

Exploring carbon credit utilization in the Nordics

Demand, cost-savings and market engagement

[October 2025]



CARBON LIMITS

CARBON LIMITS

This report was prepared by Carbon Limits AS for the Nordic Initiative for Cooperative Approaches (NICA), which was launched in collaboration between Finland, Norway, Sweden and the Nordic Environment Finance Corporation (Nefco).

Project title:

Exploring carbon credit utilization in the Nordics

Clients: Nefco / Nordic Initiative for Cooperative Approaches

Authors: Paula Hoffman
Kenneth Möllersten
Randall Spalding-Fecher
Francois Sammut

Version: 2.0 (November 2025)

CARBON LIMITS

Stensberggata 27
NO-0170 Oslo
Norge
carbonlimits.no
+47 988 457 930

Carbon Limits works with public authorities, private companies, finance institutions and non-governmental organizations to reduce greenhouse gas emissions from a range of sectors. Our team supports clients in the identification, development, and financing of projects that mitigate climate change and generate economic value, in addition to providing advice on the design and implementation of climate and energy policies and regulations.

Disclaimer

This publication was produced with the financial support of the Nordic Initiative for Cooperative Approaches (NICA) via Nefco.

Its content is the sole responsibility of Carbon Limits AS and do not necessarily reflect the views of NICA/Nefco.

Acknowledgements

Since 2018, NICA has promoted a common vision, priorities and goals for Nordic Article 6 cooperation and operationalisation. NICA provides targeted capacity building and through NICA, Nordic countries can participate in Article 6 information sharing, dialogue, and possible piloting. NICA has been funded since inception by Sweden, Norway, Finland, the Nordic Council of Ministers, and Nefco.

The authors would like to thank Kari Hämekoski (Nefco) as well as other NICA colleagues for their support, review and comments.

Executive Summary

The Nordic countries of Denmark, Finland, Iceland, Norway, and Sweden have set some of the world's most ambitious climate targets. However, current trajectories indicate that domestic action alone may not be sufficient to fully meet these goals. International cooperation under Article 6 of the Paris Agreement presents a strategic opportunity to bridge this gap, enabling countries to use internationally transferred mitigation outcomes (ITMOs) to complement domestic emission reductions.

Significant ITMO demand potential. While Nordic demand for ITMOs remains complex, the analysis indicates that cumulative Nordic ITMO demand between 2036 and 2049 could range from approximately 14 million to 72 million tonnes of CO₂e, depending on the level of offset use (1%, 3%, or 5% of 1990 emissions by 2040). These figures illustrate a substantial potential role for Article 6 cooperation in helping Nordic countries achieve their climate goals and increase ambition.

Policy momentum and enabling frameworks. The European Commission's 2040 climate target proposal marks a turning point, envisioning limited ITMO use of up to 3% of 1990 emissions across the EU. If adopted, this would open a critical window between 2036 and 2049 for EU member states, including the Nordics, to leverage Article 6 cooperation. Several Nordic countries are already preparing to integrate ITMOs into their climate strategies: Norway and Sweden have announced concrete plans, while Denmark, Finland, and Iceland are expected to align with evolving EU frameworks. The manner in which the Commission's proposal to use ITMOs equivalent to 3% of 1990 net CO₂ emissions to meet the 2040 climate target is implemented and integrated into the broader EU climate policy framework will be a key factor in shaping Nordic demand.

The private sector as strategic driver of demand. The Nordic private sector is expected to play a decisive role. Nordic companies have demonstrated strong climate leadership through net-zero commitments, participation in voluntary carbon markets, and first ITMO transactions. Going forward, demand is likely to shift toward high-integrity credits. If compliance frameworks evolve to incorporate ITMOs, such as through the EU ETS, CBAM obligations, or national schemes, private sector demand for ITMOs could scale substantially. Even in the absence of mandates, voluntary demand is expected to remain robust, reflecting corporate ambition. To unlock potential, clear guidance, strong market signals, and coordinated action between governments, the EU, and private actors is essential.

Cost effective climate action. ITMOs represent a significant cost-saving opportunity. While Nordic and EU carbon prices are expected to climb from over €100/tCO₂e today to €240–290 by 2040 and approximately €450 by 2050, early Article 6 pilot transactions suggest ITMO prices in the range of €35–70/tCO₂e. By strategically combining high-cost domestic abatement with lower-cost ITMO procurement, Nordic governments and companies can achieve climate goals more efficiently, redirecting savings toward innovation, clean technology deployment, or additional mitigation.

Key recommendations for Nordic governments are:

- Conduct detailed assessments of sector- and country-specific marginal abatement costs to identify where ITMO use can deliver the greatest cost savings
- Design national climate targets, frameworks and procurement mechanisms to facilitate the efficient integration of Article 6 into domestic mitigation pathways
- Ensure the use of high-integrity, durable and transparent credits to protect environmental integrity
- Provide clear regulatory guidance on corresponding adjustments and recognition of credits in compliance frameworks and corporate climate strategies
- Expand bilateral cooperative agreements and pilot initiatives with host countries

CARBON LIMITS

- Establish Article 6 market infrastructure and incentives to reduce costs and risks for private sector engagement, e.g. through public-private partnerships, public guarantees, pooled funds, and pilot programs
- Provide targeted education for the private sector on navigating Article 6 mechanisms, managing project pipelines, and operationalizing bilateral deals

Key recommendations for the Nordic private sector are:

- Embed Article 6 into corporate climate strategies
- Ensure that carbon market participation complements direct emissions reductions, not replace them
- Prioritize high-integrity and authorized carbon credits and explore mitigation contribution claims
- Work closely with policymakers and financiers to shape the enabling environment
- Engage in pilot projects and early transactions to gain experience
- Team up through sector coalitions or pilots to share Article 6 knowledge, aggregate demand and gain first mover experience

Table of Contents

Acknowledgements	ii
Executive Summary	iii
Abbreviations	vii
1 Introduction	A
2 Credit buyers, motivations and use-cases	B
2.1 Types of credits in international carbon markets	B
2.2 Credit buyers and uses	C
3 Climate targets in the Nordics	G
3.1 Denmark	G
3.2 Finland	H
3.3 Iceland	I
3.4 Norway	I
3.5 Sweden.....	J
3.6 Summary of Nordic national mitigation targets.....	K
4 Building a reference case for credit demand estimates	L
4.1 Historical development since 1990.....	L
Denmark.....	L
Finland.....	L
Iceland.....	L
Norway	L
Sweden.....	M
5 Key risks and enablers	M
5.1 Intended use of ITMOs by Nordic countries to meet climate targets	M
5.2 Article 6 implementation and market access	O
5.3 Global policy impacts	Q
6 ITMO demand estimation	R
7 Pathways for private sector demand	U
7.1 The business-as-usual scenario	V
7.2 The gradual adaptation scenario	V
7.3 The strategic participation scenario.....	Y
8 Cost savings from credit utilization	AA
9 Conclusions and recommendations	DD

Abbreviations

A6.4ERs	Article 6.4 Emission Reductions
ARR	Afforestation and Reforestation
BECCS	Bioenergy with Carbon Capture and Storage
CBAM	Carbon Border Adjustment Mechanism
CDM	Clean Development Mechanism
CMA	Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CSRD	Corporate Sustainability Reporting Directive
DACCS	Direct Air Carbon Capture and Storage
EEA	European Economic Area
ESR	Effort Sharing Regulation
ESRS	European Sustainability Reporting Standards
EU	European Union
EU ETS	European Union Emissions Trading System
GGGI	Global Green Growth Institute
GHG	Greenhouse Gas
IPCC	Intergovernmental Panel on Climate Change
ITMO	Internationally Transferred Mitigation Outcome
JI	Joint Implementation
LULUCF	Land Use, Land Use Change and Forestry
MoU	Memorandum of Understanding
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organization
OMGE	Overall Mitigation in Global Emissions
PACM	Paris Agreement Mechanism
REDD+	Reduced Emissions from Deforestation and Forest Degradation
SBTi	Science Based Targets Initiative
SR1.5	Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Level
TCAF	Transformative Carbon Asset Facility
UNFCCC	United Nations Framework Convention on Climate Change
VCM	Voluntary Carbon Market

1 Introduction

To meet the Paris Agreement goal of limiting global warming to around 1.5°C, countries need to cut emissions quickly and reach net zero by the middle of the century. The Nordic region, including the countries of Denmark, Finland, Iceland, Norway, and Sweden, have made ambitious commitments to reach this goal, reflected in their national climate targets as well as in a joint Declaration on Nordic Carbon Neutrality.¹ However, delivering against these targets will be challenging: While the Nordic region is making progress, stronger efforts are still needed as currently these countries are not on the trajectory to meet their national targets.²

By offering a system to trade in good of greenhouse gas (GHG) mitigation, international carbon markets can contribute to achieving national climate goals. Carbon markets allow the trading of ‘carbon credits,’ which represent a unit of GHG emissions reduced or removed. Under Article 6 of the Paris Agreement, carbon credits authorized by the host country as internationally transferred mitigation outcomes (ITMOs) can be used by other countries to meet their national climate targets and increase ambition over time.³ Such cooperation can allow for greater cost-effectiveness in meeting national targets, by transferring GHG emission reductions or removals from where they can be achieved at a lower cost to where they are more expensive.⁴ Carbon credits can also be used by the private sector, either voluntarily in the voluntary carbon market (VCM) to meet corporate climate targets or under compliance schemes, e.g. where government regulations require emission reductions to help achieve national goals.

The use of international carbon credits has a long been part of the Nordic countries’ climate change policy toolkit, within the framework of European Union (EU) legislation: During its early trading phases, the EU’s emissions trading system (ETS) allowed the limited use of carbon credits from the Clean Development Mechanism (CDM) and Joint Implementation (JI) of the Kyoto Protocol. While the EU later discontinued the eligibility of credits issued under Kyoto Protocol, emphasizing domestic mitigation, Nordic countries such as Norway and Sweden continued to integrate high-quality credits into their national targets. The EU Commission’s recent proposal for the EU’s climate target for 2040 has renewed the prospects of incorporating the use of ITMOs into the EU’s climate policy framework, potentially generating a new demand for these credits among Nordic EU member states and European Economic Area (EEA) countries.

This paper evaluates the potential demand for ITMOs in the Nordic countries to achieve their national climate targets in 2030, 2040, and 2050, under key policy scenarios, taking into account risks, barriers, and specific policy measures that may influence demand. Using a simplified method, the paper estimates potential demand for ITMOs between 2030 and 2050 under different offset share scenarios based on projections of Nordic countries’ total net emissions along a linear reduction pathway from the 2030 level to net zero in 2050. Moreover, the paper examines the potential role of the private sector in shaping Nordic credit demand and carbon market engagement. The paper also highlights potential cost-savings from ITMO-utilization in Nordic countries.

The paper starts by providing an overview of the carbon credit buyers, motivations and use-cases (Chapter 2). Chapter 3 outlines the climate targets set by the Nordic countries, while Chapter 4 sketches projected

¹ Sipilä, J., Jakobsdóttir, K., Solberg, E., Lövin, I., and Lilleholt, L.C. (2019, January 25). Declaration on Nordic Carbon Neutrality. <https://www.norden.org/en/declaration/declaration-nordic-carbon-neutrality>

² Nordic Energy Research and Nordic Council of Ministers, *Tracking Nordic Clean Energy Progress 2025* (2025).

³ Article 6 of the Paris Agreement establishes flexible mechanisms for countries to cooperate internationally in the implementation of their NDCs with the aim to “allow for higher ambition in their mitigation and adaptation actions as well as promote sustainable development and environmental integrity”, Paris Agreement, art 6.1.

⁴ Jae Edmonds et al., *Modelling the Economics of Article 6: A Capstone Report* (IETA, 2023).

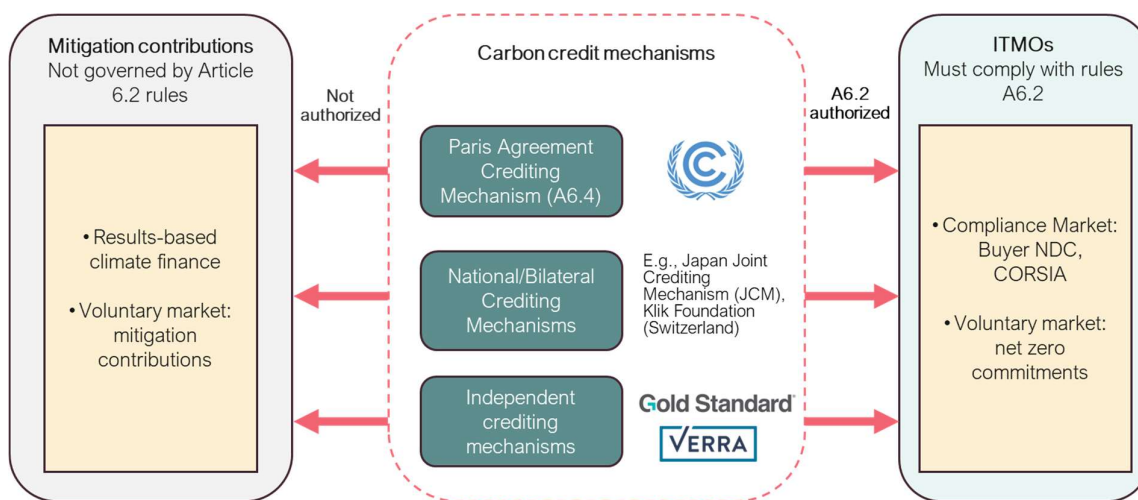
national GHG emissions for the 2030, 2040, and 2050 milestone targets as a reference case for estimating the volumes of GHG emissions that could be offset using ITMOs (Chapter 4). Chapter 5 examines key risks and enablers shaping credit demand in the Nordics, focusing on the intended use of ITMOs as indicated in Nordic and EU policy frameworks (5.1), Article 6 implementation and market access (5.2), and global policy development (5.3). These factors provide the foundation for the offset-share scenarios and ITMO demand estimates in Chapter 6. Chapter 7 outlines three potential scenarios for future demand for carbon credits among the Nordic private sector, including demand for ITMOs. The potential cost savings from using ITMOs to meet Nordic climate targets are considered in Chapter 8. The paper finalizes with concluding remarks and recommendations.

2 Credit buyers, motivations and use-cases

2.1 Types of credits in international carbon markets

The Paris Agreement introduced two distinct types of carbon credits in international carbon markets: those authorized under Article 6 of the Paris Agreement, and non-authorized credits. Authorized credits are called internationally transferred mitigation outcomes (ITMOs) and must satisfy specific requirements under Article 6.2 of the Paris Agreement, including having a corresponding adjustment.⁵ Non-authorized carbon credits do not require a corresponding adjustment. Both ITMOs and non-authorized carbon credits can be generated by the same mitigation activity under the same crediting mechanism. The use-case for the two credit categories is, however, different (Figure 1).

Figure 1 Sources of supply and demand for ITMOs and non-authorized credits



Source: Carbon Limits. 2025.

⁵ Corresponding adjustments mean that the transferring country (i.e. the host country) adds back a quantity of GHG emissions that corresponds to the mitigation outcomes underlying the transferred ITMOs into its NDC GHG inventory to create an 'emissions balance' that is compared to the NDC goal. The acquiring country subtracts the transferred ITMOs from its NDC GHG inventory when creating the emissions balance.

Buyer countries can use ITMOs to claim the underlying emission reductions or removals towards their NDC, airlines use ITMOs for CORSIA compliance,⁶ and voluntary buyers may use them for offsetting claims. ITMOs may also be used to support an overall reduction in global emissions (OMGE), i.e. when cancelled and not used for offsetting towards a mitigation target. Non-authorized credits may be used without claiming the underlying mitigation outcomes, i.e. to claim to have contributed to reductions in the host country ('mitigation contribution'), or to provide results-based finance for other environmental and social benefits.

Figure 1 also illustrates that Article 6.2 is not simply another crediting mechanism but rather a framework enabling countries to authorize the use mitigation outcomes for different markets. When a country authorizes a transfer under Article 6.2, it creates ITMOs that can be used toward Paris Agreement NDCs, CORSIA, or in the voluntary carbon market.⁷ The Article 6.4 mechanism (Paris Agreement Mechanism or PACM), is an international baseline-and-crediting mechanism subject to the authority and guidance of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA) and the supervision of a designated body, the PACM Supervisory Body.⁸ The PACM certifies emission reductions and removals (A6.4ERs) in a centralized UN system. Notably, credits from the PACM can either be authorized under Article 6.2 or can also be used without authorization, as 'mitigation contribution units', where the buyer does not claim exclusive ownership but instead supports the host country's mitigation efforts through financial contribution.

2.2 Credit buyers and uses

Carbon credits can be sold to various types of buyers. Companies, governments, non-governmental organizations (NGOs), and other public and private stakeholders can all be a source of demand for carbon credits. They purchase carbon credits for different use cases. Figure 2 outlines the primary use-cases driving international demand for carbon credits, along with the crediting mechanisms currently used to generate and issue these credits.

⁶ CORSIA mandates the use of credits that include a corresponding adjustment, prompting airlines to obtain ITMOs through Article 6.2 or 6.4 in accordance with approved methodologies. Several Article 6.2 transactions have already occurred between airlines and the Government of Guyana for CORSIA compliance, including a cancellation in February 2025, "ART - Cancelled Credits," ART Architecture for REDD+ Transactions, 2025, <https://art.apx.com/myModule/rpt/myrpt.asp?r=208>.

⁷ Countries can authorize ITMOs towards the achievement of an NDC or towards other international mitigation purposes (OIMP), Decision 2/CMA.3, paragraph 1(f). OIMP can include the use of ITMOs by private entities covered by CORSIA, or covered by compliance or voluntary mitigation targets where this is foreseen in the countries' Article 6.2 bilateral agreements.

⁸ Paris Agreement, art 6.4.

Figure 2 Crediting mechanisms and use-cases for carbon credits

Crediting mechanism		NDC	CORSIA	Other compliance	Voluntary	
Bilateral	Authorized	✓	✓	✓	✓	Voluntary: corporate voluntary and national voluntary (e.g. Sweden net-zero)
	Non-authorized	✗	✗	✓	✓	
PACM	Authorized	✓	✓	✓	✓	Other compliance: where imported units can be used against ETS, carbon tax or other obligation
	Non-authorized	✗	✗	✓	✓	
Independent crediting mechanism	Authorized	✓	✓	✓	✓	Other compliance + voluntary = 'other purposes' under Article 6.2 authorization
	Non-authorized	✗	✗	✓	✓	
Domestic crediting mechanism	Authorized	✓?	✓	✓	✓	✓ = allowed subject to relevant approvals ✓ = allowed where CORSIA or other compliance regime has approved this mechanism
	Non-authorized	✗	✗	✓	✓	

Source: Ploechl, Clemens; Sammut, Francois; Cruz, Laura; Spalding-Fecher, Randall; Zhezherin, Vladyslav. 2023. Screening and developing Article 6 activities. SPAR6C Guide 5. A GGGI publication.

In compliance markets, carbon credits can help buyers to meet GHG mitigation obligations. For example, countries can purchase credits to meet their national climate targets and NDCs, while airlines can buy them to comply with the International Civil Aviation Organization’s (ICAO) mandatory Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Credits may also be bought by entities to meet national or subnational compliance obligations, e.g. those arising under carbon taxes or emissions trading schemes (ETS). In other cases, credits are bought to provide results-based climate finance.⁹

In voluntary carbon markets (VCM), credits are bought to meet voluntary mitigation targets. While public actors too buy credits to achieve voluntary climate goals, it is especially the private sector, including companies and individuals, that has developed a strong interest in using credits for voluntary offsetting.^{10,11} This interest is mostly motivated by corporate social responsibility (CSR) concerns, environmental ethics, climate-oriented business models, and the sale of products and services with attached climate attributes.¹² The EU anti-greenwashing legislation provides guidance and requirements for claims based on the voluntary use of carbon credits. In 2024, the EU agreed to ban product-level offset claims based on carbon credits through a directive, which is to be implemented in Member States’ national legislation before the end of 2026.¹³

⁹ Results-based climate finance refers to payments that are disbursed only after independently verified climate outcomes, such as emission reductions or carbon removals, have been achieved. The emission reductions are retained by the country that has generated them and can count towards that country’s national climate target (or NDC).

¹⁰ The term ‘offsetting’ refers to the use of an equal proportion of external GHG reductions to counteract the harm of GHG emissions emitted by business, governing, livelihoods and leisure activities. Voluntary offsetting implies that the choice to offset emissions was not motivated by mandatory mitigation obligations.

¹¹ Danick Trouwloon and others, ‘Understanding the Use of Carbon Credits by Companies: A Review of the Defining Elements of Corporate Climate Claims’ n/a Global Challenges 2200158.

¹² Ibid.

¹³ European Union (2024c) Directive (EU) 2024/825 of the European Parliament and of the Council of 28 February 2024 amending Directives 2005/29/EC and 2011/83/EU as regards empowering consumers for the green transition through better protection against unfair practices and through better information, Official Journal of the European Union, L. Available at: <https://eur-lex.europa.eu/eli/dir/2024/825/oj>.

Many companies buy carbon credits to make corporate-level climate claims such as net zero, carbon or climate neutral (Box 1), e.g. in response to initiatives such as the United Nations-backed Race to Zero Campaign¹⁴ or the Science Based Targets Initiative (SBTi)¹⁵. Alternatively, instead of using carbon credits to counterbalance their own emissions, voluntary buyers can make claims about supporting mitigation elsewhere.

Box 1 Climate claims and their meaning

Offsetting claims describe the use of carbon credits to compensate for an equivalent volume of GHG emissions – such as those linked to a company's operations, products or services – so that the net effect on global emissions is neutral. The Intergovernmental Panel on Climate Change (IPCC) describes offsetting as a process in which one entity reduces, avoids, or removes a unit of GHG emissions and another party purchases that unit to neutralize its own emissions. As outlined by the UNFCCC's Race to Zero campaign, valid offsetting requires meeting strict criteria, including that the mitigation is additional, precisely measured, and not claimed by any other party.

Net zero claims typically refer to a commitment to reach an equilibrium of net zero emissions by a future date, whereby offsetting through high-quality carbon credits is only used to neutralize residual emissions that cannot be abated otherwise. The concept is reflected in the long-term goals of the Paris Agreement and has gained momentum with the IPCC's Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Level and Related Global Greenhouse Gas Emission Pathways (SR1.5) in 2018, which highlighted that for global warming to be limited to 1.5°C, global anthropogenic CO₂ emissions would need to attain net zero by no later than 2050. Consequently, commitments that aim to achieve net zero by 2050 are now considered 'science-based' net zero commitments, aligned with the long-term goals of the Paris Agreement.

Climate neutrality claims express a scenario in which all GHG emissions associated with an actor's operations, products or services are fully counterbalanced by an equivalent or greater volume of high-integrity carbon credits. These credits must be exclusively claimed by the actor, ensuring that the combined effect of the actor's emissions and the high-integrity carbon credits results in no net increase in global GHG emissions. Only actors that have adopted, and are progressing toward, science-based targets consistent with limiting the increase in the global average temperature to 1.5 degrees are eligible to make such carbon neutrality claims.

Mitigation contribution claims articulate the voluntary cancellation of carbon credits to support the achievement of national mitigation targets and NDCs. By making a contribution claim, the entity does not assert that it is neutralizing or compensating for its own emissions.

Source: Adapted from Ahonen, Hanna-Mari, Carolina Inclan, Juliana Kessler, and Aayushi Singh. 2023. "Raising Climate Ambition with Carbon Credits - Exploring the Roles and Interplay of the Voluntary Carbon Markets and Article 6 in Contributing to the Implementation of National Climate Targets and Raising Global Ambition."

Today, there are several motivations for Nordic credit buyers to participate in international carbon markets, as summarized below.¹⁶

¹⁴ 'Race to Zero' (*Climate Champions*), <https://climatechampions.unfccc.int/system/race-to-zero/>.

¹⁵ 'Ambitious Corporate Climate Action - Science Based Targets Initiative', <https://sciencebasedtargets.org/>.

¹⁶ Kenneth Möllersten et al., *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*, C10098 (IVL Swedish Environmental Research Institute, 2025), <https://ivl.diva-portal.org/smash/get/diva2:1977463/FULLTEXT01.pdf>.

MEETING NATIONAL CLIMATE NEUTRALITY TARGETS

Nordic countries like Norway and Sweden are using carbon credits to help achieve their national climate neutrality targets. Their policies on the use of carbon credits for these goals are further elaborated in Section 5.1.

MEETING VOLUNTARY NET ZERO TARGETS (E.G. SBTi CORPORATE NET ZERO STANDARD)

Nordic companies such as Equinor, H&M, IKEA, Fortum, Posti, and others with validated corporate-level targets under the SBTi purchase carbon credits as part of long-term net-zero strategies (Table 1).¹⁷ While the SBTi Corporate Net-Zero Standard does not allow carbon credits to be used to meet SBTi mitigation targets prior to the designated net-zero year, companies can still engage in credit purchases to contribute to climate action beyond their value chain, to support market development, or to prepare for future net-zero implementation. Notably, several Nordic companies explicitly refrain from using carbon credits prior to reaching their net zero targets.¹⁸ In addition, achieving net-zero requires that all residual or excluded emissions at the target year be neutralized through durable carbon dioxide removal (CDR) solutions. This credit buyer category therefore reflects significant future demand for carbon credits, especially those generated through carbon dioxide removal (CDR). An up-to-date list of Nordic companies can be found on the SBTi website.¹⁹

MEETING VOLUNTARY CARBON NEUTRALITY TARGETS OR OFFSETTING A PRODUCT OR SERVICE

This buyer category historically represented the largest source of demand for carbon credits in the Nordics. Examples of Nordic companies in this category include Vasakronan, Max Burgers, Arvid Nordqvist, or DHL (Table 1).²⁰ Carbon neutrality claims for products or services will face strict limitations from the end of 2026 under the EU's Empowering Consumers for the Green Transition Directive.²¹

SUPPORTING MARKET, TECHNOLOGY AND CAPACITY DEVELOPMENT

This buyer group includes Nordic companies investing in carbon credits to help build the domestic CDR market or other types of pilot projects, either for near-term marketing purposes, contribution claims, or offsetting claims guided by frameworks such as SBTi.²² As an example, Sparebank 1 Sør-Norge recently executed the first-ever purchase of a symbolic amount of ITMOs under the new bilateral agreement between Switzerland and Norway. SpareBank 1 uses these credits to counterbalance hard-to-abate operational emissions, however, the main intention of the transactions was to “pave the way for private sector use of the Paris Agreement market mechanisms, and for projects that capture, store or remove carbon”.²³ Nordic actors buying carbon credits to promote the growth of an ecosystem for CDR include Klarna, Spotify and H&M (Table 1).²⁴

CONTRIBUTING BEYOND THE OWN VALUE CHAIN

¹⁷ Kenneth Möllersten et al., *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*, C10098 (IVL Swedish Environmental Research Institute, 2025), <https://ivl.diva-portal.org/smash/get/diva2:1977463/FULLTEXT01.pdf>.

¹⁸ Kenneth Möllersten et al., *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*.

¹⁹ “Target Dashboard - Science Based Targets,” Science Based Targets Initiative, accessed August 4, 2025, <https://sciencebasedtargets.org/target-dashboard>.

²⁰ Kenneth Möllersten et al., *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*.

²¹ Directive (EU) 2024/825 of the European Parliament and of the Council of 28 February 2024 Amending Directives 2005/29/EC and 2011/83/EU as Regards Empowering Consumers for the Green Transition through Better Protection against Unfair Practices and through Better Information, EP, CONSIL (2024). <http://data.europa.eu/eli/dir/2024/825/oj/eng>.

²² Kenneth Möllersten et al., *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*. CL Private Sector Study

²³ “First-Ever Trade of Negative Emissions under Article 6 of the Paris...” Neustark, accessed August 4, 2025, <https://www.neustark.com/en/news/neustark-sparebank-1-sor-norge-launch-carbon-removal-pilot>.

²⁴ Kenneth Möllersten et al., *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*.

Research suggests that Nordic companies are increasingly interested in purchasing carbon credits to contribute to mitigation elsewhere. For example, companies like Vasakronan plan to incorporate such contributions into their carbon credit purchase portfolios to finance broader goals such as NDC achievement and sustainable development in other countries.²⁵

Table 1 Nordic credit buyer categories and examples

Buyer category	Examples
Nordic governments with carbon neutrality targets	Norway, Sweden
Nordic companies with net-zero targets (e.g., SBTi Corporate Net-Zero Standard)	Europris, H&M, IKEA, Fortum, Posti, Equinor
Nordic companies with carbon-neutrality targets or those offsetting a product or service	Vasakronan, Max Burgers, Arvid Nordqvist, DHL
Nordic companies supporting market, technology and capacity development	Klarna, Spotify, H&M, Sparebank 1 Sør-Norge
Nordic companies acting beyond their own value chain	Vasakronan

Source: Kenneth Möllersten, Liv Lundberg, Clara Wickman, Claire Wigg, and Sjoerd Bakker. 2025. *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*. C10098. IVL Swedish Environmental Research Institute.

3 Climate targets in the Nordics

Emissions are often categorized per sector. In the EU, three pillars exist, namely the Effort Sharing Regulation (ESR) which consists of emissions from, e.g., transport, agriculture and buildings, the EU Emission Trading System (EU ETS) which mainly consists of industrial emissions, and the Land Use Land Use Change and Forestry (LULUCF) which consists of land-related emissions and removals by sinks.

The Nordic national mitigation targets are heterogeneous, despite similarities in formulations. For example, Denmark, Finland, Iceland and Sweden all have net-zero targets, but the targets differ in crucial aspects such as timelines, sectoral coverage, and milestone targets on the path of reaching net-zero emissions. Norway does not have a net-zero target, but comparing the Norwegian “low emission society” target to a net-zero country may not be more of an “apple and oranges” comparison than comparing one country’s net-zero target to another country’s net-zero target.

3.1 Denmark

Denmark has national targets to reduce total emissions (ESR, EU ETS and LULUCF)²⁶ by 50-54% by 2025 and 70% by 2030 compared to 1990 levels. In addition, Denmark shall achieve net-zero emissions across all sectors by 2050 at the latest. These targets are enshrined in the Danish Climate Act, which bounds the targets by law. The Climate Act also states that the national targets must be updated at least every five years

²⁵ Carbon Limits. *Nordic Private Sector Interest in Paris Agreement Article 6 Implementation*. (Forthcoming).

²⁶ Klimarådet (2023). *Statusrapport 2023*. <https://klimaraadet.dk/da/rapport/statusrapport-2023>

with a 10-year perspective, and that the new targets must be no less ambitious than the previous targets.²⁷ Suggestions have been made by the Danish government to advance the net-zero target to 2045, and to set a target of 110 % net emission reductions by 2050 compared to 1990.^{28 29} This update is yet to be enshrined by Danish climate law.³⁰ In addition to the economy-wide climate targets, the Danish government has set a target of emissions reductions of 55-65 % by 2030 compared to 1990 levels in the agricultural and forestry sector.³¹

Neither the net-zero target for 2045, nor the 2050 net-negative target of 110 % emission reductions compared to 1990 levels are separated in terms of reductions and counterbalancing measures, such as CDR contributions. However, four scenarios fulfilling the long-term goals have been presented by the Danish Council for Climate Change.³² The residual emission level is between 4-13 Mton CO₂/year in these scenarios.

3.2 Finland

Finland has set a climate neutrality target to be achieved by 2035 at the latest, which covers all sectors (ESR, EU ETS, and LULUCF). In addition, emissions in the ESR and EU ETS sectors combined shall decrease by at least 60 % by 2030, 80 % by 2040, and by at least 90 % with ambitions towards 95 % by 2050, compared to 1990 levels. All these targets are enshrined in the Climate Act from 2022.³³ After 2035, net-negative emissions shall be achieved.³⁴ The Finnish net-negative target is not quantified for any certain year.

There is no explicit target for emission reductions by 2035, when the Finnish net-zero target is due. A central assumption in the attainability of net-zero emissions by 2035 is the expected size of the carbon sink in the LULUCF sector. It was expected that, without any additional measures, the LULUCF sector would be a net sink of 18 Mton CO₂ by 2035. With additional measures that are planned to be implemented, the net sink would grow to 21 Mton CO₂ by 2035. Thus, to achieve the net-zero target as defined by Finland, the emissions in the ESR and EU ETS sectors together can amount to 21 Mton CO₂ by 2035, which would imply roughly 70 % emissions decrease in these sectors compared to 1990 levels. If, however, the LULUCF sink is smaller than expected, additional emission reductions will be needed in the ESR and EU ETS sectors to attain the target.

²⁷ Retsinformation.dk (2021). *Klimaloven*. <https://www.retsinformation.dk/eli/ta/2021/2580>

²⁸ Statsministeriet (2022). *Ansvar for Danmark - Det politiske grundlag for Danmarks regering*. <https://www.stm.dk/statsministeriet/publikationer/regeringsgrundlag-2022/>

²⁹ Klimarådet (2023). *Statusrapport 2023*. <https://klimaraadet.dk/da/rapport/statusrapport-2023>

³⁰ Retsinformation.dk (2021). *Klimaloven*. <https://www.retsinformation.dk/eli/ta/2021/2580>

³¹ Finansministeriet (2021). *The government enters into a broad agreement on the green transformation of Danish agriculture*. <https://fm.dk/nyheder/nyhedsarkiv/2021/oktober/regeringen-indgaar-bred-aftale-om-groen-omstilling-af-dansk-landbrug/>

³² Klimarådet (2023). *Statusrapport 2023*. <https://klimaraadet.dk/da/rapport/statusrapport-2023>

³³ Finlex (2022). *Klimatlag 423/2022*. <https://www.finlex.fi/sv/laki/alkup/2022/20220423>

³⁴ Finlex (2022). *Klimatlag 423/2022*. <https://www.finlex.fi/sv/laki/alkup/2022/20220423>

The LULUCF sector in Finland has been a net sink historically, with net removals varying between about 10 to 30 Mton CO₂/year since the 1990-2020.³⁵ Lately, the LULUCF sector has turned into a significant net emitter of about 11-12 MtCO₂e/year between 2021-2023, which can be attributed to changes such as increased forest harvesting rates and lower growth rates.³⁶ The recent development in the LULUCF sink calls the net-zero target by 2035 into question unless other counterbalancing measures are undertaken.³⁷

3.3 Iceland

Iceland has committed to achieve net-zero emissions across all sectors (ESR, EU ETS, and LULUCF) no later than 2040 and aims to become fossil fuel-free by 2050. The 2050 target is planned to set Iceland on path to negative emissions,³⁸ but the net-negative target is not quantified for any certain year. Iceland has an interim target to achieve emission reductions in the ESR sector of 55% by 2030 compared to 2005 levels^{39,40}.

There are no emission reduction targets for 2040. However, the LT-LEDS from 2021 contain a scenario analysis for Icelandic emissions by 2040, with emissions in the ESR, EU ETS and LULUCF sectors combined amounting to 0-2 Mton CO₂ depending on the scenario.⁴¹ This requires major achievements in the LULUCF sector, going from a net emitter of 9.4 Mton CO₂ in 2020⁴² to a net sink of at least 1 Mton CO₂ in 2040, in addition to emission cuts in the ESR and EU ETS.⁴³ Note that these are not targets nor projections, only scenarios.

3.4 Norway

Norway does not have a net-zero target, but instead a net-emission reduction target, or a “low emission society target” translated from Norwegian. The low emission society target is for 2050 and entails a net emission reduction in the ESR and EU ETS sectors of 90-95 % compared to 1990 levels.⁴⁴ Norway also has an interim target covering the same sectors of at least 55 % emission reductions by 2030 compared to 1990

³⁵ Jord- och Skogsbruksministeriet (2022). *Statsrådets redogörelse om en klimatplan för markanvändningssektorn*. https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164302/MMM_2022_16.pdf?sequence=4&isAllowed=yhttps://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164302/MMM_2022_16.pdf?sequence=4&isAllowed=y

³⁶ Luke National Forest Resources Institute Finland, 2025.

³⁷ Kujanpää, L. et al. (2023). *Carbon dioxide use and removal - Prospects and policies*. https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164795/VNTEAS_2023_19.pdf

³⁸ Government of Iceland (2021). *On the Path to Climate Neutrality - Iceland's Long-Term Low Emission Development Strategy*. https://unfccc.int/sites/default/files/resource/iceland_LTS1_2021.pdf

³⁹ Government of Iceland (2021). *Agreement on the Platform for the Coalition Government of the Independence Party, the Left Green Movement and the Progressive Party*. <https://www.stjornarradid.is/library/05-Rikisstjorn/Agreement2021.pdf>

⁴⁰ Helgadóttir, Á. et al. (2023). *Report on Policies, Measures, and Projections of Greenhouse Gas Emissions in Iceland until 2050*.

⁴¹ Government of Iceland (2021). *On the Path to Climate Neutrality - Iceland's Long-Term Low Emission Development Strategy*. https://unfccc.int/sites/default/files/resource/iceland_LTS1_2021.pdf

⁴² UNFCCC (2023). *GHG data from UNFCCC*. <https://unfccc.int/topics/mitigation/resources/registry-and-data/ghg-data-from-unfccc>

⁴³ Government of Iceland (2021). *On the Path to Climate Neutrality - Iceland's Long-Term Low Emission Development Strategy*. https://unfccc.int/sites/default/files/resource/iceland_LTS1_2021.pdf

⁴⁴ Klima- og miljødepartementet (2023). *Klimaloven*. <https://lovdata.no/dokument/NL/lov/2017-06-16-60>

levels.⁴⁵ The 2030- and 2050-targets are enshrined in the Norwegian Climate Change Act, which bounds the targets by law.⁴⁶

While no recent climate policy documents seem to mention it, Norway has seemingly abandoned a target for net-zero emissions by 2030, with undefined sectoral coverage. This target is not part of the Norwegian NDC nor is it enshrined in the Climate Change Act, but it was adopted in the Norwegian parliament in 2008 with the target year 2050 which was revised in 2016 to 2030. It does not include any emission reduction or CDR targets and is defined as compensating for national emissions by international mitigation through market mechanisms.⁴⁷ The target for 2030 is a net emission reduction target without separation between emission reductions and CDR. In June 2025, Norway submitted its revised NDC for 2035, aiming to reduce absolute economy-wide emissions by at least 70% to 75% compared to 1990 levels.⁴⁸

3.5 Sweden

Sweden has national mitigation targets that are due in 2030, 2040 and 2045. The emission reduction targets for 2030 and 2040 are limited to the ESR sector where emissions shall decrease by 63% and 75%, respectively, compared to 1990 levels. In addition, the transport sector emissions (part of the ESR emissions) shall decrease by 50 % by 2030 compared to 2010 levels.⁴⁹ Net-zero emissions shall be achieved by 2045 at the latest, and this target covers the ESR and EU ETS sectors.⁵⁰ After 2045, Sweden shall achieve net negative emissions.⁵¹ The net-negative target is not quantified for any year.

The Swedish mitigation targets emphasize emission reductions. However, a fraction of the target can be fulfilled through so-called supplementary measures. Three types of supplementary measures have been identified: the enhancement of sinks in the LULUCF sector, CDR from Bio Energy with Carbon Capture and Storage (BECCS) and international climate investments.⁵² Measures in the LULUCF sector can only be counted as a supplementary measure if it goes beyond current measures and what is required. Since the adoption of the targets in 2017, the EU requirement for LULUCF uptake in Sweden has increased significantly, which makes it harder to go beyond existing requirements and to use this overperformance as

⁴⁵ UNFCCC (2022). *Update of Norway's nationally determined contribution*. https://unfccc.int/sites/default/files/NDC/2022-11/NDC%20Norway_second%20update.pdf

⁴⁶ Klima- og miljødepartementet (2023). *Klimaloven*. <https://lovdata.no/dokument/NL/lov/2017-06-16-60>

⁴⁷ Stortinget (2016). *Innst. 407 S (2015–2016) Innstilling til Stortinget fra energi- og miljøkomiteen Prop. 115 S (2015–2016)* <https://www.stortinget.no/globalassets/pdf/innstillinger/stortinget/2015-2016/inns-201516-407.pdf>

⁴⁸ "Norway NDC 2035 | UNFCCC," accessed August 22, 2025, <https://unfccc.int/documents/648557>.

⁴⁹ Regeringskansliet (2017). *Regeringens proposition 2016/17:146 - Ett klimatpolitiskt ramverk för Sverige*. <https://www.regeringen.se/contentassets/480ed767687b4b7ba6c960f9c1d4857f/ett-klimatpolitiskt-ramverk-for-sverige-prop.-201617146>

⁵⁰ Regeringskansliet (2017). *Regeringens proposition 2016/17:146 - Ett klimatpolitiskt ramverk för Sverige*. <https://www.regeringen.se/contentassets/480ed767687b4b7ba6c960f9c1d4857f/ett-klimatpolitiskt-ramverk-for-sverige-prop.-201617146>
<https://www.regeringen.se/contentassets/480ed767687b4b7ba6c960f9c1d4857f/ett-klimatpolitiskt-ramverk-for-sverige-prop.-201617146>

⁵¹ Regeringskansliet (2017). *Regeringens proposition 2016/17:146 - Ett klimatpolitiskt ramverk för Sverige*. <https://www.regeringen.se/contentassets/480ed767687b4b7ba6c960f9c1d4857f/ett-klimatpolitiskt-ramverk-for-sverige-prop.-201617146>

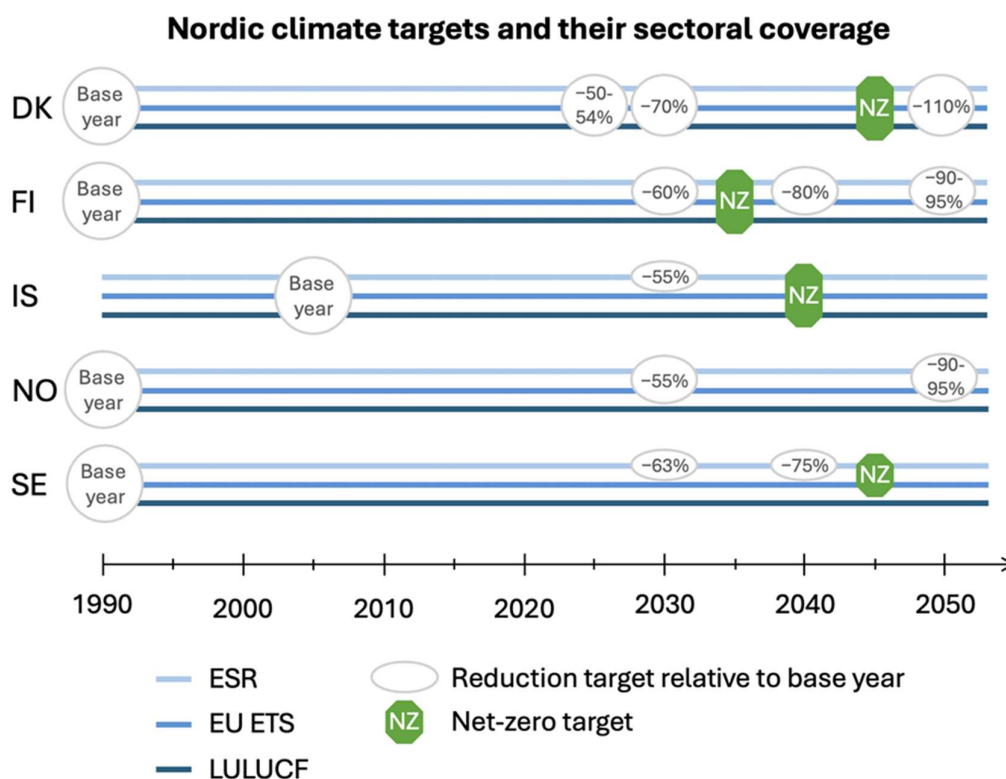
⁵² Regeringskansliet (2017). *Regeringens proposition 2016/17:146 - Ett klimatpolitiskt ramverk för Sverige*. <https://www.regeringen.se/contentassets/480ed767687b4b7ba6c960f9c1d4857f/ett-klimatpolitiskt-ramverk-for-sverige-prop.-201617146>

a supplementary measure.⁵³ Supplementary measures are allowed to contribute to a maximum of 8 percentage points for the 2030 goal, 2 percentage points for the 2040 goal and 15 percentage points for the 2045 goal. Thus, the minimum emission reduction if full use of supplementary measures is 55% by 2030 and 73% by 2040 compared to 1990 levels in the ESR sector, and 85% by 2045 compared to 1990 levels in the ESR and EU ETS sector.

3.6 Summary of Nordic national mitigation targets

Figure 3 summarizes the Nordic climate targets, where the climate target coverage is indicated.

Figure 3 Overview of Nordic mitigation targets, including sectoral coverage of targets and timelines. Sectoral coverage is indicated by the shapes representing emission reduction or net-zero targets.



Source: Dufour, M. & Möllersten, K. (2025). *Nordic net-zero: Counterbalancing residual emissions in the context of unevenly distributed BECCS potentials*. *Climate Policy*. DOI: 10.1080/14693062.2025.2546116.

⁵³ Naturvårdsverket (2023). *Kompletterande åtgärder enligt det klimatpolitiska ramverket*. <https://www.naturvardsverket.se/493bd4/contentassets/72ca3395d21f434a9ba454676be8b612/redovisning-ru-kompletterande-atgarder-enligt-klimatpolitiska-ramverket.pdf>

4 Building a reference case for credit demand estimates

This chapter outlines GHG emission trends in the Nordic countries and projected national emissions that can be derived on the basis of the national climate targets. A reference case against which the potential demand for offsetting can be analysed is then proposed.

4.1 Historical development since 1990

Departing from the Nordic countries' respective national targets, the following emission levels can be projected.

Denmark

Denmark's national target to reduce total net emissions (ESR, EU ETS and LULUCF) by 70% relative to 1990 by 2030 translates to approximately 23 MtCO_{2e}. In 2050, the total net emissions shall be 0 MtCO_{2e}. The proposal by the Danish government to advance the net-zero target to 2045, and to set a target of 110 percent net emission reductions by 2050 compared to 1990, which are yet to be enshrined by Danish climate law, would reduce the accumulated Danish emissions during the 2030 to 2050 period further.

Finland

Concerning the Finnish 2035 climate neutrality target, the original plan was to use the previously large LULUCF net removal (originally estimated to 21 MtCO₂/year by 2035) to attain the target. However, with the LULUCF sector currently being a significant net emitter instead, there are great uncertainties surrounding the attainability of the target. The separate target to reduce emissions from the ETS and ESR sectors (see section 3.2) implies emissions from those sectors amounting to 28, 14, and 7 MtCO_{2e} for the years 2030, 2040, and 2050, respectively. The future magnitude of the LULUCF sector net emissions is surrounded by significant uncertainty.

Iceland

In addition to the net-zero target for 2040, covering total net emissions, Iceland has an interim target to achieve emission reductions in the ESR sector of 55% by 2030 compared to 2005 levels.⁵⁴ Given the 2005 level emissions in the ESR sector in Iceland were 3.3 Mton CO_{2e},⁵⁵ 2030 ESR emissions should be no higher than 1.5 Mton CO_{2e}.

Norway

The Norwegian "low emission society target" entails a net emission reduction in the ESR and EU ETS sectors of 90-95 % compared to 1990 levels and an interim target covering the same sectors of at least 55 % emission reductions by 2030. The targets imply emissions of approximately 23 MtCO_{2e} in 2030 and 2.5-5 MtCO_{2e} in 2050.

⁵⁴ Government of Iceland (2021). *Agreement on the Platform for the Coalition Government of the Independence Party, the Left Green Movement and the Progressive Party*, <https://www.stjornarradid.is/library/05-Rikisstjorn/Agreement2021.pdf>; Helgadóttir, Á. et al. (2023). *Report on Policies, Measures, and Projections of Greenhouse Gas Emissions in Iceland until 2050*, https://ust.is/library/Skrar/loft/NIR/0_PaMsProjections_Report_2023_WITH%20BOOKMARKS.pdf.

⁵⁵ Government of Iceland (2020). *Iceland's 2020 Climate Action Plan*, <https://www.government.is/library/01-Ministries/Ministry-for-The-Environment/201004%20Umhverfisraduneytid%20Adgerdaaetlun%20EN%20V2.pdf>.

Sweden

For Sweden, the minimum emission reduction assuming the full use of so-called supplementary measures is 55 percent by 2030 and 73 percent by 2040 compared to 1990 levels in the ESR sector, and 85 percent by 2045 compared to 1990 levels in the ESR and EU ETS sectors. Based on these targets, it can be derived that ESR emissions must not exceed approximately 21 MtCO_{2e} in 2030 and 12 MtCO_{2e} in 2040. Furthermore, the 2045 emissions in the ESR and ETS sectors must not exceed 10.7 MtCO_{2e}.

5 Key risks and enablers

5.1 Intended use of ITMOs by Nordic countries to meet climate targets

Demand for ITMOs in the Nordics depends on how their use is integrated into the EU and national climate policy framework. If ITMOs can be used to achieve climate goals, this would increase the demand for these types of credits. The EU as well as some of the Nordic countries have signalled their intention to use ITMOs to help achieve their climate targets (Figure 4)

Figure 4 Intended use of ITMOs by Nordic countries and the EU

	 EU	 Denmark	 Finland	 Iceland	 Norway	 Sweden
Intended use of ITMOs	?				✓	✓
	Proposed for the EU's 2040 target				For national 2030 and 2035 targets	For national 2030, 2040, and 2045 targets

The European Climate Law requires the EU targets for 2030 and 2050 to be achieved through domestic net emission reductions within the EU, without contributions from the use of international credits.⁵⁶ However, the European Commission is considering allowing their use toward achieving the EU's 2040 climate goal. In its proposal for the EU's climate target for 2040, published on 2 July 2025, the Commission "envisages a role for the limited use of high-quality international credits under Article 6 of the Paris Agreement".⁵⁷ More specifically, the Commission suggests allowing the use of ITMOs in 2040 equivalent to 3% of net CO₂ emissions in 1990 (around 460 MtCO_{2e}),⁵⁸ starting from 2036.⁵⁹ Given that the target of achieving climate neutrality by 2050 at the latest specifically excludes the use of international credits, the use of ITMOs would

⁵⁶ The European Parliament and the Council of the European Union, "Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 Establishing the Framework for Achieving Climate Neutrality and Amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law')," <https://eur-lex.europa.eu/eli/reg/2021/1119/oj/eng>.

⁵⁷ European Commission, "Proposal for a Regulation of the European Parliament and the Council Amending Regulation (EU) 2021/1119 Establishing the Framework for Achieving Climate Neutrality," February 7, 2025, COM(2025) 524 final, https://climate.ec.europa.eu/document/download/e1b5a957-c6b9-4cb2-a247-bd28bf675db6_en.

⁵⁸ "The EU's Return to International Carbon Credits," World Economic Forum, July 28, 2025, <https://www.weforum.org/stories/2025/07/eu-return-to-international-carbon-credits/>.

⁵⁹ European Commission, "Proposal for a Regulation of the European Parliament and the Council Amending Regulation (EU) 2021/1119 Establishing the Framework for Achieving Climate Neutrality."

thus be limited to the time period between 2036 and 2049. If adopted by the EU Parliament and Council, this would represent a significant temporary demand for ITMOs in the EU (Table 2).⁶⁰

Table 2 Impact of ITMO use on net 2040 emissions in 2040 according to the proposed 2040 climate target of the EU

Metric	Value	Explanation
1990 emissions (reference point)	100%	Baseline
Targeted reduction by 2040	90%	Includes domestic reductions and removals
Remaining net emissions (2040 target)	10%	Net emissions allowed after applying reductions / removals
Allowed use of ITMOs	3% (of 1990 emissions)	International credits allowed to count toward the target

Source: Adapted from Jakob Graichen, Lambert Schneider, Hannes Boettcher, "The EU's 2040 climate target: Assessment of the proposal by the EU Commission" July 2, 2025, Oeko-Institute.

According to the proposal for the EU's climate target for 2040, the Commission may propose an amendment to the EU Climate law to support adjustments to the percentage of ITMOs that can be used to achieve post-2030 climate targets, leaving open the possibility to revisiting the permitted use of international credits, potentially even allowing a greater share.⁶¹ Countries like France already indicated a preference for a higher share of 5 – 10%.⁶²

Contrary to Denmark, Finland, and Iceland, which have not established distinct national approaches and will follow the EU's framework for the use of ITMOs in achieving their climate targets, Norway and Sweden adopted their own approaches on the use of ITMOs to achieve national climate targets.

In Norway, ITMOs can be used to cover any shortfall in meeting Norway's 2030 climate neutrality target, in a situation where the cooperation with the EU does not fully achieve a 55% emission reduction. The share of ITMOs allowed to contribute to Norway's targets after 2030 will, among other things, depend on whether the climate agreement with the EU is continued after 2030.⁶³ Continuation means that EU rules for the use of credits may also apply to Norway after 2030. In June 2025, Norway submitted its revised NDC for 2035, which indicated Norway's intention to use ITMOs to achieve the 70-75% emission reduction target. The Norwegian government has not specified whether the purchase and use of ITMOs will be possible to meet Norway's low emission society target is for 2050.

In Sweden, the use of ITMOs is allowed as part of the so-called 'supplementary measures'. The term encompasses the increased uptake of carbon dioxide by forests as the result of additional measures, the use of verified emission reductions carried out outside the Swedish borders, as well as carbon capture and storage based on the combustion of biomass (bio-CCS). Such measures may be used to achieve up to 8%

⁶⁰ According to estimates, it could mean that about 300 to 400 million credits would be retired by 2040,⁶⁰ and 1,026 million carbon credits over the period between 2036 to 2049, see Jacob Graichen et al., "The Proposed 2040 Climate Target for the EU," February 7, 2025, <https://www.oeko.de/en/publications/the-proposed-2040-climate-target-for-the-eu/>.

⁶¹ European Commission, "Proposal for a Regulation of the European Parliament and the Council Amending Regulation (EU) 2021/1119 Establishing the Framework for Achieving Climate Neutrality."

⁶² "Brussels Drafts Law Outsourcing EU Climate Efforts to Poorer Countries," POLITICO, June 18, 2025, <https://www.politico.eu/article/brussels-draft-law-outsourcing-eu-climate-efforts-to-poorer-countries-carbon-credits-sustainability-co2-environment/>.

⁶³ The 2050 Climate Change Committee, *The Transition to Low Emissions. Climate Policy Choices towards 2050.*, Norwegian Official Report (NOU) 2023: 25 (2023), <https://files.nettsteder.regjeringen.no/wpuploads01/sites/479/2024/02/The-2050-ClimateChangeCommittee-ENDELIG.pdf>.

of the 2030 target, 2% of the 2040 target and 15% of the 2045 net-zero target. However, the exact share of international credits, including ITMOs, within these percentages has not yet been clearly defined. As of today, there is no official position on how the current Swedish approach to the use of ITMOs will be integrated with the EU's policy framework, should the EU Commission's proposal for the EU's climate target for 2040 be adopted. The Swedish EPA is working on its forthcoming recommendations.

5.2 Article 6 implementation and market access

Demand for ITMOs in the Nordic countries will also hinge on the establishment of enabling conditions that support credible, scalable, and integrity-focused implementation of Article 6 of the Paris Agreement, such as policy harmonization, integrated infrastructure, and readiness among both buyers and suppliers.

Norway and Sweden have been pioneers in the procurement of ITMOs under Article 6 of the Paris Agreement. The Norwegian Global Emission Reduction Initiative (NOGER) cooperates bilaterally or multilaterally with host countries for the purpose of ITMO acquisitions. To date, Norway has signed bilateral agreements with Benin, Zambia and Switzerland and has established several Memorandums of Understanding (MoUs), including with Jordan, Morocco, Senegal, Zambia, and Indonesia. NOGER is actively seeking cooperation at both the project and program level in partnership with international organizations and multilateral banks such as the Global Green Growth Institute (GGGI) and the World Bank, e.g. through participation in GGGI's Designing Article 6 Policy Approaches (DAPA) program and the World-Banks Transformative Carbon Asset Facility (TCAF). This active role recently enabled the purchase of ITMOs under the Swiss-Norwegian bilateral agreement by a private company, Sparebank 1 Sør-Norge, marking another significant milestone of Article 6 implementation.⁶⁴

The Swedish Energy Agency (SEA) is managing a national programme to procure ITMOs from third countries for use towards Sweden's national target. The SEA has established several bilateral agreements with Ghana, Nepal, Zambia and Kenya, as well as memoranda of understanding with three other countries.⁶⁵ The SEA has also concluded a non-binding Memorandum of Understanding with Switzerland on piloting the international transfer of a "symbolic amount" of ITMOs from industrial carbon removal activities, such as bio-CCS, between the two countries⁶⁶. Private entities could be involved as sellers and/or buyers in both countries. This pilot cooperation aims "to engage with private stakeholders to advance the use of Article 6 of the Paris Agreement for development and deployment of carbon removal technologies and to enhance the understanding of the necessary frameworks at international and national level"⁶⁷.

In Denmark, Finland, and Iceland, Article 6 engagement is less advanced and will potentially be harmonized with the approach taken by the EU. Potential mechanisms through which ITMOs could be purchased could take many forms, including government-led procurement and purchase of carbon credits through a governmental facility entering long-term contracts with partner countries. In this regard, the Commission's proposal does not specify any particular pathway but only mentions the use of "high quality" carbon credits,

⁶⁴ Neustark, "First-Ever Trade of Negative Emissions under Article 6 of the Paris...."

⁶⁵ Dominican Republic, Switzerland and Rwanda.

⁶⁶ Swedish Energy Agency (2023) Sweden and Switzerland pave the way for international trade with carbon removals, Swedish Energy Agency.

⁶⁷ Swedish Energy Agency and Federal Department of Environment, Transport, Energy and Communications of the Swiss Confederation (2023) Memorandum of Understanding between the Swedish Energy Agency and the Federal Department of the Environment, Transport, Energy and Communications of the Swiss Confederation on a Cooperation for International Transfer of Industrial Carbon Removals. Available at: <https://www.energimyndigheten.se/4aebc0/globalassets/webben/cooperation/international-climate-cooperation/mou-on-bilateral-cooperation-under-article-6-of-the-paris-agreement---sweden-and-switzerland.pdf>.

stating that the source, quality criteria, and other requirements related to acquisition and use will be governed by EU law.

The Commission's proposal thus creates the basis for establishing specific rules at the EU level to ensure the integrity of carbon credits. While some propose a focus on CDR credits, suggesting the EU to develop its own framework for international CDR credits, in addition to the Carbon Removal and Carbon Farming Certification Framework, others suggest that, ultimately, both emission reduction and removal credits will be part of the system, with the key question being whether their use will be restricted to specific activities and/or vintages.⁶⁸

As an alternative to government-led procurement, operators under the by the EU Emissions Trading Systems (ETS 1 and ETS 2) could be permitted to directly acquire and use ITMOs. Between 2005 and 2020, during the first phases of the EU ETS, ETS-covered entities could make limited use credits from the Joint Implementation (JI) and Clean Development Mechanism (CDM) under the Kyoto Protocol (the precursor to Article 6), to meet compliance obligations. As a result, EU ETS became the largest source of demand for CDM credits, although concerns over environmental integrity gradually led to restrictions and their use was ultimately prohibited in the fourth trading period (2021-2030).

While the explanatory memorandum to Commission's 2040 target proposal states that "international credits should not play a role for compliance in the EU carbon market", indicating that entities covered by the EU ETS will likely not be permitted to use ITMOs to meet their compliance obligations, this statement is not reiterated in the proposed binding amendments. As a result, the use of ITMOs in the EU ETS is not explicitly precluded.

If not integrated with the EU ETS pillar of the EU's climate policy framework, the use of ITMOs to achieve 2040 EU target could be allowed in sectors covered by ESR and LULUCF targets. In such a scenario, an open question would be how any future rules on the use of ITMOs might be harmonized with the ESR and LULUCF regulatory frameworks, both of which are themselves to undergo legislative changes.

For instance, national targets are anticipated to change form after the ESR's current framework ends in 2030, especially as the scope of the ESR is altered by the introduction of ETS 2 for small installations, buildings and road transport.⁶⁹ A key consideration in setting future targets will likely be the continued emphasis on solidarity between Member States, taking into account differences in GDP per capita and abatement costs, while also ensuring overall cost-efficiency. These considerations could, in theory, influence the design of any potential allocation keys between EU member states, including Nordic countries, to determine how ITMO use equivalent to 3% of net CO₂ emissions in 1990 is distributed under the evolving targets.

The Commission's proposal on the EU's 2040 target also includes a reference to the uncertainties in GHG mitigation in the LULUCF sector. This reflects a broader trend observed across EU Member States over the past decade regarding a decline in natural sinks. If legislative revisions continue to recognize these challenges, there may be pressure to expand or simplify compliance options. In this context, future EU rules could even allow for the partial use of ITMOs to offset shortfalls in the LULUCF sector. Such approach, if ever introduced, could potentially influence the demand for ITMOs among Nordic Member States, some of which face distinct challenges in the LULUCF sector.

⁶⁸ European University Institute et al., *Creating EU Demand for Paris-Aligned Carbon Dioxide Removal Credits* (Publications Office of the European Union, 2025), <https://data.europa.eu/doi/10.2870/2904600>; EVE TAMME | *The EU's 2040 Climate Target Proposal*, Carbon Removal, July 8, 2025, <https://evetamme.com/2025/07/08/eu-2040-climate-target-proposal/>.

⁶⁹ Jacob Graichen et al., "The Proposed 2040 Climate Target for the EU."

The manner in which the Commission's proposal to use ITMOs equivalent to 3% of 1990 net CO₂ emissions to meet the 2040 climate target is implemented and integrated into the broader EU climate policy framework will thus be a key factor influencing ITMO demand in the Nordic countries.

5.3 Global policy impacts

Global policy developments and geopolitical dynamics may also shape both the scale of ITMO demand in the Nordic countries. For example, an upward revision in global climate mitigation ambition would be expected to drive an increased demand for ITMOs. The outcomes of the first global stocktake⁷⁰ highlight that, while international efforts to date have advanced climate action, current NDC commitments remain insufficient, leaving the world off track to meet the long-term goals of the Paris Agreement and with only a narrowing window of opportunity to realign with its objectives.⁷¹

Although higher ambition could, in principle, be achieved by solely strengthening domestic measures, it is more likely that countries will also rely on market mechanisms, at least through 2045, to achieve emissions reductions, with the Commission's proposal on the EU's 2040 target offering a concrete example. This trend is also evident in other major economies such as South Korea or Japan, both of which procure ITMOs to meet their 2030 NDC targets. The Nordic countries, particularly Norway and Sweden, as one of the most active participants under Article 6, are likewise well positioned to increase their engagement, building on their longstanding experience (Chapter 5.2).

At the same time, momentum for more ambitious climate commitments currently appears to be weakening. At COP29, there was no renewed emphasis on using the stocktake results to guide and strengthen NDCs aligned with the 1.5°C goal and the topic remained contentious during the Bonn climate talks in June 2025.⁷² By February 2025, countries were expected to submit updated pledges for the coming years, ideally putting global efforts on track. However, many countries, including the EU, missed the initial UN deadline for presenting more ambitious NDCs.⁷³ Among those that have submitted their revised NDC, few stand out for their ambitious targets (e.g. the United Kingdom or Brazil). According to the World Resources Institute, most countries have not strengthened their 2030 NDC targets and the targets for 2035 are not sufficiently ambitious.⁷⁴

The Nordic countries traditionally position themselves as climate leaders. At the same time, the current geopolitical environment is marked by heightened tensions, which divert political attention away from climate policy. Conflicts in Gaza and Ukraine, fiscal austerity measures, escalating trade disputes, and domestic political instability in countries such as France, Germany, Canada, and Australia all contribute to deprioritizing climate action.⁷⁵ These dynamics are further compounded by the resurgence of populism and growing climate scepticism globally. Most notably, the election of Donald Trump has created significant uncertainty for international climate diplomacy, as he announced the United States of America's (US)

⁷⁰ The Global Stocktake is a periodic review process, established by the Paris Agreement, to assess the collective global progress on climate action and support every five years. For more information, see "Why the Global Stocktake Is Important for Climate Action This Decade | UNFCCC," accessed August 22, 2025, <https://unfccc.int/topics/global-stocktake/about-the-global-stocktake/why-the-global-stocktake-is-important-for-climate-action-this-decade>.

⁷¹ "Outcome of the First Global Stocktake | UNFCCC," accessed August 19, 2025, <https://unfccc.int/topics/global-stocktake/about-the-global-stocktake/outcome-of-the-first-global-stocktake>.

⁷² Carbon Brief Staff, "Bonn Climate Talks: Key Outcomes from the June 2025 UN Climate Conference," *Carbon Brief*, June 27, 2025, <https://www.carbonbrief.org/bonn-climate-talks-key-outcomes-from-the-june-2025-un-climate-conference/>.

⁷³ Jamal Srouji, *Are Countries' New Climate Plans Ambitious Enough? What We Know So Far*, June 2, 2025, <https://www.wri.org/insights/assessing-2025-ndcs>.

⁷⁴ Srouji, *Are Countries' New Climate Plans Ambitious Enough?*

⁷⁵ *2025 Will Be a Decisive Year for the Climate in a World "More Uncertain and Tense than Ever,"* January 8, 2025, https://www.lemonde.fr/en/environment/article/2025/01/08/2025-will-be-a-decisive-year-for-the-climate-in-a-world-more-uncertain-and-tense-than-ever_6736840_114.html.






withdrawal from the Paris Agreement. This is the second time the USA has withdrawn from the accord, with the first withdrawal ordered by Trump during his first term.

While the US withdrawal introduces political uncertainty, the Paris Agreement remains a cornerstone of international climate cooperation, and other major economies may maintain their commitments to strengthen their relative position in the global clean energy economy. Nevertheless, the leadership role of countries such as China or the European Union in shaping the next phase of international climate diplomacy remain an open question. The upcoming COP 30, to be held in Belém, Brazil, from 10 to 21 November 2025, will be a critical junction for global climate action. Some commentators view Brazil's COP presidency as a source of hope: as the birthplace of several UN environmental conventions, the country is widely recognized for its deep experience in climate negotiations and its extensive diplomatic network.⁷⁶

6 ITMO demand estimation

The national climate targets in the Nordics are heterogeneous with significant variations concerning target years and sectoral coverage (Chapter 3 and Table 3). In addition, there are considerable uncertainties concerning the role and future emissions in the LULUCF sector. It is, therefore, difficult to use the national targets to quantify “baseline emissions” against which a potential offsetting demand can be estimated.

Table 3 Variations in Nordic national targets

Country	2030 Target (MtCO ₂ e)	2040 Target (MtCO ₂ e)	2050 Target (MtCO ₂ e)	Notes
 Denmark	23 (ESR, ETS, LULUCF)			Proposed advancement of net-zero to 2045 and 110% reductions by 2050
 Finland	28 (ETS & ESR)	14 (ESR & ETS)	7 (ESR & ETS)	LULUCF sector currently as a net emitter; uncertainty remains
 Iceland	1.5 (ESR)			ESR sector interim target: 55% reduction vs. 2005
 Norway	23 (ETS & ESR)		2.5 - 5	90–95% reduction by 2050; interim 55% by 2030
 Sweden	21 (ESR)	12 (ESR)		Minimum reductions assume full use of supplementary measures

The paper therefore uses a simplified approach to approximate the volume of emissions that could be offset through credits, assuming a linear reduction pathway from the 2030 emissions level (set at 55% below 1990 levels per EU targets) to 2040 (set at 90% below 1990 levels as per EU targets), and once again from 2040 to net-zero by 2050. The cumulative emissions along this trajectory represent the potential demand for carbon credits between 2030 and 2050. With total Nordic net emissions at around 193 MtCO₂ in 1990 this translates to net emissions decreasing to zero in 2050 from 87 MtCO₂e in 2030. In 2040, total Nordic net emissions will have decreased to 19.3 MtCO₂e. The cumulative emissions in the Nordics between 2030 and 2050 are estimated around 870 MtCO₂e. However, not all these emissions will be eligible for offsetting using ITMOs.

For determining the offset-share, the indented use of ITMOs as set out in the relevant policy frameworks may serve as a reference case (Chapter 5.1.) As seen, the shares of ITMOs in meeting targets based on

⁷⁶ 2025 Will Be a Decisive Year for the Climate in a World “More Uncertain and Tense than Ever.”

Norwegian or Swedish policy cannot be easily determined, as they will depend on the outcome of EU cooperation or fall under broader supplementary measures which also include other instruments.

While still pending approval, the offset-share scenario outlined by the European Commission, i.e. the use of ITMOs in 2040 equivalent to 3% of net CO₂ emissions in 1990, offers a more suitable reference case. Considering also the presence of other drivers of ITMO demand such as e.g. Article 6 implementation, market access and other policy impacts (Chapters 5.2 and 5.3), three offset share scenarios will be applied to estimate potential Nordic ITMO demand, as set out in Table 4.

Table 4 Offset-share scenarios for Nordic ITMO demand between 2030 and 2050

Year	Target Type	Offset Eligibility
2030	55% emission reductions compared to 1990 levels	The target is to be achieved without the use of ITMOs
2040	90% emission reductions compared to 1990 levels	1, 3 and 5% of 1990 emissions
2050	Net-zero	The target is to be achieved without the use of ITMOs

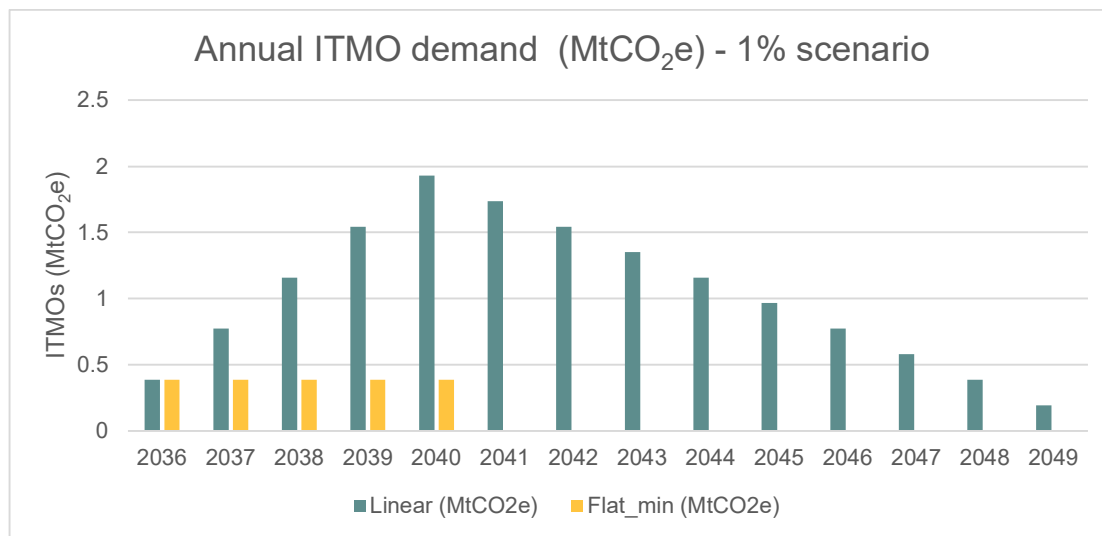
For the analysis, the assumption is that the use of ITMOs increases linearly in the period from 2036 to 2040, reaching 1, 3 and 5% of 1990 emissions in 2040, and then linearly declines in the period 2041 to 2049, reaching zero in 2050 (Figure 5, Figure 6, Figure 7).⁷⁷ In addition, the analysis accounts for a scenario where ITMOs are used at a fixed low level from 2036–2040, and discontinued thereafter, reflecting minimal reliance on ITMOs.

THE 1% SCENARIO

The results show that 1.93 million ITMOs may be used in 2040, assuming linear trajectories between 2035 and 2050, 14.475 million ITMOs over the period 2036 to 2049.

⁷⁷ This approach is adapted from Jakob Graichen, Lambert Schneider, Hannes Boettcher, "The EU's 2040 climate target: Assessment of the proposal by the EU Commission" July 2, 2025, Oeko-Institut.

Figure 5 Annual ITMO demand (MtCO₂e) - 1% scenario

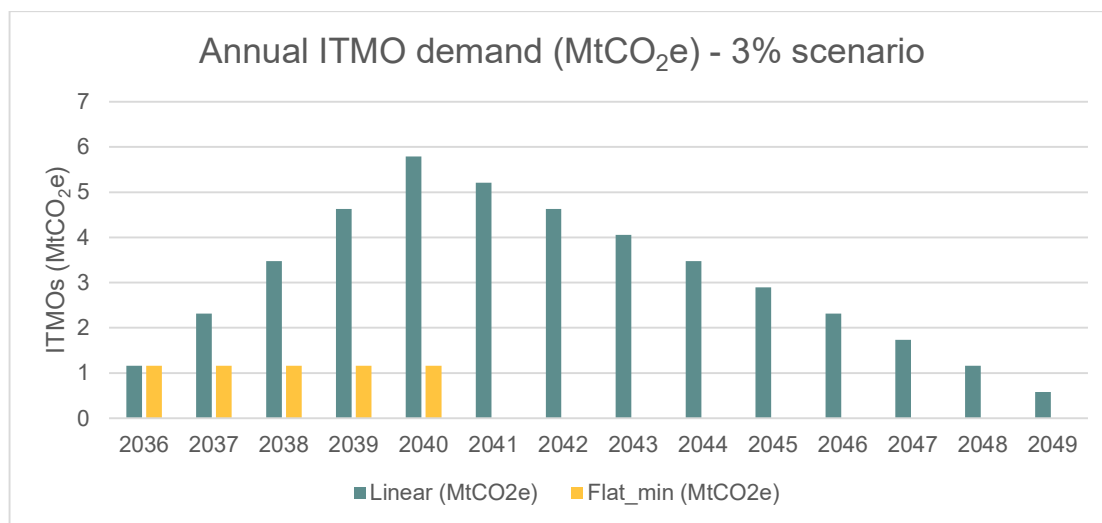


Carbon Limits. 2025.

THE 3% SCENARIO

The results indicate that, assuming linear trajectories from 2035 to 2050, 5.79 ITMOs could be used in 2040, with a total of 43.425 million ITMOs used between 2036 and 2049.

Figure 6 Annual ITMO demand (MtCO₂e) - 3% scenario

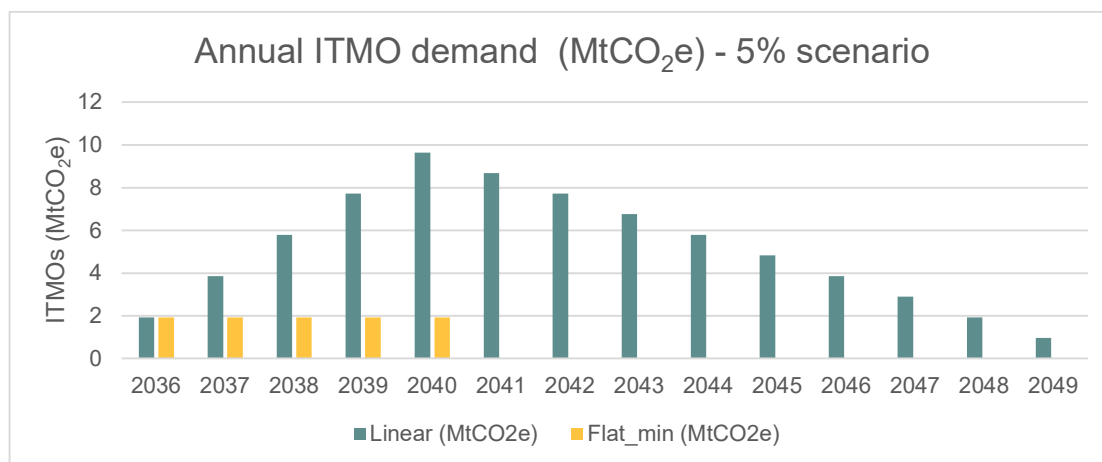


Carbon Limits. 2025.

THE 5% SCENARIO

Assuming linear trajectories from 2035 to 2050, the analysis suggests 9.65 million ITMOs may be utilized in 2040, totalling 72.375 million ITMOs between 2036 and 2049.

Figure 7 Annual ITMO demand (MtCO₂e) - 5% scenario



Carbon Limits. 2025.

7 Pathways for private sector demand

Traditionally, the private sector, including Nordic companies, bought carbon credits in the VCM to meet voluntary mitigation targets (Section 2.2). In recent years, however, the VCM faced increasing challenges related to credit integrity⁷⁸ and the validity of associated claims, which has led to volatile market activity. On the one hand, media scrutiny has repeatedly questioned the additionality⁷⁹, correct estimation of baselines, and governance of certain VCM projects, undermining confidence in the market.⁸⁰ On the other hand, ambiguity remains over claims that companies can legitimately make when buying and using carbon credits within today's VCM.⁸¹ Simultaneously, corporate climate action is increasingly subject to formal regulatory requirements, further reshaping the landscape for private sector participation in the VCM.

Several pathways for private sector demand for carbon credits in the Nordics are therefore conceivable, each closely tied to the perceptions of credit quality and the future alignment of national and corporate climate action, including through quality requirements, claims regulation, the integration of credits into compliance schemes, or voluntary ITMOs purchasing programs. Three potential scenarios are outlined below.

⁷⁸ Within carbon markets, the term 'environmental integrity' is often used to refer to the level confidence one can have in that a credit provides real, quantifiable and verifiable emissions reductions or removals. Criteria for determining the environmental integrity of a carbon credit are typically based on similar attributes. The latter include additionality (the corresponding emissions reductions or removals would not have occurred without the possibility to market them as offset credits), reliability of baselines and carbon stocks (correct estimation of emission scenarios in absence of the project and no overestimation of the corresponding climate impact), permanence (sufficient longevity of the carbon sink), single issuance or no 'double counting' (the credit must convey an exclusive claim to the underlying GHG reduction) and a positive net social and environmental impact. See Broekhoff D, 'Securing Climate Benefit: A Guide to Using Carbon Offsets', <https://www.sei.org/publications/guide-to-using-carbon-offsets/>

⁷⁹ 'Additionality' is traditionally defined as the requirement that the emissions reductions underlying VCM credits would not have occurred without the possibility to market them as credits, i.e. if mitigation activities were legally required. See Broekhoff and others (n)

⁸⁰ Ecosystem Marketplace, 'State of the Voluntary Carbon Market 2024' (*Forest Trends*, 30 May 2024) <<https://www.forest-trends.org/publications/state-of-the-voluntary-carbon-market-2024/>.

⁸¹ In the current VCM, credit generation largely occurs in countries with emerging economies while they are purchased and used by companies in industrialized nations. Because all countries have nationally determined contributions (NDCs) under the Paris Agreement, some credits may correspond to reductions already claimed by the host country. Since emissions and removals are reported through separate but partially overlapping systems for companies and governments, clear guidance is needed on what claims credit buyers are permitted to make.

7.1 The business-as-usual scenario

In this scenario, the Nordic private sector continues to pursue voluntary climate target setting. Despite the growing list of national and voluntary guidance,⁸² corporate climate claims are largely unregulated. As a result, the achievement of voluntary climate targets by the Nordic private sector relies largely on the use of carbon credits to either complement or substitute investments into the abatement of value chain GHG emissions.

In the business-as-usual scenario, demand is therefore moderate but steady (Figure 8). Credit purchases by Nordic private sector largely come from categories such as forestry and land-use, household/community devices or renewable energy. There is significant buyer interest in project types such as Reduced Emissions from Deforestation and Forest Degradation (REDD+), Improved Forest Management, or Afforestation and Reforestation (ARR). Purchasing volumes for credits from emissions reductions are still higher than for removal credits.

Figure 8 Summary business-as-usual scenario of Nordic private sector demand

Scope	●	Moderate but steady
Source	●	Use of credits for achieving voluntary climate targets (offsetting claims)
Assumptions	●	No substantial alteration in prevailing policies on crediting and claims
Implications	●	Low demand for ITMOs, mainly demand for low-priced, non-authorized credits from project types such as REDD+, ARR
Timeline	●	Up to 2025

7.2 The gradual adaptation scenario

The gradual adaptation scenario is characterized by carbon markets in a transitional phase. Still shaped by private sector-led voluntary action, the VCM is moving into a new stage with increasingly sophisticated buyer expectations, and a stronger emphasis on credit quality and integrity. Although transaction volumes in the VCM exhibited volatility globally, credit retirement rates have remained relatively stable, suggesting consistent underlying demand.⁸³

⁸² For example, a Nordic Dialogue on Voluntary Compensation was initiated in 2021 to develop a strong and unified Nordic framework for the voluntary use of carbon credits in alignment with the Paris Agreement. The dialogue resulted in the Nordic Code of Best Practice for the Use of Carbon Credits (the 'Nordic Code'), which provides VCM stakeholders with best practice requirements and recommendations for high integrity carbon credits, their voluntary use and related claims, see Ahonen H-M and others, *Harnessing Voluntary Carbon Markets for Climate Ambition: An Action Plan for Nordic Cooperation* (Nordisk Ministerråd 2022) <<https://urn.kb.se/resolve?urn=urn:nbn:se:norden:org:diva-12669>, Annex 1.

⁸³ Forest Trends' Ecosystem Marketplace, *State of the Voluntary Carbon Market 2025* (Forest Trends' Ecosystem Marketplace, 2025).

Companies show a particular preference for credits regarded as high quality, as identified through emerging labelling and rating frameworks, such as the Integrity Council for the Voluntary Carbon Market (ICVCM) and specialized rating agencies. A shift from lower-cost conventional carbon credits to higher-cost durable removal credits, under fixed budget constraints, may, however, result in the purchase of smaller volumes in the short-term.⁸⁴ Many Nordic companies have set net zero targets under voluntary initiative such as SBTi. While according to the SBTi Corporate Net-Zero Standard, carbon credits cannot be used to meet SBTi mitigation targets prior to the designated net-zero year, any remaining emissions or excluded emissions at the target year, must be neutralized (i.e., counterbalanced) through permanent carbon removal and storage to be able to claim to have become net zero. This could lead to a considerable voluntary demand for CDR credits among the Nordic private sector in the long run (see Box 2/Box 1).

Box 2 Estimating future demand for CDR credits of Nordic companies with SBTi targets

It is possible to estimate the potential future demand for carbon credits representing durable carbon removals of companies with adopted voluntary SBTi net-zero targets. This can be done **by quantifying their residual emissions in Scope 1, 2 and 3** (i.e., the categories used to track a company's GHG emissions across the value chain), since, **at the net-zero target year and beyond, the companies will have to balance their hard-to-abate residuals with durable removals to be eligible for claiming net-zero emissions.** The SBTi requires the net-zero target year to be no later than 2040 to 2050, depending on the sector.

A data set for companies with their headquarters in EU member states was used as a basis for the calculation. The data set uses information available through the Science Based Targets initiative (SBTi) target dashboard and publicly available sources, including sustainability reports, corporate disclosures (e.g., CDP responses, ESG reports) and company websites.

Projected residual emissions were calculated for 94 companies with their headquarters in Denmark, Finland and Sweden that had validated long-term net-zero targets under the SBTi Corporate Net-Zero Standard as of January 2025.

Based on the above, the included companies' **projected demand for durable removals becomes significant in 2040 (around 12 MtCO₂/a) and can be estimated to be around 50 MtCO₂ in 2050.**

Source: Adapted from Hanna Kuusela, Quantifying Corporate Residual Emissions. An Assessment on EU-Headquartered Companies with SBTi Net-Zero Targets, 2025.

To date, a growing VCM demand for CDR credits among Nordic VCM participants is already evident, driven by motivations beyond simply offsetting claims. For example, Swedish companies are increasingly engaging in the emerging CDR market not only to prepare to offset residual emissions for future net-zero targets but also to support market development and use participation in pilot projects for near-term marketing claims.⁸⁵ At the EU level, the EU Commission is working on potential models for an EU-led Program for Purchasing Permanent Carbon Removal, also exploring the option of an EU-coordinated Buyers' Club, which would consolidate voluntary demand from companies and other private actors within an EU-coordinated

⁸⁴ Kenneth Möllersten et al., *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*.

⁸⁵ Kenneth Möllersten et al., *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*.

framework.⁸⁶ In this scenario, demand for carbon credits, particularly CDR credits, among Nordic voluntary carbon market participants therefore continues to grow.

Meanwhile, the voluntary use of carbon credits by the Nordic private sector evolves in response to emerging EU regulations. Instruments such as the Corporate Sustainability Reporting Directive (CSRD),⁸⁷ the European Sustainability Reporting Standards (ESRS),⁸⁸ the “Empowering Consumers for the Green Transition” Directive,⁸⁹ and the forthcoming “Green Claims” Directive⁹⁰ impose stricter requirements on the transparent reporting of GHG emissions and mitigation targets and how climate-related claims can be communicated.

However, while EU regulation prohibits product-level offset claims based on carbon credits, this restriction does not extend to corporate-level climate claims⁹¹, which remain a driver of Nordic private sector credit demand. Consequently, interest in the use of credits to make mitigation contribution claims is growing but adoption is slow and does not yet represent a source of Nordic private sector demand in the business-as-usual scenario. Although the Nordic private sector acknowledges the role of ITMOs in scaling credible, Paris-aligned carbon markets, the purchase of ITMOs is constrained by regulatory uncertainty, high costs, and lack of clear integration in strategies.⁹² Overall, the gradual adaptation scenario points to steady demand for credits from the Nordic private sector, focused on non-authorized carbon credits from project types that are considered high quality, in particular from CDR (Figure 9).

⁸⁶ Directorate-General for Climate Action (European Commission), Ecologic Institute, Hugh McDonald, Jonathan Gardiner, Benjamin Görlach, and John Tarpey. 2025. *An EU Purchasing Programme for Permanent Carbon Removals: Assessment of Policy Options and Recommendations for Short Term Policy Design*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2834/8212975>.

⁸⁷ Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 Amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as Regards Corporate Sustainability Reporting (Text with EEA Relevance), EP, CONSIL, 322 OJ L (2022). <http://data.europa.eu/eli/dir/2022/2464/oj/eng>.

⁸⁸ Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 Supplementing Directive 2013/34/EU of the European Parliament and of the Council as Regards Sustainability Reporting Standards (2023). http://data.europa.eu/eli/reg_del/2023/2772/oj/eng.

⁸⁹ European Union (2024c) Directive (EU) 2024/825 of the European Parliament and of the Council of 28 February 2024 amending Directives 2005/29/EC and 2011/83/EU as regards empowering consumers for the green transition through better protection against unfair practices and through better information, Official Journal of the European Union, L. Available at: <https://eur-lex.europa.eu/eli/dir/2024/825/oj>.

⁹⁰ E. S. G. News, “EU Commission Confirms Green Claims Directive Not Withdrawn,” *ESG News*, June 30, 2025, <https://esgnews.com/eu-commission-confirms-green-claims-directive-not-withdrawn/>.

⁹¹ European Union (2024c) Directive (EU) 2024/825 of the European Parliament and of the Council of 28 February 2024 amending Directives 2005/29/EC and 2011/83/EU as regards empowering consumers for the green transition through better protection against unfair practices and through better information, Official Journal of the European Union, L. Available at: <https://eur-lex.europa.eu/eli/dir/2024/825/oj>.

⁹² Carbon Limits. *Nordic Private Sector Interest in Paris Agreement Article 6 Implementation*. (Forthcoming).

Figure 9 Summary gradual adaptation scenario of Nordic private sector credit demand

Scope	●	Steady
Source	●	Use of credits for achieving voluntary climate targets (offsetting claims)
Assumptions	●	No substantial alteration in prevailing policies on crediting and claims. The Commission's proposal allowing a limited number of ITMOs to offset the EU's climate target for 2040 is rejected or implementation sidelines the private sector.
Implications	●	Low demand for ITMOs, mainly demand non-authorized credits from project types providing CDR
Timeline	●	The next 1 to 30 years

7.3 The strategic participation scenario

The strategic participation scenario is characterized by Nordic countries and the EU permitting the targeted use of ITMOs to lower the overall cost of meeting national climate targets, i.e. the Commission's proposal for the EU's climate target for 2040 is adopted. Contrary to the voluntary action scenario, the introduction of ITMOs into the EU's policy framework is converted into mandatory compensation schemes or concrete incentives for the private sector, including regulated access to ITMOs.

Since 2021, the EU ETS has no longer permitted the use of international carbon credits. However, in its public consultation on the EU ETS Directive (open until 8 July 2025), the European Commission sought views on whether offset mechanisms, particularly those involving CDR credits, should be a requirement for any future system linkages.⁹³ The consultation indicates that the Commission is considering options for integrating international offsetting with the EU ETS, and the responses will inform the broader review of the system planned for 2026.

The inclusion of CDR credits in the EU ETS is subject to increasing debates in the EU policy ecosystem. As the EU moves towards its 2050 climate neutrality target and the EU ETS is projected to exhaust its allowances by around 2040, CDR credits may represent a potential new supply that could be used to meet compliance obligations.⁹⁴ While there is a preference for CDR sourced from a European removal market, the integration of international credits is not precluded (Section 5.2). Depending on the design of this integration, such developments could increase the demand for ITMOs from project activities outside the EU among the Nordic private sector entities covered by the EU ETS.

⁹³ "EU Emissions Trading System for Maritime, Aviation and Stationary Installations, and Market Stability Reserve – Review," Text, European Commission - Have Your Say, accessed August 21, 2025, https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14549-EU-emissions-trading-system-for-maritime-aviation-and-stationary-installations-and-market-stability-reserve-review/public-consultation_en.

⁹⁴ Dr Nils Meyer-Ohlendorf, *Making Carbon Removals a Real Climate Solution - How to Integrate Carbon Removals into EU Climate Policies*, Report (Ecologic Institute, 2023), <https://www.ecologic.eu/19290>.

Other approaches for strategically involving the private sector in the purchase of ITMOs could include, among others:

- The potential recognition of ITMOs to meet obligation under the EU's Carbon Border Adjustment Mechanism (CBAM) to provide a flexible compliance option for European and Nordic importers.⁹⁵
- An EU Removal Trading Scheme, requiring covered private sector entities to remove and store defined minimum amounts of carbon. Entities could fulfil this obligation either by carrying out removals themselves or by purchasing (international) CDR credits from other companies or organizations with verified carbon removal or surplus removal capacity.⁹⁶
- The inclusion of ITMOs at the country level, e.g. through measures such as mandatory purchasing programs or as compliance option for national carbon pricing schemes and or sectoral GHG reduction targets, similar to the German UER certificate.⁹⁷

In addition, growing practical experience and guidance for VCM participants enhance the business case for mitigation contribution claims in the strategic participation scenario. At the international level, the operationalization of the Paris Agreement Crediting Mechanism (PACM), alongside expanding Article 6.2 bilateral cooperation by Nordic countries increases the availability of credits issued under the PACM for mitigation contributions (Article 6.4ERs) and ITMOs for voluntary use. The Nordic private sector accesses these credits through government-backed funds, allowing voluntary purchases with reduced reputational risks and providing further incentives.⁹⁸

The strategic participation scenario reflects strong demand from the Nordic private sector for ITMOs, while demand for non-authorized credits declines as voluntary climate action is gradually replaced by compliance obligations (Figure 10). Where credits are purchased for voluntary climate action, non-authorized credits are used to claim mitigation contributions.

⁹⁵ Andrei Marcu et al., "ERCST Discussion Paper. Introduction of International Credits in the EU Climate Change Framework," European Roundtable on Climate Change and Sustainable Transition (ERCST), 2025.

⁹⁶ Meyer-Ohlendorf, *Making Carbon Removals a Real Climate Solution - How to Integrate Carbon Removals into EU Climate Policies*.

⁹⁷ Andrei Marcu et al., "ERCST Discussion Paper. Introduction of International Credits in the EU Climate Change Framework."

⁹⁸ This option is currently being explored by the German government, including also the suggestion to count related payments as mobilized private climate finance in its UNFCCC reporting, Kenneth Möllersten et al., *Voluntary Carbon Markets in Sweden - A Stakeholder Mapping and International Outlook*.

Figure 10 Summary strategic participation scenario

Scope	●	Strong
Source	●	Compliance obligations for the private sector. Voluntary demand likely to decrease as voluntary action is replaced..
Assumptions	●	The EU adopts the proposal of meeting up to 3% of the 2040 climate target with ITMOs, leading to mandatory private-sector compensation schemes.
Implications	●	High demand for ITMOs. Demand for non-authorized credits to decrease as voluntary climate action is replaced
Timeline	●	The next 10 - 15 years

8 Cost savings from credit utilization

Using ITMOs can lower the cost of achieving a given mitigation target compared to what it would otherwise have been. Countries with low marginal costs to reach their emissions targets may have incentives to reduce their emissions further and sell ITMOs credits, so long as the price of these credits sufficiently exceeds their marginal costs. Conversely, countries with high marginal costs for meeting their emissions targets have an incentive to buy ITMOs to meet their targets. The extent of cost savings from using international trade depends on the participating actors' costs for additional domestic emission reductions and the cost of ITMOs.

Attempts have been made to estimate the potential cost savings from such trading. For example, Edmonds et al. (2021)⁹⁹ examine the total cost of achieving countries' unconditional emissions targets for 2030 under two scenarios: one where countries achieve the targets individually (without cooperation), and one where they cooperate to minimise the total cost of meeting the emissions targets. The authors find that cooperative implementation of NDC goals could lower the overall cost of achieving 2030 targets by approximately € 257 billion.¹⁰⁰

Achieving Nordic mitigation targets and, in the longer term, climate neutrality will require accelerated decarbonisation efforts across every sector. The energy sector remains at the core of the green transition. Every Nordic pathway to climate neutrality depends on decarbonising energy production. Looking ahead, progress will require not only a massive expansion of renewable power but also greater energy efficiency. Renewable energy must supply both the power sector and difficult-to-abate areas, enabling mitigation initiatives elsewhere in the economy.

⁹⁹ Edmonds m.fl. (2021), "How much could article 6 enhance nationally determined contribution ambition toward Paris agreement goals through efficiency?" *Climate Change Economics* 2150007.

¹⁰⁰ USD 300.

In the domestic transport sector, emissions have been tackled primarily in road transport and passenger cars. Electrification of the car fleet has accelerated sharply, with Norway emerging as the clear frontrunner. Biofuels and blending requirements—driven partly by EU regulation—have also contributed. Yet despite these measures, overall transport emissions remain stubbornly high across the region, with almost no net reduction since 1990. The picture is uneven: between 1990 and 2021, three Nordic countries even registered increases in transport emissions. To close this gap, national strategies focus on further electrification of private cars, stronger investment in public and multimodal transport, and roadmaps to decarbonise heavy transport.

Industry has primarily been regulated through the EU Emissions Trading System (ETS) and a mix of national carbon-pricing schemes. Its progress is closely tied to the energy sector, since industries depend on reliable access to green electricity to electrify processes without losing international competitiveness. Emerging technologies such as Carbon Capture and Storage (CCS) and Carbon Capture and Utilisation (CCU) are expected to play a central role.

In waste management, earlier policies largely focused on reducing landfill emissions and increasing household recycling rates. Current plans aim to go further by cutting the total volume of waste, increasing recycling, and promoting a more circular economy.

Across the Nordic countries, there has been little meaningful progress in curbing agricultural GHG emissions. Most measures to date have targeted on-farm practices, while demand-side approaches—long recognised as necessary—have yet to be implemented. Land-use and forestry policies, such as rewetting or afforesting wetlands and peatlands, are also advancing only slowly. Achieving climate neutrality will therefore require far greater reductions in agricultural emissions alongside clearer, more ambitious strategies for land use and forestry.

As illustrated above, attaining Nordic mitigation targets will require a diverse set of measures across all sectors, that are partially interconnected. The assessment of future marginal abatement costs requires making a range of assumptions and is associated with significant uncertainties, in particular in the longer term. In the absence of published projections of economy-wide marginal abatement costs in the Nordics, the following assumptions can be used to estimate abatement costs of meeting national mitigation targets domestically.

2030

For the LULUCF sector, modelling suggests that a carbon value of 50 €/tCO_{2e} is necessary to meet the 2030 overall EU LULUCF target.¹⁰¹

¹⁰¹ COMMISSION STAFF WORKING DOCUMENT IMPACT ASSESSMENT REPORT Part 1 Accompanying the Document COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Securing Our Future Europe's 2040 Climate Target and Path to Climate Neutrality by 2050 Building a Sustainable, Just and Prosperous Society (2024). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52024SC0063>.

As for the EU ETS, models are used to predict the future EUA price development. A number of independent studies using different price prediction models have yielded price estimates in the range of around € 130 to 160 in 2030.¹⁰²

In the transportation sector, blending biofuels in petrol and diesel represents an abatement option with significant potential. The marginal abatement cost associated with this abatement option has been estimated in the range € 200-400/tCO₂e.¹⁰³

2040 and 2050

As for 2040 and 2050 price levels, EU COM published an impact assessment in 2024 as a background document for discussions of an EU 2040 target (EU Commission, 2024).¹⁰⁴ The assessments are based on four different scenarios – S1, S2, S3 – applying different “carbon values” (which incentivise emission reductions). Scenarios S1, S2, S3 apply carbon values of €160, €240, and €290, respectively, for the year 2040 and a carbon value of €450 (all scenarios) for the year 2050 (EU Commission, 2024, Part 2, Table 4). Scenarios S1, S2 and S3 result in net emission reductions (including removals) of 78%, 88% and 92% to the year 2040 as compared to 1990 (EU Commission, 2024, Part 1, Table 5). Data from Scenarios 2 and 3 from the EU’s impact assessment are most representative of the ambition levels of Nordic countries’ climate targets that generally aim at carbon neutrality (or the equivalent) before the EU 2050 target year. Thus, carbon prices in the range € 240 to 290/tCO₂e in 2040 and € 450/tCO₂e are reasonable to assume needed to attain emission trajectories compatible with Nordic climate targets.

According to the impact assessment, to reach 88-92 % net reductions (“net” in the sense that removals are included) in 2040 and net-zero emissions in 2050, removals amounting to approximately 350 to 400 MtCO₂e will be needed in 2040 and 450 MtCO₂e in 2050.

The impact assessment attains the removal levels mainly through measures in the LULUCF sector. This requires measures with abatement costs reaching € 150 to 200/tCO₂e in 2040 and above € 200/tCO₂e in 2050. The impact assessment assumes that, in addition, around 100 MtCO₂e removals from technical CDR methods (BECCS and DACCS) will be needed in 2050. The mitigation cost of those technologies in 2050 is difficult to predict. Recent cost estimates for current BECCS indicate costs above € 350/tCO₂.¹⁰⁵ DACCS has so far only been deployed on a very small scale. It can be assumed that the abatement cost of DACCS will be higher than for BECCS for the foreseeable future.¹⁰⁶

The above shows that domestic carbon prices in the Nordic countries have already surpassed €100 per ton, and that projections indicate that these prices will increase substantially over the coming decades, reaching €130–160 per ton by 2030, €240–290 per ton by 2040, and around €450 per ton by 2050 to align with

¹⁰² M. Pahle, J. Sitarz, S. Osorio, and B. Görlach. 2022. “The EU-ETS Price through 2030 and beyond: A Closer Look at Drivers, Models and Assumptions Input Material and Takeaways from a Workshop in Brussels.” Kopernikus-Projekt Ariadne Potsdam-Institut für Klimafolgenforschung, November 30. https://ariadneprojekt.de/media/2023/01/Ariadne-Documentation_ETSWorkshopBruesseel_December2022.pdf.

¹⁰³ Statens Offentliga Utredningar. 2020. *Vägen till En Klimatpositiv Framtid*. SOU 2020:4. Stockholm. <https://data.riksdagen.se/fil/08685A79-BBC3-438A-93FF-90F9E4BECF4A>.

¹⁰⁴ COMMISSION STAFF WORKING DOCUMENT IMPACT ASSESSMENT REPORT Part 1 Accompanying the Document COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Securing Our Future Europe’s 2040 Climate Target and Path to Climate Neutrality by 2050 Building a Sustainable, Just and Prosperous Society (2024). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52024SC0063>.

¹⁰⁵ The authors unpublished results.

¹⁰⁶ Bednar, J, Höglund, R, Möllersten, K, Obersteiner, M, Tamme, E. The role of carbon removal in contributing to the long-term goal of the Paris Agreement (2023). IVL Report no. C807.

Nordic climate neutrality trajectories. Currently, there is limited information on current prices of ITMOs and how they may evolve in the future.¹⁰⁷

In December 2024, the Swedish Energy Agency launched a tender for the procurement of energy-related mitigation activity proposals in Ghana to generate ITMOs. According to the procurement notice, each selected project is expected to deliver at least 200,000 tCO₂e, with a maximum negotiated price of roughly USD 40 per tonne (approx. €37/tCO₂e).¹⁰⁸ For comparison, in 2023, the Joint Crediting Mechanism reported an average transaction price of about USD 36 per tonne of CO₂e.¹⁰⁹ In its 2023 annual report, the Swiss Kllik Foundation indicated that contracted ITMOs for the period 2022–2024 are expected to average around CHF 35 per tonne (approx. €37/tCO₂e). For the subsequent phase, covering 2025–2030, the anticipated price is projected to decline to roughly CHF 27 tonne (approx. €37/tCO₂e) per tonne.¹¹⁰

While these single price estimates offer only a narrow snapshot and do not capture how ITMO pricing dynamics might evolve, the likelihood of prices exceeding €50–70 per tonne is low. The differential to Nordic carbon price predictions implies that ITMO transactions will consistently deliver substantial cost savings relative to domestic compliance. However, the extent of these savings, i.e. the true economic potential of ITMO utilization within the Nordic region, critically depends on sectoral and country-specific dynamics, such as differences in marginal abatement costs or the cost trajectories of negative emission technologies. Quantifying these savings thus requires further analysis.

9 Conclusions and recommendations

Despite notable advancements across the Nordic region, meeting Nordic national climate targets and the shared ambition of carbon neutrality will require intensified action. Using ITMOs through cooperation under Article 6 of the Paris Agreement can help to achieve Nordic climate targets and even raise ambition. EU Commission's recent proposal for the 2040 climate target provides fresh impetus for such cooperation. The proposal envisages the limited use of high-quality ITMOs of up to 3% of 1990 net emissions to meet the target. Norway and Sweden are already planning to use ITMOs to contribute to varying shares of their 2030–2050 climate targets.

But quantifying Nordic demand for ITMOs remains complex, given the heterogeneity of Nordic climate targets, their differing timelines and sectoral coverage, as well as uncertainties around the extent to which ITMO may contribute to meeting targets under Norwegian or Swedish policies. To bridge these gaps, the analysis applied three offset-share scenarios informed by the EU Commission's proposal as well as other key risks and enablers. Under the assumption that ITMO use rises linearly from 2036 to 2040 to either 1, 3 or 5% of 1990 emissions and then declines linearly from 2041 to 2049, reaching zero by 2050, Nordic demand could range from 14 to 72 million over the period 2036 to 2049.

¹⁰⁷ Jonathan Schwieger, Urs Brodmann, and Axel Michaelowa. 2019. *Pricing of Verified Emission Reduction Units under Art. 6 Gaining a Better Understanding of Possible Scenarios*. Swedish Energy Agency.

https://www.energimyndigheten.se/4a4d79/globalassets/klimat--miljo/internationella-klimatinsatser/sea-pricing-study_final.pdf.

¹⁰⁸ *The Swedish Energy Agency Opens Procurement for Mitigation Activity Proposals in Ghana*. n.d. <https://cmo.epa.gov.gh/the-swedish-energy-agency-opens-procurement-for-mitigation-activity-proposals-in-ghana/>.

¹⁰⁹ "The Landscape of Article 6 Implementation." 2023. *Climate Finance Innovators*, <https://climatefinanceinnovators.com/publication/the-landscape-of-article-6-implementation/>.

¹¹⁰ "Swiss Entity Estimates 15 Mln ITMOs from Current Article 6 Carbon Pipeline, Paying Nearly \$40/t « Carbon Pulse." (2024) <https://carbon-pulse.com/297771/>.

The analysis highlights that utilizing ITMOs could deliver substantial cost-savings, as Nordic carbon prices are projected to rise sharply, from well over €100 tCO₂e today to €240–290 by 2040 and up to €450 by 2050, depending on the sector. While associated with great uncertainty, prices for ITMOs likely to remain considerably lower. This suggests that Nordic governments could meet parts of their climate targets at a fraction of domestic abatement costs.

Given that most emission reductions will need to come from companies rather than governments or households, the Nordic private sector could play a strategic role in ITMO procurement, e.g. as part of mandatory compensation schemes or targeted incentives. Without strategic involvement, Nordic private sector demand in the VCM may still be significant as companies intensify their efforts to meet ambitious climate targets, in particular for high-quality carbon credits.

For a Nordic private sector that continues to demonstrate seriousness in aligning with net-zero pathways, engagement in Article 6 can offer a powerful tool to help achieve these goals more cost-efficiently, while also unlocking investments in both domestic and international climate action. However, to fully realize this potential, clear and coordinated guidance from governments, as well as strong market signals from consumer and regulatory agencies, will be essential, as well as the recognition that ITMOs can complement, but not replace, domestic emission reductions. Effective coordination between Nordic governments, the EU, and private actors will be critical to Article 6 can become a catalyst for scaled-up climate ambition, driving confidence and long-term demand for high-quality carbon credits. For moving ahead, key recommendations are summarized below.

RECOMMENDATIONS FOR NORDIC GOVERNMENTS

- Conduct detailed assessments of sector- and country-specific marginal abatement costs to identify where ITMO use can deliver the greatest cost savings
- Design national climate targets, frameworks and procurement mechanisms to facilitate the efficient integration of Article 6 into domestic mitigation pathways
- Ensure the use of high-integrity, durable and transparent credits to protect environmental integrity
- Provide clear regulatory guidance on corresponding adjustments and recognition of credits in compliance frameworks and corporate climate strategies
- Expand bilateral cooperative agreements and pilot initiatives with host countries
- Establish Article 6 market infrastructure and incentives to reduce costs and risks for private sector engagement, e.g. through public-private partnerships, public guarantees, pooled funds, and pilot programs
- Provide targeted education for the private sector on navigating Article 6 mechanisms, managing project pipelines, and operationalizing bilateral deals



RECOMMENDATIONS FOR THE NORDIC PRIVATE SECTOR

- Embed Article 6 into corporate climate strategies
- Ensure that carbon market participation complements direct emissions reductions, not replace them
- Prioritize high-integrity and authorized carbon credits and explore mitigation contribution claims
- Work closely with policymakers and financiers to shape the enabling environment
- Engage in pilot projects and early transactions to gain experience
- Team up through sector coalitions or pilots to share Article 6 knowledge, aggregate demand and gain first mover experience



CARBON LIMITS

October 2025

Carbon Limits AS 
@CarbonLimitsAS 

Stensberggata 27
NO-0170 Oslo
Norge

+47 988 457 930
www.carbonlimits.no

