

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Schlogl, Lukas; Pfaffenbichler, David; Raza, Werner

Research Report Net zero export finance: Lessons for Austria from international best practice

Research Report, No. 22/2025

Provided in Cooperation with: Austrian Foundation for Development Research (ÖFSE), Vienna

Suggested Citation: Schlogl, Lukas; Pfaffenbichler, David; Raza, Werner (2024) : Net zero export finance: Lessons for Austria from international best practice, Research Report, No. 22/2025, Austrian Foundation for Development Research (ÖFSE), Vienna, https://doi.org/10.60637/2025-rr22

This Version is available at: https://hdl.handle.net/10419/313623

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU



22/2025 RESEARCH REPORT

Net Zero Export Finance Lessons for Austria from International Best Practice

Studie im Auftrag der Kammer für Arbeiter und Angestellte für Wien (AK Wien)

Lukas Schlögl, David Pfaffenbichler and Werner Raza Wien, Dezember 2024



DOI: https://doi.org/10.60637/2025-rr22





A 1090 Vienna, Sensengasse 3, Austria T +43 1 3174010 F -150 E office@oefse.at I www.oefse.at

AUSTRIAN FOUNDATION FOR DEVELOPMENT RESEARCH

Net Zero Export Finance:

Lessons for Austria from International Best Practice

Lukas Schlögl, David Pfaffenbichler and Werner Raza

December 2024

Funding disclosure:

This is a study commissioned by the Chamber of Labour Vienna (AK Wien).

CONTENTS

Abbreviations and Acronyms	3
List of Figures and Tables	5
Executive Summary	3
Zusammenfassung	6
1. Introduction	.13
1.1. Ending Fossil Finance and Getting to Net Zero	.13
1.2. Austria's Export Promotion Can Make a Difference	.14
1.3. A Critical Juncture	.15
1.4. This Study	.17
2. Export Finance and Climate Policy	.18
2.1. Regulatory environment	.18
2.2. International developments	.19
2.3. Coalitions and commitments	.20
3. The Case of Austria	.22
3.1. Austria's Export Promotion and Climate Goals	.22
3.2. The Exposure of Austria's Export Promotion to Fossil and CO2-Intensive Sectors	.25
4. Learning from Peers	.31
4.1. The Fossil Phase Out in Comparison	.31
4.2. The case of Sweden	.36
4.3. The case of Germany	.38
4.4. E3F: A Notable Peer Group	.41
4.5. The Pathway towards Net-Zero	.41
5. Recommendations	.44
5.1. Leadership in Export Sustainability	.44
5.2. Paris Alignment	.46
5.3. Social-Ecological Partnership	.48
5.4. Science, Transparency, and Governance	.49
References	.51

EXECUTIVE SUMMARY

This study investigates the intersection of export finance and climate policy with a focus on Austria and relevant peers. It addresses the **role of Austria's export credit system in facilitating the global transition to a net-zero economy**. Specifically, it examines how Austria's official export financing policy aligns with the goals of the Paris Agreement and explores ways to reform it towards promoting a more sustainable and climate-neutral portfolio.

Public export promotion policies and so-called **export credit agencies (ECAs) have a significant potential to leverage change**: They are based on powerful financial instruments that provide government-backed loans, guarantees, and insurance for international trade. Their influence extends globally as they reduce the risk of international business transactions and encourage economic activities abroad. However, these financial institutions have traditionally supported carbon-intensive projects, such as those in the fossil fuel sector, significantly contributing to greenhouse gas (GHG) emissions.

Given the urgency of the climate crisis, as highlighted by the Intergovernmental Panel on Climate Change (IPCC), there is increasing global pressure on governments and ECAs to align their activities with the Paris Agreement. This alignment is essential for limiting dangerous global warming to 1.5°C, as outlined by the International Energy Agency (IEA), which asserts that new fossil fuel projects must be avoided to meet these targets. Austria, like many other countries, is at a critical juncture where its export credit policies must pivot quickly and decisively towards climate sustainability.

Austria's export credit portfolio, while relatively small compared to international peers, still contains exposure to fossil fuel projects. Between 2019 and 2023, new commitments to fossil fuel projects amounted to EUR 325 million, with Egypt, Saudi Arabia and Canada being major recipients. Despite a growing commitment to green finance, the scale and persistence of these carbon-intensive projects pose a challenge to Austria's Parisalignment ambitions.

The study critiques Austria's lag in adopting an overarching net-zero strategy for its export credit system. In response to an EU Council Conclusion from March 2022, Austria devised a Sustainability Strategy of the Export Promotion Procedure in 2023. Though a welcome step, the strategy shows serious deficiencies: **Austria embarks on one of the slowest phase-out trajectories among comparable EU peers and allows one of the most wide-ranging sets of fossil exemptions**. The current strategy does not define a time-bound road map for achieving a climate neutral portfolio and thus fails to ensure alignment with the Paris Agreement. Austria's approach also includes green finance initiatives like "Exportinvest Green Energy", which offers favourable financial conditions for renewable energy projects. However, a comprehensive approach towards achieving net-zero for the vast majority of its export promotion portfolio is currently missing. This lack of coherence is also evident in the **lack of a speedy and science-based roadmap required to phase out high-GHG guarantees fully**.

Austria's approach is contrasted with other EU countries such as Germany and Sweden, which have adopted more ambitious export credit strategies aligned with climate goals. For instance, Germany's "Climate Policy Sector Guidelines for Export Credit Guarantees" categorize projects into green, white, and red categories based on their contributions to or hindrance of climate goals. Sweden has embraced the "Fossil Free Sweden" initiative, focusing on making the country a leader in fossil-free systems and promoting the export of sustainable technologies. More importantly, both these **peers have adopted methods and frameworks for assessing the GHG footprint of projects and for bringing their portfolios progressively more in line with the Paris Agreement.**





The "Export Finance for Future" (E3F) coalition, which Austria has yet to join, exemplifies international efforts to transition ECAs towards supporting renewable energy and phasing out fossil fuel projects. Initiated in 2021, the E3F coalition includes several European countries that commit to setting ambitious climate targets, sharing best practices, and increasing transparency in export finance operations. Austria's absence from such initiatives underscores the **need for a more proactive international engagement**.

One of the main challenges identified in the study is the inherent inertia in transitioning away from fossil fuels and GHG-intensive projects. Fossil fuel projects supported today will continue to emit GHGs for decades, delaying the impact of any future decarbonization efforts. This is exacerbated by Austria's relatively lenient exit timeline for gas projects, which extends beyond the deadlines set by other European countries. In line with the **2040 national target for climate neutrality**, the phase-out of fossil fuel projects should occur sooner, and immediate steps should be taken to integrate GHG accounting across all officially supported export projects. Data from Germany's GHG accounting suggest that almost half the emissions associated with German export guarantees are attributable to sectors outside fossil energy.

Aligning Austria's public export promotion with planetary boundaries: the way forward



The study provides several key recommendations, in particular:

Adopt an Ambitious, Science-Based Net-Zero Strategy: Austria shall establish a net-zero export promotion strategy aligned with the Paris Agreement and anchored in Austria's national goal of achieving climate neutrality by 2040. The strategy must go substantially beyond the current sustainability strategy. It should be based on two pillars: (i) the immediate cessation of new fossil-fuel projects and (ii) an ambitious time-bound goal for achieving a climate-neutral portfolio of officially supported export projects. The latter also requires a prudent and transparent phase-in of high-quality negative-emissions projects. A science-based roadmap should guide funding decisions, provide safeguards against carbon lock-in (such as assessments whether projects delay or prevent the transition to low-carbon alternatives) and include carbon accounting for the lifetime emissions for officially supported export projects.

Ensure consistent Metrics and Monitoring: Austria's export promotion policy must cease to operate in 'blind flight' vis-à-vis the net zero destination. To ensure accountability, the Ministry of Finance and OeKB should implement robust public reporting frameworks that include the GHG footprint of the entire officially supported portfolio and consistent monitoring of targets. Transparent reporting on the GHG impact of officially supported projects is essential to track progress toward climate neutrality and should be published on an annual basis.

Improve Governance and Public Transparency: We recommend a more detailed regulation of sustainability and due diligence standards by law (e.g. in the Austrian Export Guarantees Act). In this context, the 2040 target for climate neutrality and corresponding public reporting requirements of the responsible Ministry of Finance should be enshrined in law. Moreover, the Ministry of Finance shall set up an advisory scientific climate council to support comprehensive climate risk assessment and the development of policy-making in export promotion.

Active Participation in International Coalitions: Austria should join leading initiatives like the E3F coalition and actively participate in the global push towards sustainable export finance. Collaboration with international partners will not only enhance Austria's climate credibility but also provide valuable insights for shaping its own policies. As a country with a notable history of sustainable technology leadership, Austria should lead by example and use its political clout to push forward the agenda of climate-friendly public finance.

The study concludes that while Austria has taken some steps towards greening its export credit system, these are insufficient given the urgency of the climate crisis. The continued support for fossil fuel projects contradicts Austria's climate goals and undermines its international credibility. A comprehensive, science-based strategy, coupled with stronger governance and transparency, is needed to align Austria's export finance with the Paris Agreement and with planetary boundaries.

ZUSAMMENFASSUNG

Die vorliegende Studie untersucht die Schnittstelle von Exportfinanzierung und Klimapolitik mit Fokus auf Österreich und relevante Vergleichsländer. Sie befasst sich mit der **Rolle des** österreichischen Ausfuhrförderungssystems bei der globalen Transformation zu einer Netto-Null-Emissionen-Wirtschaft ("net zero"). Konkret wird analysiert, wie die österreichische Exportfinanzierungspolitik mit den Zielen des Pariser Abkommens übereinstimmt, und es werden Reformansätze zur Förderung eines nachhaltigeren und klimaneutralen Portfolios vorgeschlagen.

Öffentliche Exportförderungspolitiken und sogenannte **Exportkreditagenturen (Export Credit Agencies, ECAs) haben große Hebelwirkung**: Sie stellen Finanzinstrumente wie staatlich besicherte Kredite, Garantien und Versicherungen bereit, die internationalen Handel unterstützen. Sie haben weltweiten Einfluss, da sie das Risiko internationaler Geschäfte senken und wirtschaftliche Aktivitäten im Ausland fördern. Diese Finanzinstitute unterstützen jedoch immer wieder CO2-intensive Projekte, besonders auch im Bereich fossiler Brennstoffe, und tragen damit auch erheblich zu weltweiten Treibhausgasemissionen (THG) und damit zum Klimawandel bei.

Angesichts der Dringlichkeit der Klimakrise, wie vom Intergovernmental Panel on Climate Change (IPCC) betont, wächst der globale Druck auf Regierungen und ECAs, ihre Aktivitäten mit dem Pariser Abkommen in Einklang zu bringen. Diese Ausrichtung ist entscheidend, um die globale Erhitzung auf 1,5°C zu begrenzen. Dies stellt etwa auch die Internationale Energieagentur (IEA) fest, die argumentiert, dass neue Projekte im Bereich fossiler Brennstoffe umgehend gestoppt werden müssen, um die Pariser Klimaziele zu erreichen. Österreich steht wie viele andere Länder daher an einem kritischen Punkt, an dem seine Exportkreditpolitik schnell und entschlossen auf Klimanachhaltigkeit umgestellt werden muss. Das österreichische Exportkreditportfolio ist zwar im internationalen Vergleich relativ klein, enthält jedoch nach wie vor Projekte im Bereich fossiler Brennstoffe. Zwischen 2019 und 2023 belief sich das Neugeschäft für Projekte im Bereich fossiler Brennstoffe auf insgesamt 325 Millionen Euro, wobei Ägypten, Russland und Kanada zu den Hauptdestinationen zählten. Trotz eines wachsenden Engagements für grüne Finanzierungen stellt der Umfang und die Beharrlichkeit dieser CO2-intensiven Projekte ein Problem für Österreichs Compliance mit den Pariser Zielen dar.

Die Studie kritisiert Österreichs Rückstand bei der Einführung einer umfassenden Netto-Null-Strategie für sein Exportkreditsystem. In Reaktion auf Schlussfolgerungen des EU-Rates vom März 2022 hat Österreich 2023 eine Nachhaltigkeitsstrategie für das Exportförderungsverfahren vorgelegt. Diese ist zu begrüßen, weist jedoch erhebliche Mängel auf: Österreich beschreitet darin einen der langsamsten Ausstiegspfade für fossile Geschäfte unter vergleichbaren EU-Ländern und sieht potenziell weitreichende Ausnahmeregelungen vor. Die Nachhaltigkeitsstrategie definiert keinen zeitlich festgelegten Fahrplan zur Erreichung eines klimaneutralen Portfolios und gewährleistet daher nicht die Vereinbarkeit mit dem Pariser Abkommen. Österreichs Ansatz beinhaltet zwar grüne Finanzierungsinitiativen wie "Exportinvest Green Energy", die günstige Finanzierungsbedingungen für Projekte im Bereich erneuerbarer Energien bietet. Einen umfassenden Zugang, um Net Zero für den überwiegenden Teil der öffentlich gedeckten Exportgeschäfte zu erreichen, gibt es jedoch nicht. Dieser Mangel an Kohärenz zeigt sich im Fehlen eines notwendigen schnellen und wissenschaftlich fundierten Fahrplans, um CO2-intensive Garantien vollständig auslaufen zu lassen. Die Studie vergleicht Österreichs Vorgehen mit dem anderer EU-Länder wie Deutschland und Schweden, die Exportkreditstrategien im Einklang mit ehrgeizigeren Klimazielen verfolgen. seinen "Klimapolitischen Deutschland etwa kategorisiert in Sektorleitlinien für Exportkreditgarantien" Projekte in grüne, weiße und rote Kategorien, basierend auf ihrem Beitrag zu oder ihrer Behinderung von Klimazielen. Schweden verfolgt die Initiative "Fossil Free Sweden", die darauf abzielt, das Land zu einem Vorreiter im Bereich fossil-freier Systeme zu machen und den Export nachhaltiger Technologien zu fördern. Am wichtigsten ist jedoch, dass beide Vergleichsländer Methoden und Instrumente zur Bewertung des THG-Fußabdrucks von Projekten entwickelt haben, mithilfe derer sie ihre Portfolios mit dem Pariser Abkommen zunehmend in Einklang bringen können.



Der Fossilausstieg in der Exportfinanzierung: Fristen und Ausnahmen im Vergleich

Die "Export Finance for Future" (E3F)-Koalition, der Österreich bisher noch nicht beigetreten ist, steht exemplarisch für internationale Bemühungen, ECAs zur Unterstützung erneuerbarer Energien und zum Auslaufen fossiler Projekte zu bewegen. Die 2021 ins Leben gerufene Allianz umfasst mehrere europäische Länder, die sich zur Festlegung ehrgeiziger Klimaziele, zum Austausch von "best practices" und zur Erhöhung der Transparenz in der Exportfinanzierung verpflichten. Österreichs Abwesenheit von solchen Initiativen verdeutlicht den Bedarf einer **proaktiveren Haltung beim internationalen Engagement**.

Heute unterstützte Projekte im Bereich fossiler Brennstoffe emittieren noch Jahrzehnte lang THG und verzögern damit die Wirkung zukünftiger Dekarbonisierungsbestrebungen. Dieses Problem wird durch Österreichs großzügigen Zeitrahmen für den Ausstieg aus Gasprojekten, der über den vieler anderer europäischer Länder hinausgeht, verstärkt. Im Einklang mit dem nationalen Ziel der **Klimaneutralität bis 2040** sollte das Auslaufen fossiler Projekte früher erfolgen. Zusätzlich sollten jedoch sofortige Schritte zur Integration der THG-Bilanzierung über alle offiziell geförderten Exportprojekte hinweg unternommen werden. Daten aus Deutschland legen nahe, dass fast die Hälfte der mit Exportgarantien verbundenen THG-Emissionen auf Sektoren außerhalb des Bereichs fossiler Energie entfällt.

Die Österreichische Exportförderung klimaneutral machen: Der Weg nach vorne



Die Studie gibt eine Reihe zentraler Empfehlungen, darunter:

- 1. Eine ambitionierte, wissenschaftlich fundierte Netto-Null-Strategie zu verabschieden: Österreich sollte eine Netto-Null-Exportförderstrategie im Einklang mit dem Pariser Abkommen verabschieden, in der das Ziel der Klimaneutralität bis 2040 verankert wird. Die Strategie sollte über die derzeitige Nachhaltigkeitsstrategie hinausgehen und auf zwei Säulen beruhen: (i) dem sofortigen Stopp neuer fossiler Projekte und (ii) einem ehrgeizigen, zeitlich gebundenen Ziel zur Erreichung eines klimaneutralen Portfolios öffentlich unterstützter Exportprojekte. Letzteres erfordert auch, dass nach gewissenhafter und transparenter Prüfung zunehmend mehr nachhaltige Projekte mit "negativen Emissionen" ins Portfolio genommen werden. Ein wissenschaftlich fundierter Fahrplan sollte die Finanzierungsentscheidungen leiten, Schutzmechanismen gegen Rückschritte im Bereich fossiler Brennstoffe bieten (z.B. einen CO2-Lock-in-Test, der beurteilt, ob Projekte den Umstieg auf Niedrig-Emissions-Alternativen behindern oder verzögern) und die Kohlenstoffbilanzierung der Lebenszyklusemissionen offiziell unterstützter Exportprojekte beinhalten.
- 2. Konsistente Messung und Überwachung zu gewährleisten: Die österreichische Exportförderungspolitik sollte nicht mehr "im Blindflug" in Bezug auf das Netto-Null-Ziel operieren. Um Rechenschaftspflicht zu gewährleisten, sollten das Finanzministerium und die OeKB robuste Berichtssysteme implementieren, die den THG-Fußabdruck des gesamten offiziell unterstützten Portfolios sowie die konsistente Überwachung der Ziele umfassen. Transparente Berichte über die THG-Auswirkungen öffentlich gestützter Projekte sind entscheidend, um Fortschritte in Richtung Klimaneutralität zu verfolgen und sollten jährlich veröffentlicht werden.
- 3. Die Governance und öffentliche Transparenz zu verbessern: Wir empfehlen eine detailliertere gesetzliche Regelung der Nachhaltigkeits- und Sorgfaltsstandards (z.B. im österreichischen Ausfuhrfördergesetz). In diesem Zusammenhang sollte das Ziel der Klimaneutralität bis 2040 und die entsprechenden öffentlichen Berichtspflichten des zuständigen Finanzministeriums gesetzlich verankert werden. Darüber hinaus sollte das Finanzministerium einen beratenden wissenschaftlichen Klimarat einrichten, um eine umfassende Klimarisikobewertung und die Entwicklung politischer Maßnahmen in der Exportförderung zu unterstützen.

4. An internationalen Koalitionen mit Vorreiterfunktion aktiv teilzunehmen: Österreich sollte führenden Initiativen wie der E3F-Koalition beitreten und aktiv an globalen Bemühungen um nachhaltige Exportfinanzierung teilnehmen. Die Zusammenarbeit mit internationalen Partnern wird nicht nur Österreichs Klimaglaubwürdigkeit stärken, sondern auch wertvolle Erkenntnisse für die Gestaltung der eigenen Politik liefern. Als Land, das auf eine bemerkenswerte Geschichte im Bereich nachhaltiger Technologien zurückblickt, sollte sich Österreich als Vorbild positionieren und sein politisches Gewicht nutzen, um die Agenda für klimagerechte öffentliche Finanzen offensiv voranzutreiben.

Die Studie schließt mit der Feststellung, dass Österreich zwar einige Schritte zur ökologischen Ausrichtung seines Exportkreditsystems unternommen hat, diese jedoch angesichts der Dringlichkeit der Klimakrise bisher unzureichend sind. Die anhaltende Unterstützung für fossile Projekte widerspricht den Klimazielen Österreichs und untergräbt seine internationale Glaubwürdigkeit. Eine umfassende, wissenschaftlich fundierte Strategie, gepaart mit einer stärkeren Governance und Transparenz, ist erforderlich, um die österreichische Exportfinanzierung mit dem Pariser Abkommen und den planetaren Belastungsgrenzen in Einklang zu bringen.

ABBREVIATIONS AND ACRONYMS

AK Wien	Chamber of Labour Vienna
AT	Austria
BE	Belgium
BMF	Ministry of Finance / Austria
BMK	Ministry of Climate Action and Energy / Austria
BMWK	Federal Ministry for Economic Affairs and Climate Action / Germany
CCS	Carbon Capture and Storage
CCSU	Climate Change Sector Understanding
CEPT	Clean Energy Transition Partnership
CO2	Carbon dioxide
CO2(e)	Carbon dioxide (equivalents)
COP	Conference of the Parties
DE	Germany
DK	Denmark
E3F	Export Finance for Future
ECA	Export Credit Agency
EIB	European Investment Bank
EKN	Exportkreditnämnden (Swedish Export Credit Agency)
EKN	Swedish Export Credit Agency
ES	Spain
ESG	Environmental, Social, and Governance
ESIA	Environmental and Social Impact Assessments
EU	European Union
EUR	Euro
FI	Finland
FR	France
GDP	Gross Domestic Product
GDP	Gross Domestic Product
GHG	Greenhouse Gas
IDFC	International Development Finance Club (IDFC)

IEA	International Energy Agency
IFC	International Finance Corporation
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
IT	Italy
LDC	Least Developed Country
LU	Luxemburg
NEKP	National Energy and Climate Plan
NGOs	Non Governmental Organisations
NL	The Netherlands
NZECA	Net Zero Export Credit Alliance
OECD	Organisation for Economic Co-operation and Development
OeKB	Oesterreichische Kontrollbank AG
PV	Photovoltaics
SE	Sweden
SEK	Swedish Export Credit Corporation
SEK	Swedish Export Credit Corporation (SEK)
TCFD	Task Force on Climate-related Financial Disclosures
THG	Treibhausgasemissionen
UAE	United Arab Emirates
UK	United Kingdom
UNFCCC	united Nations Framework Convention on Climate Change
\$	US Dollar

LIST OF FIGURES AND TABLES

Figure 1.	New OeKB commitments with federal guarantees in the fossil energy sector (2019-2023, in EUR millions and % of total new commitments)	26
Figure 2.	Potentially climate-relevant projects: a tentative classification of A and B projects (2006-2024, number of OeKB projects)	28
Figure 3.	The fossil phase out in export promotion: exemptions and deadlines in comparison	36
Figure 4.	Paris Alignment in Export Finance: EKN's Approach	37
Figure 5.	A stylised view of the challenge ahead: Bringing the officially supported export portfolio towards a net-zero GHG footprint	42
Table 1.	Climate delay discourse (à la Lamb et al.) in Austria's export sustainability strategy	24
Table 2.	New OeKB commitments with federal guarantees in the fossil energy sector (2019-2023, liabilities in EUR Mio)	25
Table 3.	Potentially climate-relevant projects: a tentative classification of A and B projects (2006-2024, number of OeKB projects)	29
Table 4.	OeKB's disclosure discipline for A and B projects	30
Table 5.	Phase out from official support to fossil-sector exports: comparison of pledges by EU member states	32
Table 6.	Exemptions pertaining to the coal sector (excluding power plants)	34
Table 7.	Exemptions pertaining to the oil sector	34
Table 8.	Exemptions pertaining to the natural gas sector	35

1. INTRODUCTION

This is not a time for 'business as usual'. A continuously mounting body of evidence underscores the profound implications for ecosystems, economies, and societies worldwide of unprecedented changes in the Earth's climate system. Recent data and reports from the Intergovernmental Panel on Climate Change (IPCC) provide an alarming account of the current state of the climate, driven primarily by human activities.

The IPCC's Sixth Assessment Report, released in 2021, highlights that global temperatures have already risen by approximately 1.1°C since the late 19th century. The frequency and intensity of extreme weather events, such as heatwaves, hurricanes, and heavy precipitation, have increased significantly, leading to widespread ecological and societal disruptions (IPCC, 2021). Moreover, the Arctic region is warming at more than twice the global average rate, causing rapid ice melt and contributing to rising sea levels. The IPCC reports that the global mean sea level has risen by about 20 centimetres since the start of the 20th century, with a significant acceleration observed in recent decades (ibid.).

The prognosis for future climate impacts is worrying. The IPCC projects that, without significant and immediate reductions in greenhouse gas emissions (GHG), global temperatures could rise by 1.5°C as early as 2030. Such an increase would exacerbate the frequency and severity of climate-related disasters, impacting food and water security, human health, and biodiversity (ibid.). The International Energy Agency (IEA) echoes these concerns, emphasizing the need for a drastic transformation of the global energy system. The IEA's Net Zero by 2050 report outlines a pathway to achieving net-zero emissions by mid-century, which is essential for limiting global temperature rise to 1.5°C. This pathway includes a rapid shift towards renewable energy sources, enhanced energy efficiency, and the deployment of new technologies such as carbon capture and storage (IEA, 2021).

The Paris Agreement, adopted in 2015, aims to limit global temperature increases to well below 2° C above pre-industrial levels, with efforts to keep the rise within 1.5°C. This target builds on the earlier Kyoto Protocol, which set emission reduction targets for developed countries. One of the most critical concepts in climate science is the carbon budget, which quantifies the amount of carbon dioxide (CO2) emissions that can be released while still having a likely chance of limiting global warming to a specific temperature threshold. The IPCC (2021) estimates that to have a 50% chance of staying below 1.5°C, the remaining carbon budget from the start of 2020 is approximately 500 gigatons of CO2. At the current rate of emissions, this budget could be exhausted within a decade, underscoring the urgent need for drastic emission reductions.

The Stockholm Resilience Centre's research on planetary boundaries provides further context for the climate emergency. The planetary boundaries framework identifies nine critical thresholds that regulate the stability and resilience of the Earth system. As of recent assessments, six of these boundaries, including climate change, biodiversity loss, and biochemical flows, have been crossed due to human activities. Crossing these boundaries increases the risk of large-scale, irreversible environmental changes, highlighting the interconnectedness of climate change with other environmental issues (Richardson et al., 2023).

1.1. Ending Fossil Finance and Getting to Net Zero

Fossil fuels – coal, oil, and natural gas – are the primary drivers of the climate crisis. Combustion of these fuels for energy, transportation, agriculture and industrial processes releases large amounts of CO2 and other GHGs into the atmosphere, leading to global

warming and climate change. According to the IEA, fossil fuels accounted for nearly 74% of global CO2 emissions from energy production in 2019. The continued reliance on fossil fuels is incompatible with the climate targets set by the Paris Agreement, which aims to limit global temperature rise to well below 2°C, with efforts to keep it within 1.5°C above pre-industrial levels.

Once added, CO2 stays in the atmosphere between 300 to 1,000 years (Buis, 2019). The implications of climate science are clear: new fossil fuel projects ought not be permitted. This means, in particular, that governments should take "whatever legislative or administrative action is necessary (...) including restrictions on finance and on subsidies" to new fossil projects and that civil society should advocate legislated bans (Green et al., 2024). Already in May 2021 the IEA warned that oil and gas development must stop immediately for the world to meet the goal of net zero emissions by 2050. Projected global oil and gas production as well as coal and gas power generation already far exceed the 1.5° limits.

Despite the pressing need for climate mitigation, governments worldwide continue to subsidize fossil fuels. The International Monetary Fund (IMF) estimated that global fossil fuel subsidies amounted to \$5.9 trillion in 2020, which includes both direct financial support and implicit subsidies such as unpriced externalities like pollution and climate impacts (Parry et al., 2021). These subsidies distort energy markets, making it harder for renewable energy sources to compete and delaying the transition to a sustainable energy system. Recent macroeconomic impact models estimate a lower bound of 19% permanent income reduction relative to a baseline without climate-change impacts within the next 26 years (Kotz et al., 2024). The authors show that the costs of reduced economic productivity greatly outweigh the costs required to mitigate emissions in line with a 2 °C target. Bilal and Känzig (2024) estimate that every 1°C of global warming permanently reduces world GDP by 12% by 2100.

While fossil fuels are the largest contributors to climate change, other, non-fossil, emissionintensive sectors also play a substantial role as well. According to the IPCC, industrial activities account for about 21% of global GHG emissions, with steel and cement production being particularly relevant due to their reliance on fossil fuels and chemical processes that release CO2. Agriculture and land use changes contribute around 23% of global emissions, primarily through methane from livestock, nitrous oxide from fertilized soils, and CO2 from deforestation and soil degradation.

Calculations from German Authorities show that just over half of the GHG emissions (55%) associated with the portfolio of German export credit guarantees were attributable to projects related to fossil energy in 2023 (Euler Hermes, 2024). In turn, almost half of emissions therefore came from other sectors (such as aviation, shipping, chemicals, or metals). This illustrates the need that the phase out of support to the fossil fuel sector will have to be complemented by a second pillar, namely comprehensive cross-sectoral decarbonisation. A net-zero approach involves measures such as promoting low-carbon industrial processes, adopting sustainable agricultural practices, improving energy efficiency, and enhancing carbon sequestration through reforestation and soil management.

1.2. Austria's Export Promotion Can Make a Difference

Public export promotion systems hold a critical role in addressing the climate crisis. Export Credit Agencies (ECAs) provide government-backed loans, guarantees, and insurance to domestic companies operating internationally, particularly in sectors like energy, infrastructure, and transportation. Their support can shape global investment patterns by determining which projects receive funding. By choosing to back sustainable initiatives over carbon-intensive ones, ECAs can thus accelerate the global transition to a low-carbon economy. Or they can delay it.

As this study will show, in the fight against climate change, it is crucial for ECAs, or their authorizing institutions, to phase out support for GHG-intensive projects, such as those involving or 'locking in' fossil fuels, as early as possible. This shift is in harmony with the EU's Green Deal whose primary long-term objective is to achieve net-zero greenhouse gas emissions by 2050 and to thus limit temperature rise as stipulated in the Paris Agreement. This goal has been made legally binding through the European Climate Law enacted in 2021. As an interim target, the European Commission has set 2030 as a deadline for achieving a reduction of GHG by 55 percent compared to 1990 and 2040 as a deadline for achieving a 90 percent reduction. Austria has set 2040 as its national goal for climate neutrality. Further, the EU taxonomy provides a classification system for sustainable economic activities, guiding both public and private investment towards projects that are environmentally friendly and socially responsible. The current study draws on these timelines and the taxonomy where appropriate.

It is important to stress early that, although it is a small country, Austria's influence in this context extends well beyond its borders. The country can set an important example to its neighbouring countries, particularly in Eastern Europe, by implementing ambitious climate policies and demonstrating the feasibility of transitioning to a low-carbon economy. As part of the EU, Austria has the opportunity to influence collective policies and advocate for stronger environmental regulations and targets, including in export promotion. By demonstrating commitment and progress, Austria can encourage its peers to align their policies with ambitious climate goals, contributing to the broader EU objective of achieving climate neutrality by 2050.

Austrian companies are already at the forefront of innovations in renewable energy, energy efficiency, and sustainable construction. Austria has extensive experience and expertise in hydropower and is a leader in biomass heating systems and bioenergy technologies. But Austrian firms have also developed advanced technologies for energy-efficient buildings, including high-performance insulation materials and passive house designs. The country has a strong track record in waste management and recycling technologies and in sustainable forestry. Further, Austrian companies have developed innovative smart grid solutions, including advanced metering infrastructure and grid management systems. The list goes on. By exporting sustainable technologies while rapidly und fully phasing out unsustainable ones, Austria can facilitate the global transition to cleaner energy and production systems and reduce emissions beyond its borders.

Austria can also play a crucial role in international climate cooperation and capacity building. By partnering with developing countries and providing technical assistance and financial support, Austria can help build the capacity of these nations to implement effective climate mitigation strategies. Export finance can play an important role in this. Participation in international initiatives and organizations, such as the United Nations Framework Convention on Climate Change (UNFCCC) allows Austria to contribute to global efforts and share its expertise and best practices.

1.3. A Critical Juncture

Transitioning to a net-zero economy requires substantial investments in clean energy technologies, infrastructure, and innovations. The IEA's "Net Zero by 2050" report outlines that achieving net-zero emissions by mid-century will necessitate annual investments in clean energy of around \$4 trillion by 2030. This investment is needed for scaling up renewable energy sources, improving energy efficiency, and developing new technologies such as

hydrogen, advanced batteries, and carbon capture and storage (CCS). ECAs are a part of the financial ecosystem which can provide this necessary funding and de-risking of renewable projects.

The economic case for decarbonisation has substantially strengthened in recent years. Solar and wind power have become increasingly cost-competitive with fossil fuels. According to the IEA, the cost of solar photovoltaics has declined by about 90% over the past decade, and onshore wind costs have fallen by 70%. These trends, coupled with policy support and technological advancements, make the transition to a net-zero economy both feasible and, increasingly, economically advantageous. However, achieving this transition requires coordinated action by governments, businesses, and financial institutions to redirect investments away from fossil fuels and towards clean energy.

Current innovations in recycling, battery technology, hydrogen use, solar integration, and carbon capture represent critical steps towards addressing the climate crisis. The successful commercialization and widespread adoption of these technologies hold great potential for reducing GHG emissions and fostering a low-carbon economy.

For instance, cement and steel production are among the most carbon-intensive industrial processes. Innovations in recycling these materials can reduce their carbon footprints. Using industrial waste products such as blast furnace slag and fly ash in cement production not only reduces the need for virgin raw materials but also cuts emissions from the calcination process. In steel production, increasing the use of scrap steel in electric arc furnaces as opposed to traditional blast furnaces can reduce energy consumption and emissions. In construction, advances have been made in recycling cement from demolished concrete buildings. These recycling technologies are increasingly becoming commercially viable, driven by advancements in sorting and processing technologies.

Battery technology is critical for the transition to renewable energy and electric mobility. Recent advances in lithium-ion batteries have significantly improved energy density, charging speed, and lifespan. Moreover, sodium-ion batteries are emerging as a promising alternative due to the abundance and low cost of sodium compared to lithium. These batteries could provide a more sustainable option for energy storage, particularly in large-scale applications where cost and resource availability are crucial factors.

Hydrogen is also gaining traction as a potential game-changer in various industries, including steel production. The use of green hydrogen – produced via electrolysis using renewable energy – instead of carbon as a reducing agent in steelmaking could virtually eliminate CO2 emissions from the process. Pilot projects, such as those undertaken by *SSAB* in Sweden or *Voestalpine* in Austria, are currently demonstrating the feasibility of hydrogen-based steel production. Additionally, integrating solar energy into industrial processes offers another avenue for decarbonization. Concentrated solar power can generate the high temperatures required for processes like steel production, reducing reliance on fossil fuels. While still in the early stages of commercial adoption, these technologies show great promise for industries seeking to reduce their carbon footprints.

These and similar innovations present export opportunities for technologically advanced countries – including those, like Austria, who tend to provide supplies industries. By investing in and developing these technologies and its supplies, Austria can sustain leadership in the technology market, creating jobs and economic growth avenues while contributing to global climate goals. Austria's government, including through export promotion, should create a maximally conducive environment for these innovations to thrive.

1.4. This Study

The research presented throughout this study, commissioned by the Chamber of Labour Vienna (AK Wien), builds on the work of a previous study prepared for the European Parliament (Schlögl et al., 2024), which drew on data from ECA annual activity reports, the European Commission's annual reviews of member states' export credits and a set of expert interviews and assessed the alignment of ECA operations and their due diligence practices vis-à-vis EU policy goals. The current study brings together findings from this previous analysis, applied to Austria, with novel research carried out throughout the first half of 2024. We further build on a previous study which investigated social due diligence in the Austrian export promotion procedure (Baxewanos & Raza, 2013).

The present study's objectives are twofold: to critically assess Austria's strategy for climateneutral transformation of its export promotion, with a particular focus on international best practices; and to use these international reform impulses to accelerate the ambitious phaseout of climate-damaging business sectors while promoting climate-friendly export policies. To this end, the study hopes to contribute to clarifying the role and responsibility of public export promotion systems in addressing the climate crisis. It highlights the value and importance of leading by example in relation to private actors. It also hopes to make international benchmarks and exemplary cases for the green transformation of ECAs and sustainable export promotion policies more tangible. Additionally, the study aims to advance policy learning in Austria by exploring what can be learned from international best practices and identifying what is needed to position Austria among the global leaders in sustainably-oriented ECAs.

Our mixed-methods approach, adopted for this study, draws on a review of relevant scientific and policy literature, the study of legal and political documents related to Austria's export finance and a comparative analysis of phase out plans of EU member states based on a coding scheme. Further, descriptive analyses and categorisations of publicly available data on Austria's export credit and guarantee portfolio were performed and a set of semi-structured background interviews with relevant stakeholders were conducted, which included representatives from the Ministry of Finance (BMF), Austria's ECA (OeKB), the Ministry of Climate Action and Energy (BMK), the Swedish Export Credit Agency (EKN), the Swedish Export Credit Corporation (SEK) and Germany's ECA (Euler Hermes). In addition, experts from non-governmental organisations (SwedWatch, Swedish Society for Nature Conservation, Oil Change International, Both ENDS) were consulted. The authors also participated in the conference "Net-Zero by 2050: The Role of Export Finance", jointly organised by the European Commission and the Belgian presidency of the Council of the EU in April 2024. We are grateful for comments received from the Chamber of Labour Vienna on earlier versions of this study. The views presented here are those of the authors and do not necessarily represent official positions of our funding institution nor of the organisations consulted.

The study is structured as follows: Chapter 2 provides an overview of Export Finance and Climate Policy with an emphasis on current development in the regulatory and policy environment; Chapter 3 studies the exposure of Austria's export promotion to the fossil and potentially GHG-intensive sectors and assesses Austria's respective sustainability strategy; Chapter 4 brings together lessons from other EU member states and provides a benchmark for Austria's ambitions in this space; the cases of Germany and Sweden and the 'net-zero' framework are explored in depth; finally, Chapter 5 concludes and presents a series of recommendations on how to align Austria's system of export promotion with the requirements of the Paris Agreement.

2. EXPORT FINANCE AND CLIMATE POLICY

Export finance refers to the financial services and products provided to facilitate international trade. A key player in this domain is the Export Credit Agency (ECA), a government or quasigovernmental institution that offers financial assistance in the form of guarantees, insurance, and loans to domestic companies involved in international trade. The primary role of ECAs is to mitigate the commercial and political risks associated with exporting. By mitigating these risks, ECAs enhance the confidence of domestic companies to engage in international markets, particularly in higher-risk regions. They typically operate under mandates that aim to support national economic growth, job creation, and the advancement of strategic sectors.

Export finance has its roots in the early 20th century, with the establishment of the first ECAs following World War I. The institutions were created to stabilize economies and promote international trade during periods of economic uncertainty. The United Kingdom established its Export Credits Guarantee Department (now UK Export Finance), in 1919, setting a precedent for many nations. Austria followed suit with the establishment of Oesterreichische Kontrollbank AG (OeKB) in 1946, aiming to support its war-torn economy by facilitating international trade. OeKB is registered as a private company but works, pursuant to § 8a in conjunction with § 5/1 Austrian Export Guarantees Act (Ausfuhrförderungsgesetz, AusfFG), as the authorized agent of the state, more precisely: the Ministry of Finance. Over the decades, OeKB has evolved to address the changing needs of global markets, expanding its services to include more financial instruments and risk mitigation strategies.

2.1. Regulatory environment

The legal and regulatory environment of export finance is shaped by a web of international agreements, national regulations, and industry standards designed to promote fair competition, transparency, and sustainability in global trade. Central to this environment is the Arrangement on Officially Supported Export Credits (commonly referred to as the 'Arrangement'), a framework established in 1978 by the OECD. The Arrangement sets forth guidelines for the terms and conditions of officially supported export credits, including minimum interest rates, maximum repayment terms, and the management of credit risks.

Austria, through BMF and OeKB, is a participant in the OECD Arrangement. Adherence to these guidelines ensures that its export credit practices align with internationally agreed-upon standards, promoting a 'level playing field' for exporters. The OECD Arrangement has evolved since its inception and has adapted to changes in the global economic landscape and addressing emerging issues such as environmental sustainability and market stability. Recent updates to the Arrangement have included provisions to phase out support for unabated coal-fired power plants and to promote financing for renewable energy projects, reflecting a growing emphasis on aligning export credit practices with climate goals.

Beyond the OECD, other important players in the regulation of export finance include the Berne Union, an international association of export credit and investment insurers. Established in 1934, the Berne Union provides a forum for its members to exchange information, develop best practices, and promote sound principles in the provision of export credit insurance and investment protection. The Berne Union's guidelines and standards complement those of the OECD Arrangement.

Common Approaches

The "Common Approaches", formally known as the OECD Recommendation on Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence, represent a component of the legal and regulatory environment governing export finance. These guidelines were developed to ensure that ECAs conduct thorough assessments of the environmental and social impacts of the projects they finance.

The Common Approaches require ECAs to undertake due diligence procedures that include the identification, assessment, and management of environmental and social risks associated with projects. This involves categorizing projects based on their potential impacts, with Category A projects having significant adverse environmental or social impacts that are irreversible, and Category B projects having less severe impacts that are more readily mitigated. ECAs are also encouraged to consult with affected communities, disclose relevant information, and monitor projects to ensure compliance with environmental and social standards throughout the project lifecycle. OeKB has integrated the Common Approaches into its operational framework to ensure that the projects it supports are not only economically viable but also environmentally and socially responsible.

2.2. International developments

The international regulatory environment is generally influenced by broader economic and political trends, such as the push for greater environmental sustainability and the integration of social responsibility into trade finance. A particularly notable initiative is the EU Council Conclusion 7101/22 from 15 March 2022, which underscores the European Union's resolve to modernize export finance regulations to better align with the Paris Agreement and the European Green Deal. The conclusion calls for a review and overhaul of the policies and practices of ECAs within the EU to promote a transition towards a low-carbon economy. Further, it calls for enhanced transparency and accountability in the operations of ECAs.

The EU Council Conclusion highlights several priorities for reform. First, it emphasizes the need to phase out financial support for fossil fuel projects and to prioritize renewable energy and green technologies. In paragraph 11, the conclusion specifically

"calls on the Commission to launch a discussion with the Participants to the OECD Arrangement in order to reach an agreement on ending officially supported export credits for projects in the fossil fuel energy sector, beyond coal and including oil and natural gas projects, unless in limited and clearly defined circumstances that are consistent with a 1.5°C warming limit and the goals of the Paris Agreement."

In paragraph 12, the Council Conclusion further

"announces the intention hereby by the Member States to determine by the end of 2023 in their national policies their own science-based deadlines for ending officially supported export credits to fossil fuel energy sector projects [up-, downand midstream], unless in limited and clearly defined circumstances that are consistent with a 1.5°C warming limit and the goals of the Paris Agreement."

A pertaining footnote specifies that the conclusion refers to "projects of exploration, production, transportation, storage, refining, distribution of coal, crude oil, natural gas, and unabated power generation."

At the international level, the OECD Arrangement has been updated to incorporate more environmental considerations. This includes tightening regulations around support for fossil fuel projects, particularly coal-fired power plants. There has been an expansion of provisions for renewable energy and climate-friendly projects. The so-called 'modernization' package includes enhanced support for green projects, with more favourable financial conditions for projects in renewable energy, clean technology, and sustainable infrastructure. The Climate Change Sector Understanding (CCSU) has been integrated into the Arrangement. The CCSU provides specific guidelines for ECAs to follow when assessing and supporting climate-related projects. Transparency and reporting requirements have been improved. The modernization enhances transparency mandates, requiring more detailed reporting on the environmental and social impacts of financed projects.

2.3. Coalitions and commitments

The reform of the OECD Arrangement has so far fallen short of imposing a ban of fossil fuel projects with the exception of coal-fired power plants. In recent years, however, a growing number of international coalitions and commitments have emerged, aiming to phase out support for fossil fuel projects in export finance and promote a transition to sustainable energy sources. These initiatives reflect a global consensus on the urgent need to address climate change and align financial practices with environmental sustainability goals. Notable among these are the Export Finance for Future coalition, the Net Zero Export Credit initiative, the Glasgow Statement, and various commitments made at the Conference of the Parties (COP) meetings under the Paris Climate Agreement.

The Export Finance for Future (E3F) coalition, launched in April 2021, is an alliance of European countries committed to aligning their export finance practices with the goals of the Paris Agreement. The coalition includes France, Germany, Denmark, Spain, Sweden, the Netherlands, Belgium, Finland, Italy and the United Kingdom. Austria is not a member. E3F aims to phase out export finance support for unabated fossil fuel projects and redirect funding towards renewable energy and other sustainable projects. The coalition also focuses on enhancing transparency, sharing best practices, and setting ambitious targets to reduce the carbon footprint of export finance. E3F represents a significant step towards a coordinated European approach to sustainable export finance, setting a precedent for other regions to follow.

The UN-led Net Zero Export Credit Alliance (NZECA) is a broader international effort to achieve net-zero emissions in export credit by 2050. This initiative encourages ECAs to adopt strategies and policies that will gradually phase out financial support for fossil fuel projects. NZECA focuses on setting interim targets, increasing transparency, and fostering international cooperation to achieve its goals. The initiative emphasizes the importance of transitioning finance towards renewable energy and sustainable technologies, thereby supporting global efforts to mitigate climate change. NZECA has Sweden, Denmark, Canada and the UK as founding members and the United Arab Emirates, Spain and Kazakhstan as affiliate members.

The Glasgow Statement, announced during the United Nations Climate Change Conference (COP26) in November 2021, saw over 30 countries and financial institutions commit to ending direct public support for the international unabated fossil fuel energy sector by the end of 2022. Signatories include major economies such as the United States, Canada, and the United Kingdom, as well as several European nations, with the exception of Austria. The Glasgow Statement represents a unified commitment from both developed and developing countries to shift public finance away from fossil fuels and towards clean energy.

The annual COP meetings under the United Nations Framework Convention on Climate Change (UNFCCC) have become critical venues for forging international agreements on climate action. In addition to the Glasgow Statement, various COP meetings have produced political commitments related to export finance. For example, at COP26, parties agreed to enhance their Nationally Determined Contributions and phase out unabated coal usage. These commitments are increasingly influencing the policies of ECAs, pushing them to adopt more stringent environmental and social governance criteria.

Several other initiatives complement these major coalitions and commitments. The Equator Principles, a risk management framework adopted by financial institutions worldwide, including some ECAs, ensure that financed projects meet robust environmental and social standards. Additionally, the Task Force on Climate-related Financial Disclosures (TCFD) provides guidelines for disclosing climate-related financial risks, encouraging greater transparency and accountability in export finance. Further, the International Development Finance Club (IDFC), a network of national and regional development banks, has also committed to aligning its financial flows with the Paris Agreement.

3. THE CASE OF AUSTRIA

In Austria, OeKB operates on behalf of and for the account of the Republic of Austria under the Export Guarantees Act (Ausfuhrförderungsgesetz, AusfFG). This national legislation defines its mandate, governance structure, and reporting obligations. The Oesterreichische Kontrollbank (OeKB) is registered as a private company but works, pursuant to § 8a in conjunction with § 5/1 Austrian Export Guarantees Act, as the authorized agent of the state, more precisely: the Ministry of Finance.

Established to bolster Austria's international trade, OeKB provides a range of financial products, including export guarantees, export credits, and investment guarantees in the form of a 'public-private partnership' with the Ministry of Finance. These instruments are designed to support Austrian exporters in securing and financing their international transactions, particularly in markets where commercial banks might be hesitant to operate due to perceived higher risks. Austrian exporters may, alternatively, also consider private insurance companies that provide trade credit insurance, though the coverage and terms may differ from those offered by OeKB.

The primary mandate of OeKB is thus to support Austrian enterprises in their internationalization efforts. This includes mitigating risks associated with foreign trade and promoting Austrian exports by enhancing the competitiveness of domestic companies in the global market. In addition, compliance with international regulations, as described in the previous Chapter, is meant to ensure, in principle, that OeKB not only supports Austrian exporters but also contributes to broader goals of sustainable development. The Ministry of Finance, in conjunction with the legal basis OeKB operates on, and the oversight and regulation it provides, has the ultimate responsibility vis-à-vis this fulfilment of political goals.

3.1. Austria's Export Promotion and Climate Goals

Sustainability but no Net-Zero Approach

Though several initiatives within the realm of environmental sustainability can be considered, it should be noted first that Austria generally lacks an overarching strategy for aligning export promotion with the requirements of the Paris Agreement. Such a strategy would specify the procedures necessary to ensure a credible pathway towards GHG neutrality within a specified timeframe (see the final section of Chapter 4 for a detailed account). Instead, a set of isolated initiatives and instruments exist.

First, in recent years, OeKB has been engaged in various efforts to enhance its sustainability and align its operations with climate-friendly practices, reflecting also changes in the scope and conditions of the OECD's climate change sector understanding. OeKB has integrated green principles into its corporate strategy and operational framework. One notable initiative is the development of sustainable finance products, such as green bonds, which are aimed at financing projects with positive environmental impacts. These green bonds support investments in renewable energy, energy efficiency, and other environmentally beneficial sectors.

The recently established "Exportinvest Green Energy" facility is a specialized financing program offered by OeKB to support Austrian exporters and designed to promote investments in green energy projects, both domestically and internationally, by providing favorable financing conditions and risk mitigation measures. Under its umbrella, OeKB offers long-term loans and guarantees to Austrian companies involved in the development, production, and export of renewable energy technologies and services. These projects can include solar, wind,

hydroelectric, and biomass energy, among other sustainable energy sources. OeKB has also developed an online platform ("ESG Data Hub") used by the Austrian banking sector to collect and manage sustainability data from companies.

Austria's Fossil Phase Out Plan

The "Nachhaltigkeitsstrategie des Ausfuhrförderungsverfahrens" (Sustainability Strategy of the Export Promotion Procedure), published in December 2023, outlines Austria's approach to phasing out support for fossil fuel projects. The strategy, developed by the Federal Ministry of Finance (BMF) and administered by OeKB, emphasizes sustainable development, human rights, democracy, peaceful coexistence, and environmental protection. It sees a dual mandate of promoting Austria's international trade competitiveness while achieving sustainability and environmental goals.

The strategy gives on overview of a set of green financing instruments aimed at supporting environmentally friendly investments and details a plan to cease federal guarantees for projects in the fossil fuel sector. Projects are affected along the entire value chain—from extraction and production, through transportation, to processing and power generation using thermal power plants (i.e. up-, mid- and downstream). The phase-out is claimed to align with the Paris Agreement's 1.5°C target and Austria's goal of climate neutrality by 2040. Further, it gives deadlines after which projects no longer benefit from risk-reducing federal guarantees unless they significantly improve environmental efficiency without extending the capacity or lifespan of existing fossil fuel infrastructure. Specifically, the plan outlines timelines for phasing out support for coal (ineligible from January 2025), oil (ineligible from January 2026), and natural gas (ineligible from January 2030), justifying this with different emission potentials of these fossil energy sources. Note that the phase-out commitment applies solely to new projects.

Several points stand out in Austria's strategy. First, the relevant EU's Council Conclusion in response to which the strategy was devised, commits member states to "science-based" deadlines for ending officially supported export credits to fossil fuel energy sector projects (see previous Chapter). Austria's strategy does not reference scientific evidence or authorities. From a climate science perspective, the timeline for phasing out fossil fuel support is extensive, especially the 2030 deadline for natural gas. Accordingly, a recent NGO report considers the phase-out timelines of Austria, Germany, Italy, Slovakia, and Slovenia as "misaligned with science" (Troost, 2024). Considering typical lifespans, a new gas power plant constructed now might operate until 2050 or longer. Austria's sustainability strategy would, in principle, allow a project of this kind to still receive public financial support.

Second, the strategy frames its approach as one of navigating a tension between economic and environmental interests and as balancing objectives ("Güterabwägung"). Even if the debatable assumption of a trade-off is granted, a strong argument can be made that there is an overriding public interest in maintaining a relatively safe climate change corridor "well below 2°C" compared to pre-industrial levels. This would mean that only projects which both improve the current account balance (as mandated by the Export Guarantee Act) and are strictly aligned with the Paris Goals ought to be considered eligible for official support. The law does not envisage a quasi-jurisdictional "weighing" of these goals. Finally, the provision for wideranging exceptions to the phase-out open the door to undermining the effectiveness of the strategy. We examine this issue in further detail in the succeeding chapter.

Climate change mitigation is often met with resistance in the form of arguments that downplay or discount the need for action contrary to sheer neglection. According to Lamb et al. (2020), such 'climate delay discourses' can be categorized into four main types (with further subcategories): (i) redirecting responsibility, (ii) pushing for non-transformative solutions, (iii) emphasizing the downsides, and (iv) surrendering to climate change. Drawing on this taxonomy, Table 1 labels a range of arguments made in Austria's sustainability strategy from this analytic point of view. The picture emerging thus suggests that there are tendencies of climate delay discourse on multiple dimensions to be found in Austria's sustainability strategy.

Table 1. Climate delay discourse (à la Lamb et al.) in Austria's export sustainability strategy

Rec	lirect responsibility	
	Individualism	"motivate and support affected companies to adapt their products or to keep existing products viable as bridging technologies"
	Free rider excuse	n/a
	Whataboutism	" the plan was drawn up taking into account the known exit scenarios of comparable European export credit agencies"
Pus	h non-transformative s	colutions
	Technological optimism	"If projects are used in connection with carbon capture and storage facilities these are also excluded from the applicability of this strategy."
	All talk, little action	"The phase-out plan is intended to help achieve the 1.5°C target of the Paris Climate Agreement"
	Fossil fuel solutionism	"When switching from coal to crude oil, the emission factors are already around 30% lower and when switching from crude oil to natural gas, the factors can be reduced by a further 25-30%"
	No sticks, just carrots	"A number of green export promotion instruments already exist as an incentive for environmentally and climate-friendly investments"
Ξm	phasize the downsides	of climate policies
	Policy perfectionism	"To ensure a level playing field, BMF is committed to developing common international environmental protection and sustainability standards"
	Appeal to well- being	"Measures that contribute to the improvement of efficiency, health, safety, social or environmental standards are not affected by the phase out"
	Appeal to social justice	"For development policy reasons, the assumption of liability for projects in LDCs for cooking and heating purposes remains possible"
Sur	render to climate chang	ge
	Change is impossible	"In the absence of viable alternatives, business related to the refining of metallurgical coal can continue to be supported until further notice."
	Doomism	n/a

1

3.2. The Exposure of Austria's Export Promotion to Fossil and CO2-Intensive Sectors

Generally, data about the exposure of Austria's public export finance to the fossil sector are scarce. There have been two recent parliamentary inquiries by Austrian members of Parliament directed at the Federal Minister of Finance regarding Austria's export credit engagement in the fossil fuel sector (2021 and 2024). These inquiries examine the extent to which Austria's financial support, through export credits and guarantees, continues to benefit the fossil fuel sector (upstream, midstream, and downstream) abroad. The second inquiry specifically addresses Austria's lag in phasing out export credits for fossil fuels compared to other EU member states and its failure to align with international climate agreements.

Country	2019	2020	2021	2022	2023	Total
Egypt	0.1	13.4	3.5	27.0	51.2	95.2
Russia	38.7	26.5	14.0			79.2
Canada			40.5			43.2
Saudi Arabia					35.5	35.5
Indonesia		5.0	7.5	10.5	8.4	31.4
UAE	9.9					9.9
India			7.3			7.3
Mauritius		4.6	1.9			6.5
Turkmenistan			0.6	3.7	0.4	4.7
Serbia	1.1		0.2	2.7		4.0
Brazil				2.7		2.7
Kazakhstan	0.2		0.5		1.3	2.0
Belarus		1.3	0.4			1.7
Türkiye					1.4	1.4
British Virgin Islands				0.5		0.5
Kuwait			0.5			0.5
USA			0.5			0.5
Guinea			0.4			0.4
Myanmar		0.2	0.2			0.4
Latvia				0.3		0.3
Azerbaijan				0.2		0.2
Mozambique	0.2					0.2
Total	50.2	51.0	78.0	47.6	98.2	325.0
% of total new commitments	0.8%	0.6%	2.0%	0.8%	1.5%	1.1%
% of new commitments excl. bill guarantees*	2.4%	2.7%	3.9%	2.0%	4.5%	3.1%

 Table 2.
 New OeKB commitments with federal guarantees in the fossil energy sector (2019-2023, liabilities in EUR Mio)

* Bill guarantees (also known as avals or "Wechselbürgschaften" in German) secure the domestic risk of banks against defaults when they offer preferential financing or loans to exporters. In a typical year, these can make up about a third of OeKB new commitments but may be less common in other ECAs.

Source: Parliamentary Inquiries, Export Services Annual Report, authors' calculations. There may be rounding errors.

The figures presented in the table above are derived from the responses to these parliamentary inquiries. The should be interpreted with care as they can be heavily influenced by single large-scale projects. Further, they have not been independently verified and no specific project information has been made available backing up the numbers.

Table 2 and Figure 1 give an overview of OeKB's new commitments in the fossil sector between 2019-2023, according to publicly available data. The majority of liabilities related to the fossil fuel sector were concentrated in a few countries, including Egypt, Russia, and Canada. Fossil commitments included projects such as oilfield pipes, gas engines and mining equipment. The total volume amounts to EUR 325 million and commitments increased over the period considered here. Relatively speaking, total OeKB new commitments remain minor in comparison to the total portfolio of new commitments. However, the time series shows an overall upwards trend and the 2023 figures, in particular, are incompatible with a fossil phase out trajectory. They could potentially indicate a beginning 'balloon effect' in the approach of the fossil phase out, meaning that projects later becoming ineligible are brought forward for official support. It should also be noted that single big transactions can move the needle, exemplified by the significant recent commitments in Canada or Saudi Arabia.

Figure 1. New OeKB commitments with federal guarantees in the fossil energy sector (2019-2023, in EUR millions and % of total new commitments)



Source: Parliamentary Inquiries, Export Services Annual Report, authors' calculations. There may be rounding errors.

A view at the subset of 'A' and 'B' projects

As described in the previous Chapter, certain long-term projects are categorized under the OECD Common Approaches based on their expected environmental and social impacts. ECAs adhering to the Common Approaches, like OeKB, are required to publish information on Category A and B projects to ensure transparency and accountability in its operations. Category A projects are those with significant potential environmental and social impacts, while Category B projects have less severe, but still notable, potential impacts. The ECA must disclose details of these projects typically 30 days before a final decision is made for Category A projects and shortly before or after the decision for Category B projects. As a general rule,

special due diligence in line with the Common Approaches becomes only necessary for projects that exceed SDR 10 million (currently, EUR 12 million), or projects which are located near sensitive areas, e.g. national parks. For Category A projects, Environmental and Social Impact Assessments (ESIA) must always be conducted.

Large-scale industrial and energy projects with long-term financing would typically get classified as A or B and some, albeit limited, information on respective OeKB financed projects is thus publicly available. It is worth noting that this classification, and the resulting due diligence, only covers a minor part of OeKB's total portfolio, in some years less than 10%. It generally only covers the biggest long-term projects and, among those, projects classified as 'A' are relatively rare. Indicatively, in 2023 of 36 projects guaranteed by OeKB which exceeded the relevant finance volume only three projects were classified with 'A' according to the activity report of the export promotion council of the Austrian Ministry of Finance.

We draw on publicly available information to tentatively classify OeKB's A and B projects into (i) whether these might contribute to *climate mitigation* or *climate adaptation* in the sense of the EU Taxonomy, (ii) whether these are *fossil* projects or otherwise projects that, based on a rudimentary judgment, are related to infrastructure with potentially significant *GHG emissions*. Figure 2 and Table 3 present the results of this tentative analysis. We provide these estimates simply as a starting point for a debate and not as any kind of final judgment.

There are several caveats to be considered. First, based on the sparse information publicly available, we consider the relevant infrastructure specified by the project description rather than individual parts or supplies. The supplies provided towards such infrastructure may themselves have a limited GHG footprints but are considered for this purpose as a component of a larger system (e.g. production lines on a steel mill). Second, supplies provided may well optimize production processes, make them more energy efficient and may also be preferable to alternatives both in terms of the standards of due diligence and the emissions generated (e.g. direct reduction in steel production). We adopt an 'absolute' emissions perspective (see Chapter 4 for details). Third, in some cases, fossil or 'brown' infrastructure may also be ready for low-carbon alternatives in the future (e.g. ironmaking processes potentially ready to be powered by green hydrogen such as the Midrex technology).

Conversely, projects labelled as potentially 'green' may still be associated with GHG emissions, depending on assumptions about inputs. Consider Lithium battery production taking place in China. Despite increasing investments in renewable energy, China's electricity grid is still heavily reliant on coal meaning that a portion of the electricity consumed by the production lines of this or similar projects may come from coal-fired power plants. Or consider Biomass plants which often use fossil fuels like natural gas or diesel during the start-up phase. In a similar vein, a hydropower project may be carbon-neutral in operation but construction depends on cement and other emissions-intensive supplies. Whether wood pellets plants can be considered part of a climate change solution also depends on various assumptions about inputs.

Further, many industrial processes have backup power systems to ensure continuous operation in case of power outages. Such backup systems commonly use diesel generators. Depending on the production processes, there may be a need for heating, which could be supplied by natural gas or oil-fired boilers. The transportation of raw materials to the production facility and the shipping of finished products to customers typically involve trucks and other vehicles powered by diesel or gasoline adding to the direct fossil fuel consumption related to projects of this kind (i.e. so-called scope 3 emissions).

With these caveats in mind, and considering only OeKB's 68 A and B projects since 2006, a picture emerges suggesting that the phase out of fossil projects has *to a certain extent* already materialised among big long-term projects. OeKB's most recent major fossil project is a refinery expansion project in India (2014), followed by bitumen production plants in Russia (2012) and Morocco (2012) and a gas power plant in Romania (2006). Further, many of the projects which we classify as 'potentially GHG intensive' are related to steel production and similar energy-intensive heavy industry and a significant number of these took place in Russia. The fact that OeKB has discontinued finance to projects in Russia – with no reported A or B projects since 2015 and an official stop of new commitments since 2022 – has arguably inadvertently accelerated the fossil phase out. This opens up the serious question how the fossil exposure of the officially supported export portfolio might develop once sanctions are lifted and trade with Russia becomes viable again.



Figure 2. Potentially climate-relevant projects: a tentative classification of A and B projects (2006-2024*, number of OeKB projects)

*Until mid-2024.

Sources: Authors' classifications and calculations based on OeKB project information

	Manufacturing	Energy	Mining	Waste Management	Total
Russia	11		1	1	13
China	3				3
India	2	1			3
Korea	3				3
Mexico	2				2
Ukraine	2				2
USA	2				2
Hungary	1				1
Indonesia	1				1
Morocco	1				1
Romania		1			1
Total	28	2	1	1	32

Table 3. Potentially climate-relevant projects: a tentative classification of A and B projects(2006-2024*, number of OeKB projects)

*Until mid-2024.

Sources: Authors' classifications and calculations based on publicly available project information

A note on disclosure discipline

For the analysis presented above, we draw on project information publicly provided on OeKB's website. Table 4 below shows OeKB's disciplines on reporting information about A and B projects. Guidance is given by Annex III of the OECD's Common Approaches. We use this benchmark to assess the scope of information OeKB has generally provided during 2006-2024. Based on this, OeKB could improve its compliance with recommended disclosures. In particular, project finance and information about environmental impact assessments should be reported more consistently. OeKB generally justifies limited disclosures with safeguarding legally protected client interests.

Disclosures recommended by the OECD 'Common Approaches'	OeKB reporting
1. Project Information.	
i) Name of project	Always
ii) Project country	Always
iii) Project Sector	Always
iv) Project Finance	Sometimes [1]
v) Amount Officially Supported (SDR million)	Sometimes [1]
vi) Brief description of capital goods and services	Most times
2. Cooperation with other ECAs (if relevant).	
i) Other ECAs involved	Always
3. Classification.	
i) Category of project	Always
ii) Reasons for classification, including project type	Rarely[3]
4. Type of Environmental Information Reviewed.	
i) Environmental Impact Assessment (EIA)	Sometimes[4]
ii) If no EIA, specify the environmental information reviewed	Sometimes
5. Environmental Standards / Benchmarks applied.	
i) Compliance with Host Country Standards	Sometimes
ii) International Standards the project was benchmarked against	Sometimes
iii) If international standards not met, justify the standards applied	Rarely
6. Evaluation of Environmental Information Reviewed.	
i) Key environmental factors taken into consideration	Always
ii) Outcome of Evaluation	Always
iii) If support due to additional environmental conditions, which?	n/a
7. Disclosure of Information (for Category A projects only).	
i) Ex ante disclosure project & environmental impact information:	Always
ii) If no, please explain why	n/a
8. Additional Information.	
i) Commitment Date (optional)	Sometimes [2]
ii) Form 1C number (where relevant)	Never
iii) Any comments that could help implementing Recommendation	Never
[1] No longer reported since 2015. Unclear reporting in some cases.[2] No longer reported since 2018.[3] The general basis for classification is stated but reasons are missing or vague.	

Table 4. OeKB's disclosure discipline for A and B projects

[4] Basic environmental information is usually provided. External weblinks not useful in several cases.

4. LEARNING FROM PEERS

4.1. The Fossil Phase Out in Comparison

The purpose of this Chapter is to benchmark Austria's phase-out plan against those of its peers, focusing on how different countries are addressing the transition and the specific measures they are implementing. The chapter provides a comparison of exit plans, followed by two peer cases, Sweden and Germany.

Table 5 provides an overview of the phase-out policies of EU countries regarding fossil fuel support. The table is organized as follows: the first columns show whether the country is a signatory of the Clean Energy Transition Partnership (CEPT) and whether it is a member of Export Finance for Future coalition (E3F). The subsequent columns indicate whether the country has published a phase-out policy and detail the timelines of these policies concerning coal, oil, and gas. We thus reproduce the approach of a fossil fuel phase-out tracker by Marius Troost, issued by Counter Balance, Both Ends, and Oil Change International with minor adaptations and revisions. We independently sourced the information from national exit plans and statements of relevant ministries.

Most Western European countries have established timely phase-out policies. Some countries, such as Bulgaria, Estonia, Hungary, Lithuania, Poland, and Portugal, have not presented an exit strategy but claim to have no national fossil energy support; these countries are left blank in the table. Conversely, Croatia, the Czech Republic, Greece and Latvia have neither published their exit strategies nor otherwise indicated if or when to end support to fossils-sector projects. Compared to European peers with public policies in place, only Slovakia, Slovenia and Romania have more lenient timelines than Austria. Italy is a special case, planning to phase out oil by 2028 (distribution) and still undecided on a specific date for gas. Germany permits gas projects until 2025 in industrialized countries and 2029 in developing countries.

Country	CETP [1]	E3F [2]	Phase out policy	No officiant new foss	for from	
				Coal	Oil	Gas
Austria			Yes	2025	2026	2030
Belgium	Х	Х	Yes	2021	2023	2023
Bulgaria			No, but*			
Croatia			No			
Czech Rep.			No			
Denmark	Х	Х	Yes	2022	2022	2022
Estonia			No, but*			
Finland	Х	Х	Yes	2021	2023	2023
France	Х	Х	Yes	2023	2021	2021
Germany	Х	Х	Yes	2023	2023	2025/2029[3]
Greece			No			
Hungary			No, but*			
Italy	Х	Х	Yes	2021	2028[4]	No date[5]
Latvia			No			
Lithuania			No, but*			
Luxemburg			Yes	2023	2023	2023
Netherlands	Х	Х	Yes	2024	2024	2024
Poland			No, but*			
Portugal	Х		No, but*			
Romania			Yes, but**	2032	2032	2050
Slovakia			Yes, but**	2030	2030	2030
Slovenia	Х		Yes, but**	2030	2030	2030
Spain	Х	Х	Yes	2023	2023	2023[6]

Table 5. Phase out from official support to fossil-sector exports: comparison of pledges byEU member states

* Country reports that no fossil fuel finance is being provided, thus no phase out policy.

** A limited amount of information is available on the phase out plans of this country

[1] Clean Energy Transition Partnership, a partnership of international governments, their ECAs and financing institutions

[2] Export Finance for Future, an initiative of ECAs to promote a shift towards climate-neutral export project financing.

[3] 2025 for industrialized and 2029 for developing countries.

[4] Distribution in 2028, else from 2023 or 2024.

[5] Effective date to be specified only after EU Taxonomy and the current discussions on Energy security.

[6] The policy includes significant loopholes for LNG financing.

Sources: National exit plans and statements of relevant ministries, author's classifications

Exemptions in the phase out

Many states have incorporated exemptions into their energy policies. The following analysis provides an overview, categorizing these exemptions by fossil energy source (see Tables 6-8 as well as Figure 3). This information, drawn from national exit plans, represents the first systematic examination of such exemptions, to our knowledge. We rank the exemption by their scope with the top row being the most antithetical and the bottom row the most in the spirit with a phase out of fossil-sector projects.

Austria's exit plan, in addition to its extended timeframe, foresees extensive exemptions for coal, oil, and gas. Austria and Belgium envisage the most comprehensive coal-related exemptions among their peers. These encompass: National energy and resource security, Geostrategic interests, Carbon capture technologies, Dual usage applications, Metallurgical coal refining, Safety, health, social, and environmental performance improvements (without extending lifespan), decommissioning or conversion to renewables. While the latter exemptions are generally uncontroversial, the former present potentially significant loopholes due to their ambiguous nature. Of particular concern is the lack of clarity surrounding who determines overriding geostrategic or energy security interests and under what circumstances. Further, while carbon capture and green hydrogen may contribute to decarbonization efforts, these emerging technologies become problematic when project financing is permitted based on the premise of infrastructure 'readiness' for dual usage, even if plants may in fact be largely powered by conventional fossil sources.

The possibility of exemptions based on energy security should not be dismissed as merely hypothetical. During the early 2010s, OeKB is reported to have been a potential contender for becoming involved in financing the 'Nabucco' pipeline project as a provider of public cover. This ambitious venture aimed to transport natural gas from the Caspian region to Europe, reducing dependence on Russian gas and thus promoting energy security through supplier diversification. Had Nabucco proceeded, OeKB would potentially have provided financial guarantees and support to companies like OMV, covering political and commercial risks. This would easily have been the largest fossil project since the turn of the millennium. Although the project was ultimately cancelled in 2013, it demonstrates that fossil fuel megaprojects with Austrian participation remain a possibility and are likely to be justified on the grounds of "supply security."

Table 6. Exemptions pertaining to the coal sector (excluding power plants*)

National energy, resource security, geostrategic interests	х										
Carbon Capture (CCU CCS)	х	х					х			х	х
Dual use (both fossil and renewable)	х										
Refining of metallurgical coal	х	х		х							
Transportation, if mostly non-fossil related		х						х	х		
Electricity, heat, power generation of critical infrastructure				х							
Improving safety, health, social, envir. performance (w/o t+)	х	х		х	х						
Maintenance		х									
Conversion to renewables or decommissioning	х	х				х					
	AT	BE	DK	FI	FR	DE	IT	LU	NL	ES	SE

*Coal-fired power plants (unless equipped with CCS/CCU) have been ineligible for official support under the OECD Arrangement since 2021.

Table 7. Exemptions pertaining to the oil sector

National energy, resource security, geostrategic interests	х						х				
Carbon Capture (CCU CCS)	х	х					х		х	х	х
Dual use (both fossil and renewable)	х										
Replacing coal/higher-emission sources									х		
Transportation, if mostly non-fossil related								х	х		
Least developed countries, cooking and heating	х								х	х	
Reserve/emergency power generation, humanit.emergencies	х			х		х			х		
Thermal power					х						
Improving safety, health, social, envir. performance (w/o t+)	х	х			х		х		х		х
Maintenance		х				х			х		
Conversion to renewables or decommissioning	х	х				х	х		х		
	AT	BE	DK	FI	FR	DE	IT	LU	NL	ES	SE

Table 8. Exemptions pertaining to the natural gas sector

National energy, resource security, geostrategic interests	х					х	х				
Carbon Capture (CCU CCS)	х	х				х			х	х	х
Dual use (both fossil and renewable)	х										
Replacing coal/higher-emission sources									х		
Liquefied Natural Gas (LNG)										х	
Transportation, if mostly non-fossil related								х	х		
Least developed countries, cooking and heating	х		х			х	х		х	х	
Reserve/emergency power generation, humanit.emergencies	х			х		х			х		
Thermal power					х						
Improving safety, health, social, envir. performance (w/o t+)	х	х			х		х		х		х
Maintenance		х				х			х		
Conversion to renewables or decommissioning	х	х				х	х		х		
	AT	BE	DK	FI	FR	DE	IT	LU	NL	ES	SE



Figure 3. The fossil phase out in export promotion: exemptions and deadlines in comparison

4.2. The case of Sweden

Sweden has a highly competitive economy which, like Austria's, it is based strongly on trade. Exports make up at least half of GDP for both countries and export structures of the two countries are generally comparable. In Sweden nowadays, the export of manufactured commodities prevails with machinery, vehicles, mineral fuels, electrical machinery and equipment, pharmaceuticals, paper, iron and steel, plastics, wood and fish among the largest sectors. Austria's most significant export goods are machinery and vehicles, (semi-)produced goods and chemical products followed by agricultural goods and raw materials. Like Sweden, Austria's largest trading partners lie within Europe.

Sweden's Fossil Exit Plan

Sweden describes its approach in export finance towards projects with a negative climate impact as "restrictive". It categorically provides no new support to up- and midstream fossil projects and only supports downstream fossil projects in very limited cases where substantial environmental or safety improvement are achieved or there is a "documented and realistic" transition plan towards the 1.5°C Paris goal.

Sweden's Net Zero Approach

Sweden's ECAs occupy a leading role in both terms of sustainability and transparency. Public export finance and insurance business in Sweden is shared between two national export credit agencies, SEK and EKN, with the former providing financing and the latter guarantees. EKN and SEK follow the standard international regulatory guidelines but also have strict policies on phasing out fossil fuels. Sweden also takes a stance on evaluating other potentially high-emission projects. Though still in a pilot phase, the country has implemented a methodology which goes beyond the fossil sector to assess the Paris alignment of all new projects (lending and guarantees). It is aimed as a tool to categorize new projects. For an overview of Climate-related policies in officially supported Swedish export finance, see Schmidt at al. (2024).

Overall, Sweden differentiates between three steps, namely (i) mitigation, (ii) adaption and (iii) a carbon lock-in test, for classifying new projects (see Figure 4). The method is based on

multiple principles and methodologies, including Paris alignment, the EU taxonomy, and the credibility of transition plans and focuses on the final usage of export goods. Based on these, projects then are either classified as "achieving", "aligned with", "aligning towards" or "not aligned with" the Paris Agreement. Projects must generally provide emission data, which are then plotted on a decarbonization curve, allowing for a categorization and giving the agency at least a tentative understanding of its aggregate carbon footprint.





Source: EKN

Mind that not only emissions are a factor in this assessment but also the creation of dependencies on fossil fuels (see also Erickson et al. (2015) and Seto et al. (2016) for approaches to assessing carbon lock-in risk). An example of an 'unaligned' project outside the fossil sector would, for instance, be an unelectrified railway project without transition plan. While EKN's methodology does not aim to automatically reject such unaligned projects, it is a first step to gather better data and a complete overview of the Swedish ECAs' portfolio. The methodology is currently in a pilot phase and may undergo revisions in the future. It is planned that emissions-intensive projects may be offset by negative-emissions projects (see the end of this Chapter for considerations regarding the net-zero approach).

Another innovative and noteworthy instrument is the implementation of a scientific climate council, which acts as an advisory expert body to EKN. Currently, it includes four scientists from the sphere of climate and energy who counsel several times a year. The ultimate goal is to achieve a pathway to navigate Swedish exports in line with the Paris Agreement. While it is important to get expertise from this field into the export industry, it is also relevant for scientists to get involved in the export industry and to get a feeling for the national economic composition and ongoing discussions. EKN thus describes this tool as a positive learning experience on all accounts. The consultation of science fosters a constructive dialogue on how to achieve a sustainable transformation while promoting export interests. For details regarding the composition and mandate of the Council see SEK (2024).

'Fossil Free Sweden'

Sweden embraces the economic potential of a climate-aware standing. By becoming a pioneer in this regard, it aims to consolidate its economic influence and comparative advantages, including the space of exports. One initiative to underline this approach is *Fossil Free Sweden*, which aims to "increase the pace of the climate transition" with the goal "to build a strong industrial sector and to create more jobs and export opportunities by going fossil free"

(Fossilfritt Sverige, 2024). At its core lies the goal of achieving a fossil-fuel-free society by 2045. The initiative, launched by the Swedish government in 2015, has brought together a diverse array of stakeholders, including businesses, municipalities, regions, and organizations, united by a shared vision for a sustainable future. Consider the vision of *Fossil Free Sweden*, according to which

"Sweden should be the country that companies and other countries go to when they want to buy or develop fossil free systems. This benefits the business sector and exports, which thereby contribute to enhancing well-being at home while contributing to emission reductions globally. By taking a lead and showing how this promotes the country's own interests, we can also inspire others to follow suit. (...) This strategy has meant that the climate issue in Sweden has therefore gone from being environment policy to having more to do with enterprise and export policy." (ibid.)

The initiative is led by a national coordinator and identifies both obstacles and opportunities that lie ahead in the transition to a fossil-free economy. By analysing these factors, *Fossil Free Sweden* formulates policy proposals that are presented to the government. This dialogue fosters a spirit of cooperation, enabling the identification of common ground and the development of strategies to accelerate the nation's progress towards a fossil-free future. The initiative has engaged 22 business sectors in the creation of roadmaps for achieving fossil-free competitiveness which are intended to serve as blueprints for sustainable operations, outlining specific commitments, identifying potential challenges, and proposing solutions.

4.3. The case of Germany

Germany is not only the largest economy within Europe, but also an economy characterized by an exceptionally high export orientation (BPB, 2024). In 2022, goods exports exceed 1.5 billion euros, making Germany the world's third-largest exporter. It has maintained a positive trade balance since 1952, with an almost continuous growth trend since 1980 and approximately one out of four jobs depending on export activities. Its most important trading partners are other EU member states. Outside the EU, the USA, China, and Asia are important. In 2015, the majority of German export goods consisted of four sectors: motor vehicles and parts, machines, chemical products, and data processing equipment, electronic and optical products – these groups combined make up over half of all exports. Similar to Austria, the German economy currently faces challenges. Globalization and digital change require constant adaptation. Additionally, like Austria, Germany faces a high dependency on energy and raw material imports and China's economic rise along with competition from the US poses a challenge to its export-oriented economy.

Germany's Fossil Exit Plan

Germany has introduced a climate policy sector guidelines for export credit guarantees ('Klimapolitische Sektorleitlinien für Exportkreditgarantien'). These guidelines aim to promote innovation and climate-friendly technologies, as well as support to the export of green technologies abroad. They cover energy, industry, and transport. The sector guidelines define three categories: (i) a green category for high-priority (green) technologies, (ii) a white category for products that do not make a significant contribution to the Paris climate goals, and (iii) a red category for products that can no longer be covered by export credit guarantees. For green category transactions, it is planned, among other things, to increase the coverage ratio for financial credit cover for economic and political risks from 95% to 98%. In the energy sector, the sector guidelines set rules for phasing out fossil fuel subsidies. There are relatively narrowly defined exceptions under which an export credit guarantee may still be granted and mainly

concern the gas sector. In the industrial sector, the production of iron, steel, and aluminium is oriented as far as possible towards the EU Taxonomy Regulation both with regard to positive and negative incentives. In the transport sector, international emission standards are implemented in civil shipping; in this sector, as well as in civil aviation, the switch to climate-friendly drive systems is particularly supported.

The Sektorleitlinie started with a consultation phase in July 2023. An online questionnaire was available from this time on and comments could be submitted until the end of August. In addition, a webinar was held to explain the new sector guidelines and a roundtable discussion. The consultation primarily addressed trade associations, unions, and NGOs, but comments from other stakeholders were possible. The draft sector guidelines were then coordinated and approved by the Interministerial Committee and the Federal Chancellery. The Interministerial Committee for Export Credit Guarantees is the German government body responsible for deciding on coverage policy and applications for export credit guarantees for export transactions. In addition to the Federal Ministry of Economic Affairs and Climate Action, the committee included the Federal Ministry of Finance, the Federal Foreign Office, and the Federal Ministry for Economic Cooperation and Development. The resulting strategy is compromise product and is arguably the strategy with the highest degree of complexity among EU members. It is leaky in some respects, especially with regards to gas, but has fewer and less far-ranging exemptions with regard to oil and coal than Austria's strategy.

Germany's Net Zero Approach

Alongside the "Sektorleitlinie", Germany has devised a methodology for quantifying the GHG emissions of projects covered by export credit guarantees, known as Hermes guarantees, and for investment guarantees provided by PwC (for details, see Euler Hermes, 2024; PwC, 2024). The methodologies are part of a national strategy to align export credit portfolios with the 1.5°C Paris goal and are based on the Partnership for Carbon Accounting Financials (PCAF) standards, modified for application to Germany's export credit portfolio (PCAF, 2024).

The calculation of GHG emissions of export guarantees within this system relies on Germany's proportional financial involvement in each project. Specifically, emissions are attributed according to Germany's share of the financial risk or compensation liability, which represents its relative exposure to the total project financing. The calculation covers the three emission categories defined by the Greenhouse Gas Protocol: direct emissions (Scope 1), indirect emissions from purchased energy (Scope 2), and, where feasible, upstream and downstream indirect emissions (Scope 3). Scope 3 emissions include those related to supply chain activities when relevant data and emissions factors are available. Additional downstream Scope 3 emissions – emissions from fossil fuel processing, transport, or end-use combustion – are included for projects in the fossil fuel sector. In cases where sector-specific data or project-specific emissions data are not available, estimates are made based on emissions factors.

For projects in the renewable energy sector, Germany's methodology also allows for the calculation of "avoided emissions." This term refers to the emissions hypothetically saved through the displacement of fossil fuel-based energy with renewable energy. Avoided emissions are calculated separately and represent the potential reduction in GHG emissions had the energy produced by the renewable project replaced fossil energy sources. The approach provides a clearer picture of the GHG impact of renewables but treats these as supplementary to the direct emissions data.

To establish a baseline for tracking emissions reductions, the carbon footprint for Germany's export credit guarantees was first calculated in 2022. The baseline serves as a reference for future assessments, enabling year-on-year comparisons and evaluating the climate strategy's efficacy. Emissions intensity – measured by the ratio of emissions to financial exposure – is

used as an additional metric. In 2023, emissions intensity saw a reduction, suggesting incremental progress, although absolute emissions are still significantly influenced by projects in the fossil fuel sector. This sector alone contributed 55% of the portfolio's emissions in 2023, a slight decrease from the prior year. Germany's calculations also show that almost half the emissions associated with guarantee instruments are not attributable to the fossil energy sector.

Data quality is a certain caveat, with emissions data quality classified on a scale from 1 to 5, as outlined in the PCAF standards. A score of 1 represents verified, high-quality emissions data, while a score of 5 indicates estimates derived from emissions factors. The quality of the data used in calculating Scope 1 and Scope 2 emissions for Germany's export credit portfolio in 2023 averaged a PCAF score of 3.6, reflecting a mix of verified data and estimates. It should be noted that there is no granular reporting on project-level GHG emissions data with the exception of certain A projects, where ESIAs exist.

Overall, Germany's approach to quantifying GHG emissions associated with export guarantees can be considered ambitious and uses state-of-the art standards. The methodological design generally takes a conservative approach to emissions estimates, often selecting higher emissions factors in cases of ambiguity to avoid underestimating the portfolio's carbon footprint. For example, if the type of coal used in a supported power plant is unspecified, the emissions factor for lignite (which has a higher carbon intensity than other types of coal) is applied. Additionally, the methodology does not differentiate between emissions from the construction and operational phases of a project; instead, it assumes full operational emissions from the outset of coverage. These conservative assumptions are in place to ensure that the portfolio's carbon footprint is not underestimated.

For 2023, Germany estimates the financed emissions via export guarantees at 30 million tons of CO2e. This is a significant quantity and amounts to about half of Austria's total CO2 emissions, depending on the source of the estimate. It should be noted, though, that Germany's estimates are primarily intended to monitor its internal climate strategy and calculations may not be directly comparable with emissions data from other entities, including other ECAs. As such, the results reflect the specific conditions of Germany's export credit system and the unique climate strategy it employs.

Perhaps most debatable in Germany's approach is that, in line with PCAF standards, emissions are attributed to guarantees proportional to the degree of financial involvement. In practice, this means that only initially 100% of emissions associated with an export guarantee are counted but, with increasing repayment, gradually fewer emissions get counted. No further emissions are taken into account once a project has been fully paid down – regardless of whether GHGs still occur. This is a significant normative decision. It could be argued that a financier should own the lifetime emissions of a project it provides funding or insurance for and the speed at which a project is repaid cannot be a relevant yardstick.

Putting these methodological questions to the side, Germany's quantification approach sets a robust framework for monitoring and evaluating Germany's export credit guarantee portfolio's climate impact, with the aim of achieving net-zero emissions by 2045 for projects in advanced economies and by 2050 for projects in developing and emerging economies. Though some methodological choices may remain debatable and the strategy currently lacks a clear reduction path, CO2 accounting ends Germany's blind flight in export finance vis-à-vis net zero and provides a radar towards that goal.

4.4. E3F: A Notable Peer Group

Both Sweden and Germany are members of a notable peer group mentioned in Chapter 2: the Export Finance for Future (E3F) initiative. E3F is a group of countries working together to encourage a shift towards sustainable investments and was founded in 2021 with the aim of promoting and supporting a shift in investment patterns towards climate-neutral and climate resilient export projects. In 2022, E3F had their third Ministerial Summit in Berlin where members presented exit plans. E3F members have since promoted climate-friendly exports and transitioning away from fossil fuels. They follow a four-pillar strategy as outlined in the E3F Statement of Principles composed of (i) incentivizing sustainable projects (e.g. encouraging investment in green tech and helping industries to decarbonise), (ii) disengaging from unsustainable Activities (e.g. the phase out of fossil fuel projects), (iii) promoting best practices and collaboration (e.g. advocate for similar sustainability measures among ECAs and working with organizations like the OECD to create a level playing field) and (iv) transparency and accountability (e.g. publishing reports on member states' export financing activities related to energy).

E3F established a common reporting format to track member states' policies on activities related to fossil fuels. This includes exploration, production, transportation, and refining of coal, oil, and gas. The first report of this kind, called E3F Transparency Reporting, was published in May 2022. The report tracks member states' financial support for coal, oil, gas, and renewable energy projects since 2015. It categorizes fossil fuel activities across the entire value chain (upstream, midstream and downstream and several subcategories), this approach laid also the groundwork for exit plans that also differentiate between the same categories.

4.5. The Pathway towards Net-Zero

In light of the initiatives of peers, what is a plausible way for Austria towards a climate-friendly export promotion regime aligned with the Paris Goals? A variety of tools and blueprints from industry leaders, some specifically developed for ECAs, are available – from the GHG Protocol, the Partnership for Carbon Accounting Financials (PCAF), the Net Zero Investment Framework (NZIF) to the EU's Sustainable Finance Framework (including the Taxonomy for sustainable activities). In addition, several ECAs and public banks have developed policies and due diligence approaches specifically addressed at climate change including EIB, Euler Hermes and KfW to the methodology of Perspectives Climate Research (for a review of ECA climate change policies see Shishlov et al., 2020).

Carbon Footprint Methods

Exemplarily, the European Investment Bank (EIB) implemented a carbon footprinting methodology in 2023 (for details, see EIB, 2023). The goal of the EIB methodology is to estimate both the direct emissions they cause and the potential emission reductions they might achieve. The information is published in project data sheets and sustainability reports. Only projects above a certain threshold undergo assessment, i.e. absolute or relative emissions exceeding 20.000 tonnes CO2e a year. In the EIB methodology, a project's absolute and relative emissions are calculated by establishing project boundaries and assigning emissions to the three scopes of the GHG Protocol: (i) scope 1 (i.e. direct emissions arising in the project itself such as from combustion of fuels), (ii) scope 2 (i.e. indirect emissions such as from the purchase of electricity) and (iii) scope 3 (i.e. other indirect emissions such as from the extraction of raw materials or the transport of goods). EIB calculates absolute emissions even if they only partially finance the project.

In its accounting approach, EIB sets project boundaries: So-called 'absolute' emissions represent the total emissions of the project in a typical year of operation. They are calculated using activity data (e.g., fuel used) and emission factors. 'Relative' emissions represent the change in emissions compared to a baseline scenario where the project is not built. Relative emissions are thus a measure of what emissions were avoided due to the project: for instance, by choosing a less emissions-intensive over a more emissions-intensive technology. The EIB methodology thus enables a relatively transparent and fair assessment of the environmental impacts of investment projects, although the relative emissions approach can rest on debatable hypothetical assumptions and should not be the main benchmark.

ECAs wishing to decarbonise their portfolio will need to adopt approaches such as these, going beyond the phase out of fossil-sector projects. This is particularly relevant to OeKB which has relatively low exposure to the fossil-fuel sector but higher exposure to energy-intensive heavy industries. In its due diligence guidelines for climate change, the Canadian export promotion agency, EDC, has identified a range of carbon intensive sectors that are associated with at least 500.000 t CO2e per year. It includes airlines, cement manufacturing, metals smelting and processing, petrochemical and chemical manufacturing (including fertilizer production), thermal power generation and upstream oil and gas operations (EDC, 2019). For Austria, it is arguably the steel sector which remains the biggest challenge going forward. Projects such as voestalpine's green hydrogen pilot facility "H2FUTURE" should thus be monitored closely.

Figure 5 gives a stylised picture of the challenge ahead, with important milestones of Austria's phase out depicted on a timeline. 2040 marks both Austria's national target for becoming climate neutral and the EU commission's target date for the reduction of net emissions by 90% compared to 1990. Adopting a net zero perspective, the GHG footprint of the officially supported export portfolio needs to be considered not only at different scopes of emissions but also at different time horizons. For the part of the global economy supported by official export finance to reach GHG neutrality by 2040 (or any other date), commitments to new net-emitting projects have to end considerably earlier. A gas infrastructure project agreed in 2029 will only become operational several years later and will continue to emit well beyond 2040. A financier thus has to factor in future lifetime emissions of projects at the time of the funding decision.



Figure 5. A stylised view of the challenge ahead: Bringing the officially supported export portfolio towards a net-zero GHG footprint

Source: authors' illustration.

From this consideration it follows that the phase out of new fossil projects is a necessary but not a sufficient step towards net zero. The 2040 cut-off would require that an emissions trajectory be backcasted to the present. Such a model would then inform funding decisions

ahead of time. The deadline for a funding stop of net-emitting projects implied by the 2040 target also depends on the speed and scale of phasing in net-absorbing projects, which themselves may have lead time to factor in. In sum, a net zero strategy requires a back-casted model specifying, based on cautious assumptions, a shrinking GHG budget to be spent over time which provides the emission guard rails. Without such a model, a financier operates in 'blind flight' vis-à-vis the net zero destination and will risk missing it.

A key step towards Paris-aligned export finance is the integration of GHG emission assessment methodologies into the due diligence processes. This enables the financing institution to evaluate the potential environmental impact of projects before financing decisions are made. In addition to GHG assessment, the institution should begin to adopt a net-zero *accounting framework* to track its progress towards a carbon-neutral future and consider carbon offsets. The framework should encompass both direct and indirect emissions associated with the total officially supported portfolio of Austria's export promotion system. Further, the institution should develop a transition pathway to achieve net-zero emissions, outlining concrete targets and strategies regarding its portfolio's exposure to emission-intensive projects on the one hand and emission-reducing projects on the other hand.

The Last Mile

For projects that cannot (yet) be fully decarbonized, institutions need to consider implementing sustainable compensation mechanisms. This may involve (i) supporting the development of carbon capture and storage technologies which sequester GHG from the atmosphere and either store the remaining pollutants geologically or bring them towards a sustainable form of reuse. It could also mean (ii) investing in gold-standard, sustainable carbon offset projects which have an independently proven net-negative GHG footprint such as reforestation. Either avenue would need to be pursued *additionally* to the existing portfolio and with a degree of caution and proper due diligence.

GHG removal measures and related green technology are clearly no 'carte blanche' to offset the consequences of fossil-fuel projects (or a critical discussion see Brad et al., 2024; see also Jäger & Schmidt, 2020). These routes are limited and transitory instruments to balance out residual emissions from hard-to-abate projects and reflect a growing consensus among experts that CO2 removal from the atmosphere is inevitable to stay within the Paris Agreement temperature limit (Kemfert et al., 2022; Smith et al., 2024). It should be noted that there remains justified doubt about many offset projects, as currently practiced, which cannot always guarantee to be economical, durable, sustainable and whose potential of GHG removal may be overstated or unspecific. Expectations both about capture and offsetting strategies should thus remain cautious and are no excuse for delaying action on phasing out polluting activities. Further, decisions and assumptions about carbon removal should be made transparent and be open to public and scientific scrutiny.

Finally, a proactive approach to identifying and promoting sustainable projects is required. This involves collaboration with relevant ministries, social partners, and industry experts to gather evidence on negative emissions projects and identify areas with high potential for export incentives. Although Austria's officially supported export portfolio has green elements in the sense of renewable technology, it is not clear at this point what the potential for negative emissions currently is. Renewable technology will help avoid emissions but a net-zero portfolio requires so-called "carbon sinks" which sustainably remove GHGs from the atmosphere via activities like afforestation, reforestation, wetland restoration, wooden buildings or geologic/ocean storage. In addition to attractive terms, a proactive role in providing technical assistance and consulting services to help businesses transition to lower-carbon operations, nurturing sustainable export business ideas and scaling up renewable projects should be considered.

5. **RECOMMENDATIONS**

This study examined to what extent Austria's official export promotion currently succeeds at aligning the portfolio of officially supported projects with the requirements of the Paris Agreement. The study benchmarked Austria's approach in sustainable export finance with European peers and explored ways to reform the official export promotion system towards fossil-free climate-neutrality ("net zero").

Even in recent years, Austria has still provided guarantees to export projects linked to the fossil sector with new commitments in this sector amounting to EUR 325 million between 2019 and 2023. Though the overall exposure of Austria's officially supported export portfolio to the fossil sector is small in comparison to the total portfolio, it is still on an upwards trajectory. Further, Austria has embarked on a slow trajectory for phasing out natural gas projects, with potentially far-reaching exemptions, and has no credible instruments to get the portfolio of officially supported export projects to a net zero GHG footprint. The steps Austria has taken so far to align its export portfolio with the Paris Agreement are laudable, but remain insufficient. Our indepth peer comparisons show that both Sweden and Germany – highly industrialised and export-oriented economies like Austria – show considerably more ambition in aligning their official export finance with the Paris Agreement and can thus provide valuable lessons for Austria.

The next step towards sustainable export finance is for Austria to revise its fossil exit plan and devise an *ambitious, comprehensive and science-based net-zero strategy*. This should fully align the officially supported project portfolio with the Paris Agreement and initiate an active and anticipatory role. The strategy should include a net-zero funding strategy and should sketch out Austria's role as an engaged international player in promoting the transition to a low-carbon export industry. Fully phasing out fossil-sector and GHG-intensive export projects in a timely and comprehensive manner is a relatively low-hanging fruit for Austria. It is nevertheless a crucial political and economic signal both towards Austria's export industry and to other countries.

Based on the analyses provided in this study, we recommend actions across several areas, which address the Government of Austria, in particular the Ministry of Finance, but also envisage an important role for social partners, civil society and the scientific community.

5.1. Leadership in Export Sustainability

1. A clear direction of travel

Austria has an impressive history of clean energy and renewable technologies. Compared to many other countries, its engagement in officially supported fossil-sector exports remains relatively limited. Yet, policy makers send mixed signals. A long timeframe for phasing out official support to gas projects, the most extensive options for exemption among Western European peers and generally defensive framings, alongside a 'bystander' position on the multilateral scene are among these signals. Going forward, what will be needed is – to quote Diana Acconcia, Director for International Affairs and Climate Finance in the Directorate-General for Climate Action of the European Commission – "a clear direction of travel".

There are clear signs that the fossil industry is headed the way of the tobacco industry with increasing regulatory pressures and public ostracism, reflected, for instance, in the UN now calling for a ban on advertisements for coal, oil and gas. Taking this policy field as a warning, Austria should not repeat the mistakes made in the area of non-smoker protection. In 2009, a compromise-laden non-smoker protection law was enacted, which

continued to allow smoking in the hospitality industry under certain conditions. The legislation enticed restaurant operators to undertake costly structural modifications such as room partitions and filter systems. Ten years later, a strict general legal smoking ban in indoor hospitality venues was eventually passed. A clear direction of travel from the outset would not only have been preferable from a public health perspective, but also from a business point of view.

A clear direction of travel requires both a destination and an expected time of arrival. Austria should set a deadline by which its portfolio of official supported export projects, including also investment guarantees, has reached net-zero GHG emissions. From this deadline, a trajectory for ongoing funding decisions should be extrapolated backwards, specifying the remaining GHG budget, criteria for funding decisions and a pathway for phasing in sustainable and high-quality negative-emissions projects. The 'itinerary' of this journey should be developed by the Ministry of Finance in consultation with relevant stakeholders (see our recommendations on working with science and civil society).

Put differently, in the interest of boosting long-term competitiveness and securing good jobs, an anticipatory and determined approach is required in Austria's export promotion. The government should prepare Austria's internationalised industry for mastering developments such as a potential ban of official support to fossil sector projects in the OECD Arrangement or steps at EU level going beyond this. Nudging the domestic industrial base to adapt to the green transition decisively, with a carrot and sticks approach, should be part of this approach. This, ideally, should be tied in with a whole-of-government industrial policy sketching the overall transformation necessary to provide goods and services for a net-zero global economy based on Austria's comparative advantages. Elements of this exist with the National Energy and Climate Plan (NEKP), Austria's Recovery and Resilience Plan 2020-2026 and the Republic's Industrial Transformation Fund.

2. An active international role

Austria is a small country, dependent on the export of industrial supplies. Unilateralism is not an option. It is in the country's best interest to participate in fora where norms evolve and standards are set. Austria should thus not be standing on the side-lines of international debates on sustainable export finance. Nor should it let an uncompromising stance on nuclear energy get in the way of participating in international initiatives that promote the green transition or clean technology.

We recommend that Austria joins as soon as possible the Export Finance for Future (E3F) initiative and that it signs retroactively the COP26 Clean Energy Transition Partnership (CETP). Both fora welcome new participants with Belgium, Finland and Italy joining E3F only after its foundation and Norway and Australia joining CETP only in 2023. Austria should also consider joining the UN-convened Net-Zero Export Credit Agencies Alliance (NZECA) and the Berne Union's Climate Working Group.

The more countries transition, the more regulatory and political pressures grow on laggards and the more financial incentives will be geared towards aligning portfolios with a climate-friendly agenda. Austria should also not underestimate its function as a role model towards Eastern European partners who are watching closely their Western neighbours' positioning on these matters.

3. A fully committed and opportunity-oriented narrative

'Let's make it possible' is the slogan of Austria's ECA, OeKB. It is in this spirit that Austria's export promotion should head towards preparing for a net-zero future. This means, in particular, avoiding climate delayerist discourse and a mindset of 'yes, but' – both in public-facing communication and in the self-understanding of the sector. Framings such as, "if we don't do it, others will do it", "a level playing field is needed first", "others are doing it worse" or "gas is a bridging technology" stand in the way of reaping the benefits of becoming an early mover on net-zero exports. It may be worth noting in this context that natural gas is considerably more GHG-intensive than often assumed due to a leaky supply chain, involving highly potent methane emissions, and structural carbon lock-in (Alvarez et al., 2018; Kemfert et al., 2022).

5.2. Paris Alignment

1. A Science-Based Strategy

Scientific evidence, as highlighted by the IPCC, IEA and other evidence cited throughout this study, underscores the urgent need for mitigation efforts to limit global temperature rise and prevent catastrophic climate impacts. The remaining carbon budget to stay within 1.5°C is rapidly shrinking, necessitating immediate and substantial reductions in emitted GHGs. The work of the Stockholm Resilience Centre on planetary boundaries further emphasizes the interconnectedness of climate change with other critical environmental thresholds.

The science has a clear implication: new fossil fuel projects ought not be permitted and GHG intensive projects need to be phased out rapidly. Already in May 2021 the IEA warned that oil and gas development must stop immediately for the world to meet the goal of net zero emissions by 2050. Green at al. (2024) argue that governments should ban new fossil fuel projects, and civil society should advocate such bans. Policy-makers should be acutely aware that emitted CO2 stays in the atmosphere hundreds or even thousands of years and is very costly or even impossible to remove (Buis, 2019; Inman, 2008). Austria's system of export promotion needs to take the scientific consensus about the extreme risks and economic costs of departing from a 1.5°C global heating trajectory duly into account. These risks significantly outweigh short-term gains from export projects.

Based on the scientific consensus, Austria should adopt methods of GHG assessment for its full portfolio and lay out a rapid transition pathway towards net-zero export finance. As our analysis shows, Austria is currently among the countries with the most generous timelines for natural gas projects and with the potentially most far-reaching exemptions. We recommend that the phase out plan be revised as soon as possible. Official support to fossil-sector project should cease immediately and exemptions should be strictly limited to cases which are fully aligned with the Paris Agreement. The clause regarding energy and raw material security, even though restricted to 'isolated cases', is a potentially far-reaching exception and should be dropped. Past large-scale energy ventures initiated by Austria, like the (failed) Nabucco pipeline project, were promoted on the grounds of supply security. The margin of discretion around gas exemptions should thus be kept to a minimum.

In sum, Austria should establish a net-zero export promotion strategy aligned with the Paris Agreement and anchored in Austria's official goal of achieving climate neutrality by 2040. The strategy must go substantially beyond the current sustainability strategy. It should include (i) an ambitious time-bound goal for achieving a climate-neutral portfolio

of officially supported export projects, (ii) the immediate cessation of new fossil-fuel projects and (iii) a prudent and transparent phase-in of renewable-energy and highquality, sustainable negative-emissions projects. A science-based roadmap should guide funding decisions, provide safeguards against carbon lock-in and include carbon accounting for the lifetime emissions of officially supported export projects.

2. Carbon accounting and lock-in assessment

In the future, Austria's Export Promotion system should transparently and regularly report the estimated GHG footprint of its portfolio of officially supported export projects based on international gold-standard methodologies such as the Partnership for Carbon Accounting Financials (PCAF). Coverage by public guarantees should be made conditional on such reporting, where feasible, and should otherwise be inferred transparently based on emissions factors. As described in the previous chapter, a range of tools and state-of-the-art modelling techniques can be drawn on, some specifically developed by and for ECAs. Even if modelling comes with a degree of uncertainty and requires assumptions, it is important that progress towards the net zero destination can be tracked. Currently, Austria operates in blind flight vis-à-vis the net zero goal.

Germany's Federal Ministry for Economic Affairs and Climate Action (BMWK) has recently devised a method for counting GHG footprint of guarantee instruments in export and investment promotion which could, with certain adaptations, serve as a guiding framework. Key indicators of the footprint are the absolute emissions associated with the guarantees undertaken, as well as emissions intensity. BMWK publishes these figures annually, along with the amount of emissions avoided, i.e. GHG savings achieved by projects in the field of renewable energies (see Chapter 4). Other ECAs, such as those of Finland, Sweden or Great Britain also perform GHG accounting.

A related and similarly important tool is the systematic assessment of projects regarding risks of prolonging the dependency on GHG-intensive supplies, also known as *carbon lock-in*. Certain technologies and infrastructures (e.g. combustion engines, road infrastructure, household furnace) make it costly to change direction away from fossil fuels and thus delay or prevent the transition to low- carbon alternatives (see also Erickson et al. (2015) and Seto et al. (2016) for approaches to assessing carbon lock-in risk and see p.37 for the Swedish tool). Switzerland has a policy of only granting public guarantees for export projects if carbon lock-in risk is considered to be minimal. Austria should follow suit.

3. Legal and commercial risks

It is foreseeable that projects unaligned with the Paris Agreement will not only bring reputational risks, but, increasingly so, commercial and legal risks. Going forward, we recommend that the Ministry of Finance as well as the Export Promotion Advisory Board duly consider such long-term risks when providing public guarantees to export projects.

There are cascading effects to be expected from to the international push for a fossilfuel phase out. The costs of maintenance and repairs to fossil infrastructure will increase as a growing number of countries become unwilling to grant lifespan extensions or may even pressure for decommissioning fossil infrastructure. Further, there is also a trend of climate-related litigation globally, where entities are held accountable for their contributions to climate change and there is a possibility that financial institutions or governments could be targeted as well. In particular, there is also a growing recognition of the link between environmental harm and human rights. With an increasing body of international agreements, norms and national laws which aim to limit global warming, ECAs are under pressure to align their financing with these goals. Climate activists and NGOs may file strategic lawsuits to hold ECAs, or their governing bodies, accountable and failure to mitigate known climate risks could thus result in liability.

5.3. Social-Ecological Partnership

1. Withholding support for GHG-intensive projects

In line with the scientific consensus, the Austrian Export promotion system, including all relevant stakeholders, should push for withholding support for new fossil and GHG-intensive projects with immediate effect.

Austria's Export Guarantees Act foresees an Advisory Board which carries out assessments of applications for public guarantees from an economy-wide, including ecological and employment policy, perspective. The board consists of representatives from several ministries, the social partners and the central bank and has a consultative role. We recommend that the Advisory Board should request from the Ministry of Finance a detailed, science-based clarification of the exemption criteria and timelines in the sustainability strategy, including an explication of how the alignment with the Paris Agreement is guaranteed.

Until a satisfactory explication and sound methodology like comprehensive GHG accounting and carbon-lock in assessments (see Recommendation 5.2.2) are provided, the Advisory Board should not recommend any approval of fossil projects. Further, we advise a high degree of scrutiny towards high-emissions projects, whether in the fossil sector or not. Assessments of such projects should only be positive if credible transition plans are in place aligning them with the Paris Agreement.

2. A 'transformation coalition'

Social partners, non-governmental organisations, the scientific community and other stakeholders in Austria should use all political clout available to them to pressure policy makers towards pushing renewable energy solutions while phasing out remaining highemissions export projects. In the spirit of a multi-stakeholder 'transformation coalition of progress', these stakeholders should collaborate to promote sustainable export finance. Such a collaboration could involve joint workshops, training programs, and the development of sector-specific guidelines for GHG reduction.

From the point of view of employment policy, the social partners should be particularly aware that there is good evidence that the renewable energy sector produces more jobs than the fossil sector (Molnár et al., 2022). They should thus push for full utilisation and a scaling up of sustainable finance facilities in the official export promotion system. The transformation coalition could take inspiration from vision of the *Fossil Free Sweden* initiative according to which "Sweden should be the country that companies and other countries go to when they want to buy or develop fossil free systems."

Aligning export finance with climate goals appeals to a broad political coalition and is a fundamentally bi-partisan agenda. Climate change disrupts and threatens traditional ways of life (including agriculture, winter tourism or the integrity of Alpine nature) and poses a health risk to the elderly, in particular. Fossil fuels are incompatible with notions of national self-sufficiency and make Austria dependent on foreign suppliers often unaligned with Western values. The climate crisis triggers conflicts and can fuel involuntary migration. At the same time, subsidies to fossil fuel projects tend to benefit 'big business'. While the richest one percent of the population account for

disproportionate share of GHG emissions (Starr et al., 2023), the burden of climate change is disproportionately born by worse-off and vulnerable groups.

5.4. Science, Transparency, and Governance

1. Working with science and civil society

Sweden's ECAs have set up a scientific climate council of four scientists who convene three to four times a year with concrete agendas and public notes. Austria should follow suit and establish an independent Scientific Climate Council. This could draw on experts from renowned Austrian research-oriented institutions, including CSOs, with expertise in climate and energy issues such as the International Institute for Applied Systems Analysis (IIASA), which has been regularly involved in IPCC assessment reports, the University of Natural Resources and Life Sciences (Boku) and its Climate Change Center Austria (CCCA), GeoSphere Austria, the Vienna University of Technology (TU), Vienna's University of Economics and Business (WU), the University of Vienna, the Austrian Institute of Technology (AIT) or Kontext Institute for Climate Issues to name but a few plausible contenders.

2. Transparency

To ensure accountability, the Ministry of Finance and OeKB should implement a robust reporting framework that includes the GHG footprint of the entire officially supported export portfolio and consistent monitoring of targets. Transparent public reporting on the GHG footprint of officially supported projects is essential to track progress toward climate neutrality and should be published on an annual basis.

Austria's Ministry of Finance should make instruments of export promotion conditional upon high standards of public disclosure, including estimates of lifetime GHG emissions, where this is feasible. Further, disclosures for all publicly supported projects should be improved, including information on A and B projects according to the Common Approaches (see Chapter 3). Germany's BMWK makes annual GHG emissions of projects covered by export guarantees available publicly. Further, members of the E3F initiative, including Germany, publicly report ECA expenditures on both fossil and renewable projects. Austria should follow suit on both accounts.

OeKB is currently perceived by critical commentators to be among those ECAs who "provide particularly little publicly available information" (Pušić & O'Manique, 2023, p. 16). We recommend that OeKB adheres to as many items of disclosure foreseen by the OECD Common Approaches as possible. OeKB could draw on the example of the International Finance Corporation (IFC), which provides comprehensive and timely information about all projects it funds. Public guarantees should generally be made conditional upon these public disclosures.

3. Improving Governance

The governance of the public export promotion procedure should be reconsidered and, in due course, reformed. Currently, there is no detailed legal regulation regarding the mandate of OeKB within the framework of export promotion; in particular, assessment procedures to be applied in project decisions are not legally regulated. Section 5(1) of the Export Guarantees Act (AusfFG) stipulates that the task of the agents authorized by the federal government is merely the banking-technical examination (in the sense of a commercial banking assessment through creditworthiness checks and processing) of the applications for assumption of liability. Further, with regard to such implementing

provisions, an instrument is needed in addition to the Advisory Board, which cannot bind the Ministry of Finance and does not improve public transparency.

We recommend a more detailed regulation of sustainability and due diligence standards by law (e.g. in the Export Guarantees Act). In this context, the 2040 target for climate neutrality and corresponding public reporting requirements of the responsible Ministry of Finance should be enshrined in law.

REFERENCES

Alvarez, R. A., Zavala-Araiza, D., Lyon, D. R., Allen, D. T., Barkley, Z. R., Brandt, A. R., Davis, K. J., Herndon, S. C., Jacob, D. J., Karion, A., Kort, E. A., Lamb, B. K., Lauvaux, T., Maasakkers, J. D., Marchese, A. J., Omara, M., Pacala, S. W., Peischl, J., Robinson, A. L., ... Hamburg, S. P. (2018). Assessment of methane emissions from the U.S. oil and gas supply chain. *Science*, *361*(6398), 186–188. https://doi.org/10.1126/science.aar7204

Baxewanos, F., & Raza, W. (2013). Social Due Diligence in the Austrian Export Promotion *Procedure* (ÖFSE Working Paper No. 40). ÖFSE.

https://www.oefse.at/fileadmin/content/Downloads/Publikationen/Workingpaper/WP40_social_due _diligence.pdf

Bilal, A., & Känzig, D. R. (2024). *The Macroeconomic Impact of Climate Change: Global vs. Local Temperature* (NBER Working Paper No. 32450). NBER. https://www.nber.org/papers/w32450

BPB. (2024, March 28). *Deutschland: Außenhandel*. bpb.de. https://www.bpb.de/kurz-knapp/zahlen-und-fakten/globalisierung/52842/deutschland-aussenhandel/

Brad, A., Haas, T., & Schneider, E. (2024). Whose negative emissions? Exploring emergent perspectives on CDR from the EU's hard to abate and fossil industries. *Frontiers in Climate*, *5*. https://doi.org/10.3389/fclim.2023.1268736

Buis, A. (2019). *The Atmosphere: Getting a Handle on Carbon Dioxide - NASA Science*. https://science.nasa.gov/earth/climate-change/greenhouse-gases/the-atmosphere-getting-a-handle-on-carbon-dioxide/

EDC. (2019). *Due Diligence Framework: Climate Change*. EDC. https://www.edc.ca/content/dam/edc/en/corporate/corporate-social-responsibility/environment-people/climate-change-framework.pdf

EIB. (2023). *EIB Project Carbon Footprint Methodologies: Methodologies for the assessment of project greenhouse gas emissions and emission variations*. European Investment Bank. https://www.eib.org/attachments/lucalli/eib_project_carbon_footprint_methodologies_2023_en.pdf

Euler Hermes. (2024). *Greenhouse Gas Footprint of the Export Credit Guarantee Portfolio*. Exportgarantien.De. https://www.exportkreditgarantien.de/en/sustainability/climate-strategy/ghg-footprint.html

Fossilfritt Sverige. (2024). About Fossil Free Sweden. https://fossilfrittsverige.se/en/about-us/

Green, F., Bois von Kursk, O., Muttitt, G., & Pye, S. (2024). No new fossil fuel projects: The norm we need. *Science*, *384*(6699), 954–957. https://doi.org/10.1126/science.adn6533

IEA. (2021). *Net Zero by 2050—A Roadmap for the Global Energy Sector*. International Energy Agency.

Inman, M. (2008). Carbon is forever. *Nature Climate Change*, *1*(812), 156–158. https://doi.org/10.1038/climate.2008.122

IPCC. (2021). *Climate Change 2021 – The Physical Science Basis*. Cambridge University Press. https://doi.org/10.1017/9781009157896

Jäger, J., & Schmidt, L. (2020). *The Global Political Economy of Green Finance and Socio-Ecological Transformation* (Vols 4–2020). Mattersburger Kreis für Entwicklungspolitik. Kemfert, C., Präger, F., Braunger, I., Hoffart, F. M., & Brauers, H. (2022). The expansion of natural gas infrastructure puts energy transitions at risk. *Nature Energy*, 7(7), 582–587. https://doi.org/10.1038/s41560-022-01060-3

Kotz, M., Levermann, A., & Wenz, L. (2024). The economic commitment of climate change. *Nature*, *628*(8008), 551–557. https://doi.org/10.1038/s41586-024-07219-0

Lamb, W. F., Mattioli, G., Levi, S., Roberts, J. T., Capstick, S., Creutzig, F., Minx, J. C., Müller-Hansen, F., Culhane, T., & Steinberger, J. K. (2020). Discourses of climate delay. *Global Sustainability*, *3*, e17. https://doi.org/10.1017/sus.2020.13

Molnár, B., Frizis, I., Hummelen, S. V., & Stenning, J. (2022). *Export credit support in the Netherlands: Fossil phase out and job impacts*. Cambridge Econometrics. https://www.bothends.org/uploaded files/document/2022 NL export credits jobs study .pdf

Parry, I. W. H., Black, S., & Vernon-Lin, N. (2021). *Still Not Getting Energy Prices Right: A Global and Country Update of Fossil Fuel Subsidies* (IMF Working Paper No. WP/21/236). IMF. https://www.imf.org/en/Publications/WP/Issues/2021/09/23/Still-Not-Getting-Energy-Prices-Right-A-Global-and-Country-Update-of-Fossil-Fuel-Subsidies-466004

PCAF. (2024). *The Global GHG Accounting and Reporting Standard for the Financial Industry*. https://carbonaccountingfinancials.com/standard

Pušić, N., & O'Manique, C. (2023). *Changing the Trade Winds: Aligning OECD Export Finance for Energy with Climate Goals*. Oil Change International. https://www.oilchange.org/wp-content/uploads/2023/05/OCI-CHANGING-THE-TRADE-WINDS.pdf

PwC. (2024). *Treibhausgasfußabdruck des Portfolios der der Investitionsgarantien*. Garantien für Direktinvestitionen. https://www.investitionsgarantien.de/main-navigation/wissen/klima-strategie/thg-fussabdruck

Richardson, K., Steffen, W., Lucht, W., Bendtsen, J., Cornell, S. E., Donges, J. F., Drüke, M., Fetzer, I., Bala, G., von Bloh, W., Feulner, G., Fiedler, S., Gerten, D., Gleeson, T., Hofmann, M., Huiskamp, W., Kummu, M., Mohan, C., Nogués-Bravo, D., ... Rockström, J. (2023). Earth beyond six of nine planetary boundaries. *Science Advances*, *9*(37), eadh2458. https://doi.org/10.1126/sciadv.adh2458

Schlögl, L., Pfaffenbichler, D., & Raza, W. (2024). *Aligning European Export Credit Agencies with EU policy goals* (In-Depth Analysis No. PE 702.590). European Parliament. https://www.europarl.europa.eu/RegData/etudes/IDAN/2023/702590/EXPO_IDA(2023)702590_EN.pdf

Schmidt, M., Censkowsky, P., Jia, Z., & Shishlov, I. (2024). *Paris Alignment of Export Credit Agencies: Sweden*. Nordic Council of Ministers. https://pub.norden.org/temanord2024-536/temanord2024-536.pdf

SEK. (2024). The scientific climate council. https://www.sek.se/en/the-scientific-climate-council/

Seto, K. C., Davis, S. J., Mitchell, R. B., Stokes, E. C., Unruh, G., & Ürge-Vorsatz, D. (2016). Carbon Lock-In: Types, Causes, and Policy Implications. In *Annual Review of Environment and Resources* (Vol. 41, Issue Volume 41, 2016, pp. 425–452). Annual Reviews. https://doi.org/10.1146/annurev-environ-110615-085934

Shishlov, I., Weber, A.-K., Stepchuk, I., Darouich, L., & Michaelowa, A. (2020). *External and internal climate change policies for export credit and insurance agencies* (CIS Working Paper No. 104). Center for Comparative and International Studies (CIS).

Smith, S. M., Geden, O., Gidden, M. J., Lamb, W. F., Nemet, G. F., Minx, J. C., Buck, H., Burke, J., Cox, E., Edwards, M. R., Fuss, S., Johnstone, I., Müller-Hansen, F., Pongratz, J., Probst, B. S., Roe, S., Schenuit, F., Schulte, I., & Vaughan, N. E. (2024). *The State of Carbon Dioxide Removal—2nd Edition*. Oxford's Smith School of Enterprise and the Environment. https://osf.io/f85qj/

Starr, J., Nicolson, C., Ash, M., Markowitz, E. M., & Moran, D. (2023). Income-based U.S. household carbon footprints (1990–2019) offer new insights on emissions inequality and climate finance. *PLOS Climate*, *2*(8), e0000190. https://doi.org/10.1371/journal.pclm.0000190

Troost, M. (2024). *EU ECA fossil fuel phase-out tracker* (Both). Both ENDS. https://www.bothends.org/uploaded_files/inlineitem/ECA_tracker_-_17_April_-_edited.pdf