customer data availability improves, we expect to be able to track removals. Lending to on-farm vehicles is not included.

#### **Measurement**

The target was measured as an economic emission intensity metric (tCO<sub>2</sub>e/EURm).

The base year for the target is 2021.

#### **Target-setting method and benchmark scenario(s)**

The target was set using the Economic Intensity Contraction Approach. An economic intensity-level metric offers a comparable format across customers, sub-sectors and portfolios. It was preferred to an absolute measure, which would not have been well suited to the management or comparison of emissions or decarbonisation across different types of agricultural production and sizes of farm.

We set a Nordic sector target based on a policy-based benchmark scenario, drawing on national sector targets for Denmark and Finland and the SBTi FLAG sector target.

The Danish national sector target for agriculture is a 55–65% reduction by the end of 2030 relative to 1990 levels, including both emission reductions and carbon removals. Recalculated for the base year 2021 using the most recent data from the Danish National Inventory Report, the reduction is 42–52% by end of 2030. In Finland, the national target is to reduce agriculture emissions by 29% by 2035 relative to 2019 levels. For Norway and Sweden, we used the SBTi FLAG tool target to reduce emissions by 30% between 2021 and 2030, with two-thirds of the reduction to be achieved through emission reductions and one third through carbon removals. The chosen pathway is comparable to the few other emissions pathways for agriculture available (the OECM all-sector and agricultural pathways, and the SBTi FLAG), indicating that it is aligned with or more ambitious than available model pathways.

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<sup>26</sup> [Technical Summary to the IPCC Special Report on Climate Change and Land](#), 2022.

### 3.5 Power Production

*Global power sector CO<sub>2</sub> emissions accounted for 38% of global emissions in 2021. The majority of power production (62%) is still based on fossil fuels<sup>27</sup>. According to the IEA, electricity generation will need to reach net-zero emissions globally by 2040 and supply almost 50% of total energy demand<sup>28</sup>.*

#### Climate target

Reduce physical emission intensity in our Power Production portfolio by over 70% by the end of 2030 compared with 2019.

#### Scope and boundaries

The target covers business loans to companies whose primary activity is electricity production. It excludes both holding companies who do not have their own production and power production by industrial companies, in accordance with the SBTi SDA<sup>29</sup>.

The emissions covered are scope 1 and 2.

#### Measurement

The target was measured as a physical emission intensity metric (gCO<sub>2</sub>e/kWh), set in relation to physical output (produced electricity). The chosen metric is aligned with SBTi sectoral guidance and is the metric predominantly used in the industry. Low-carbon generation (hydro, nuclear, wind and solar) emission intensity was based on customers' reported annual production volumes. Where customer-specific emissions were not reported, a low-carbon estimate of 5gCO<sub>2</sub>e/kWh was adopted.<sup>30</sup>

The base year for the target is 2021. The baseline was based on the output of corporate customers for whom production (electricity generation) output had been collected. The scope covered 76% of our exposure to the sector in 2021.

#### Target-setting method and benchmark scenario(s)

The target was set following a convergence approach using the SBTi SDA tool for the power production sector, which is based on a combination of different 1.5°C pathways and scenarios from the IPCC and IEA. The SBTi tool provides a power production GHG reduction target for 2030 based on physical intensity (gCO<sub>2</sub>e/kWh) that aligns with the SBTi 1.5°C pathway. While the target-setting tool is designed for scope 1 emissions, we applied it to cover both scope 1 and 2 emissions.

There are currently no Nordic pathways available for this sector. All 2050 pathways result in zero or negative power production emissions. It is important to note that the SBTi 1.5°C scenario does not currently prescribe any negative emissions targets.

<sup>27</sup> [Global Energy Review: CO<sub>2</sub> Emissions in 2021](#), IEA, 2022.

<sup>28</sup> [Net Zero by 2050: A Roadmap for the Global Energy Sector](#), IEA, 2021.

<sup>29</sup> [Sectoral Decarbonization Approach](#), SBTi, May 2015.

<sup>30</sup> Nordea estimate based on research on lifecycle emissions by the IPCC (2012) and the United Nations Economic Commission for Europe (2020).

### 3.6 Oil & Gas

*In 2021 scope 1, 2, and 3 emissions from the global oil and gas sector accounted for 34% of annual global GHG emissions<sup>31</sup>, including approximately 20% of total methane emissions<sup>32</sup>. According to the Sustainability Accounting Standards Board's global industry classification, the Oil & Gas sector consists of Exploration and production, Midstream, Refining & marketing, and Services.*

#### **Climate target**

Reduce absolute scope 1, 2 and 3 financed emissions from Exploration and production by 55% by the end of 2030 compared with 2019.

#### **Scope and boundaries**

The target covers business loans to clients in the Oil & Gas Exploration and production (E&P) sub-sector. E&P forms part of the upstream segment of the Oil & Gas value chain. E&P entities explore for, extract and produce energy products such as crude oil and natural gas.

The emissions covered are scopes 1, 2, and 3. Methane emissions as CO<sub>2</sub> equivalents for scopes 1 and 2 are included. Scope 3 emissions are included as the scope 3 category, use of sold products, is the most material emissions category for E&P companies.

#### **Measurement**

The target was measured using an absolute financed emissions metric (tCO<sub>2</sub>e). The baseline was based on a combination of company-reported data and proxies, as scope 3 disclosures in particular were not consistent throughout the industry. With increased convergence expected over time, we expect to rebase with higher-quality data to ensure adequate transparency.

The base year for the target is 2019.

#### **Target-setting method and benchmark scenario(s)**

The target was set using an absolute contraction approach.

Total GHG emissions from the supply and energy-related use of oil and gas, including methane and scope 3 emissions, need to fall by 25–33% by the end of 2030 to be within the 1.5°C-aligned pathways of the IEA NZE 2050 Scenario and OECM.

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<sup>31</sup> [Global Energy Review: CO<sub>2</sub> Emissions in 2021](#), IEA, 2022 (energy and process CO<sub>2</sub> emissions).

<sup>32</sup> [Global Methane Tracker 2022](#), IEA (world methane emissions from all sources and world methane emissions from energy sources, assuming 1 tonne methane = 25 tonnes CO<sub>2</sub>e).

### 3.7 Offshore

*Offshore drilling rigs fall within the Oil & Gas – Services industry, as defined by the Sustainability Accounting Standards Board, while standard and offshore service vessels fall within the Marine Transportation industry. Offshore does not refer to Oil & Gas E&P (or upstream) companies, for which a separate target has been set.*

#### **Climate target**

Phase out lending to the Offshore sector by the end of 2025 at the latest.

#### **Scope and boundaries**

The target covers business loans to clients in the Drilling rigs segment and Offshore service vessels segment of the Oil & Gas and Shipping sectors.

#### **Measurement**

The target refers to on-balance sheet lending in millions of euro.

While the target is exposure-based, the estimated combined scope 1 and 2 financed emissions impact across the Oil & Gas and Shipping sectors is significant.<sup>33</sup>

The base year for the target is 2019.

#### **Target-setting method and benchmark scenario(s)**

The target was set as an exposure-based phase-out; emissions-based benchmark scenarios were not applicable. We have not identified any applicable target-setting methodologies or benchmark scenarios for the Offshore sector as defined above.

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<sup>33</sup> We also measure financed emissions and disclose them in our Group annual report. For these emissions, we apply our PCAF-compliant financed emissions methodology for business loans to clients in the Drilling rigs segment, based on the average emissions intensity in our Poseidon Principles Offshore service vessels portfolio.

### 3.8 Mining

*The Mining sector is responsible for 4–7% of global emissions<sup>34</sup>, with a significant share coming from the combustion of extracted fossil fuels, including coal. To transition this sector to net zero by 2050, fossil fuel extraction must be phased out and operational emissions driven down.*

#### **Climate targets**

Thermal peat mining: phase out thermal peat mining by the end of 2025.

Thermal coal mining: full phase-out already achieved in 2021.

#### **Scope and boundaries**

The target covers business loans to Nordic-based mining customers involved in the extraction of coal, lignite and thermal peat for energy production. Oil and gas are covered under a separate sector target.

The target covers all three emission scopes, as the burning of the extracted fuel creates the vast majority of value chain emissions.

#### **Measurement**

The target refers to financing in millions of euro for both thermal coal mining and thermal peat mining. For thermal coal mining, a full phase-out was already achieved in 2021 and no reintroduction will be permitted. For thermal peat mining, a full phase-out will be achieved by the end of 2025 at the latest.

The base year for the target is 2022.

#### **Target-setting method and benchmark scenario(s)**

The target was set using an absolute contraction approach for coal and peat. The IEA NZE 2050 Scenario states that, following a transition in the energy sector, no new coal or peat mines or extensions thereof will be required as of 2021. It also states that there should be a phase-out of existing activities by end of 2030 for OECD countries and by end of 2040 for the rest of the world. The IEA NZE 2050 Scenario includes peat under coal estimates.

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<sup>34</sup> Emission estimates are based on research by McKinsey's Basic Materials Institute, 2020.

## 4 Limitations and other information

The fulfilment of our targets is dependent not only on our actions but also on the transitional efforts and actions taken by our customers and national and international governments. If the economies in which Nordea operates do not transition in the pace needed, there are limitations to our ability to meet our targets as well.

Pathways are models – not forecasts – of how the economy and sectors need to decarbonise in order to achieve a certain outcome in the real world. They rely on simplifications and are driven by assumptions regarding, for example, emissions trajectories, regulation, markets, technology, and societal factors. They are a way to explore the interactions, interdependencies, risks and opportunities, and costs and benefits involved in trying to reach net zero by 2050. While model results often provide linear pathways, real-life transition is often non-linear and complex. This is especially true where technological development and market dynamics for green technology are concerned. Such technology is often supported by policies which, in turn, vary due to costs, technology maturity, the political landscape and other factors. Moreover, scientific understanding regarding the urgency of climate action, carbon budgets and needed change will develop as climate science improves. Regular updates and revisions are therefore built into climate policy and implementation.

The use of different scenarios is not optimal, as such scenarios contain different assumptions regarding how the remaining carbon budget should be distributed between sectors and regions. However, a single coherent scenario with sufficient regional and sectoral granularity for all GHGs does not yet exist. We have therefore chosen to prioritise sector and regional granularity and use different scenarios rather than a single scenario for all sectors.

We have chosen the IEA NZE 2050 Scenario as the main scenario on which to base our sector and sub-sector pathways, but have not used it for all activities (e.g. agriculture). The IEA only models CO<sub>2</sub> for the global pathway and does not include all GHGs. IEA data is reported in ten-year intervals, with five-year time steps in the extended dataset. The IEA NZE 2050 Scenario mainly provides global-level outputs, not regional or country-specific information. It does not consider carbon removal from outside the energy sector and it does not model land use, which will be significant for agriculture, forestry and other industries.

We obtain GHG emissions data through a combination of three approaches. The first corresponds to GHG emissions verified and reported directly or indirectly by customers, while the second and third correspond to estimated GHG emissions based on primary data on physical activity and economic activity data, respectively. To ensure transparency regarding reported financed emissions estimates, we use the PCAF methodology to score the data depending on its source and quality. The scores range from 1.0 to 5.0, with 1.0 corresponding to the most accurate data (audited and direct customer and investee data) and 5.0 to the most uncertain data (estimated data). At the end of 2022, for example, our Shipping target was based on a large share of more reliable data (100% company-specific data, quality score 1.0), whereas our Residential Real Estate target was based on a significantly lower share of such data (38% building-specific data, quality score 4.19). Assessing data quality in connection with emissions trajectories achieved will be fundamental for both us at Nordea and for our external stakeholders on the road to net-zero emissions. Improving data quality over time is a key priority: data challenges will remain significant for several years, in particular when it comes to smaller businesses and individuals, e.g. mortgages. For more information on data quality, see the company-specific data percentages and average PCAF data quality scores in the sustainability notes of our annual reports.

The NZBA Guidelines state that members should set sector-level targets for all, or a substantial majority of, a list of carbon-intensive sectors where data and methodologies allow. These sectors are agriculture; aluminium; cement; coal; commercial and residential real estate; iron and steel; oil and gas;



power generation; and transport. We have not set sector-level targets for iron and steel, aluminium, cement or commercial real estate. Our approach is to set targets for sectors based on their contribution to our total financed emissions profile and these four sectors contribute relatively little. Furthermore, the most material emissions from these sectors are scope 1 and 2, which are covered in the portfolio target described in section 2 above. In 2023 iron and steel, aluminium and cement together accounted for just 1% and commercial real estate 3% of our lending portfolio financed emissions. We will continually review the need to set additional targets.

## **5 Disclaimer**

This document contains forward-looking statements that reflect management's current views with respect to certain future events and potential financial performance. Although Nordea believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Results could differ materially from those set out in the forward-looking statements due to various factors. These include but are not limited to (i) macroeconomic developments, (ii) changes in the competitive environment, (iii) changes in the regulatory environment and other government actions, and (iv) changes in interest rate and foreign exchange rate levels. This document does not imply that Nordea has undertaken to revise these forward-looking statements beyond what is required by applicable law or stock exchange regulations if and when circumstances arise that lead to changes following their publication.