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Strategic Finance for Sustainable Industries in Emerging Markets

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UNIDO

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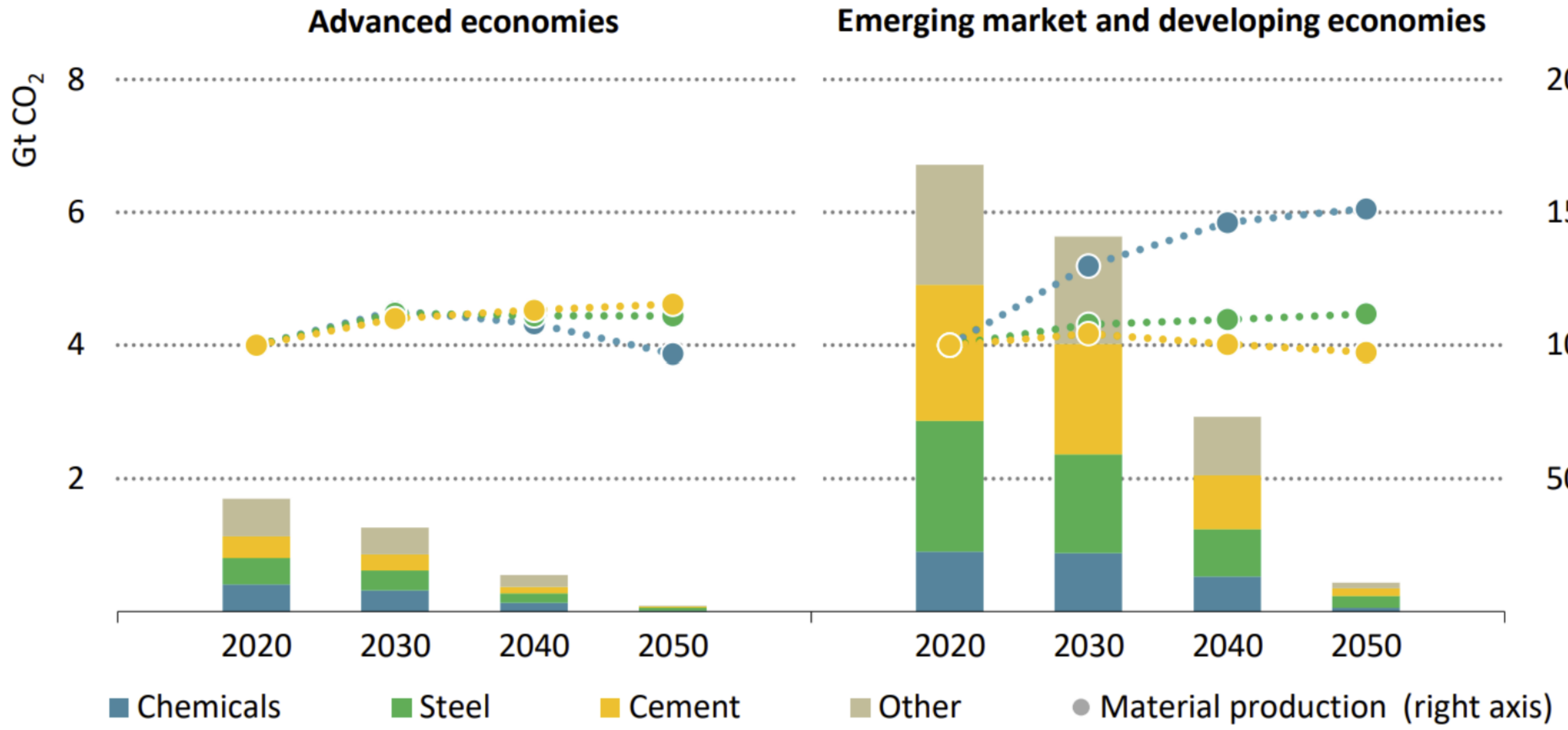
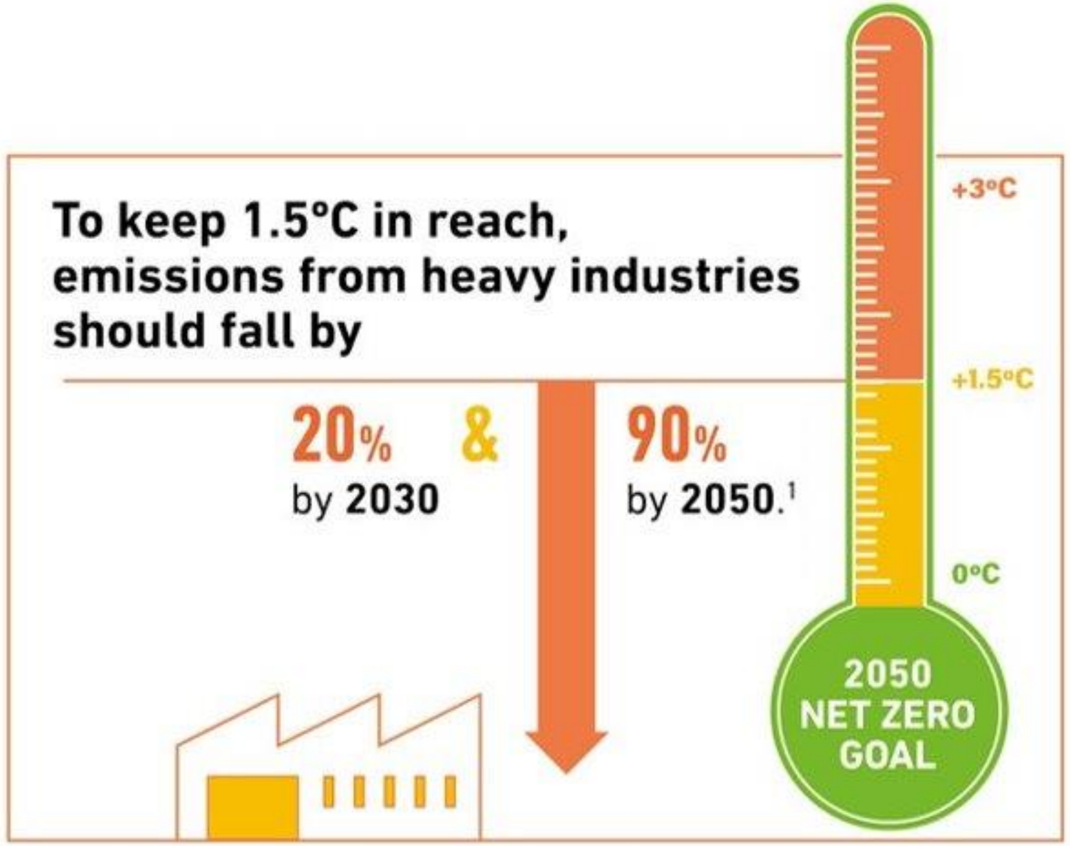
Fostering Sustainable Industries in EMDEs – The emission gap





[1] Steel and Cement Can Drive the Decade of Action on Climate Change, Industrial Analytics Platform, 2022

EMDEs dominate industrial emissions today, with expansion in the production and use of materials expected out to the mid-century, supporting development.

Source: Net Zero by 2050 – Analysis - IEA

Fostering Sustainable Industries in EMDEs – The financing gap

Transition to net-zero industries requires massive investment

DECARBONIZING STEEL
requires up to **USD 335 billion** of cumulative **investment** by **2050.**[1]

DECARBONIZING CEMENT
requires **USD 30 billion** in additional capital expenditure and **USD 300 billion** for **infrastructure** by **2050**.[1]

DEVELOPING COUNTRIES
will need up to **USD 2.5 trillion annually** for **climate-related investments** by **2030**.[2]

Investment needs are not yet investment opportunities

Limited market readiness of breakthrough technologies and related infrastructure.

Long lifetime of assets, high investment costs and technology risks.

Insufficient policies and low demand for low-carbon industrial products.

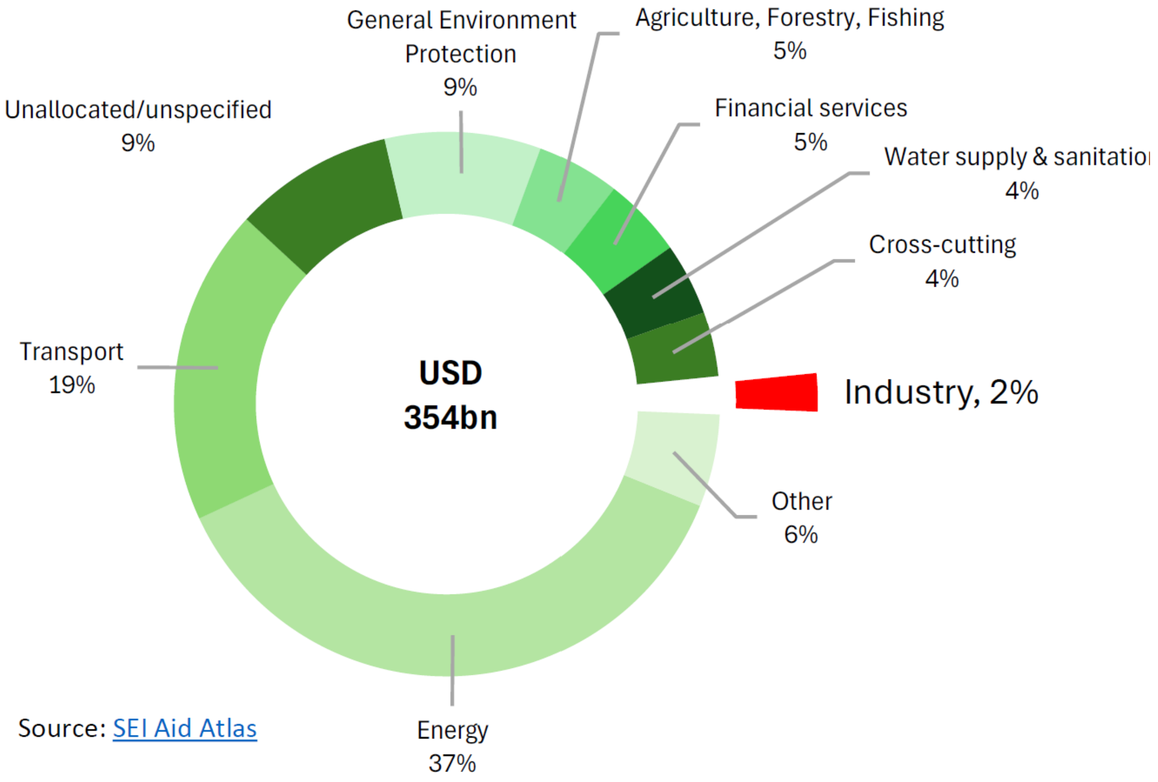
66% of **business executives report** that investment and infrastructure are the most **urgent barriers for net-zero transition.**[3]

90% of **businesses** say they would invest more if governments **implemented policies** to address sector specific barriers.[3]

[1] IFIs and Heavy Industry Decarbonization in Emerging and Developing Economies, LeadIT, 2023 [2] Making Net-Zero Steel Possible, Mission Possible Partnership, 2022 [3] Business Breakthrough Barometer, WBCSD, 2024

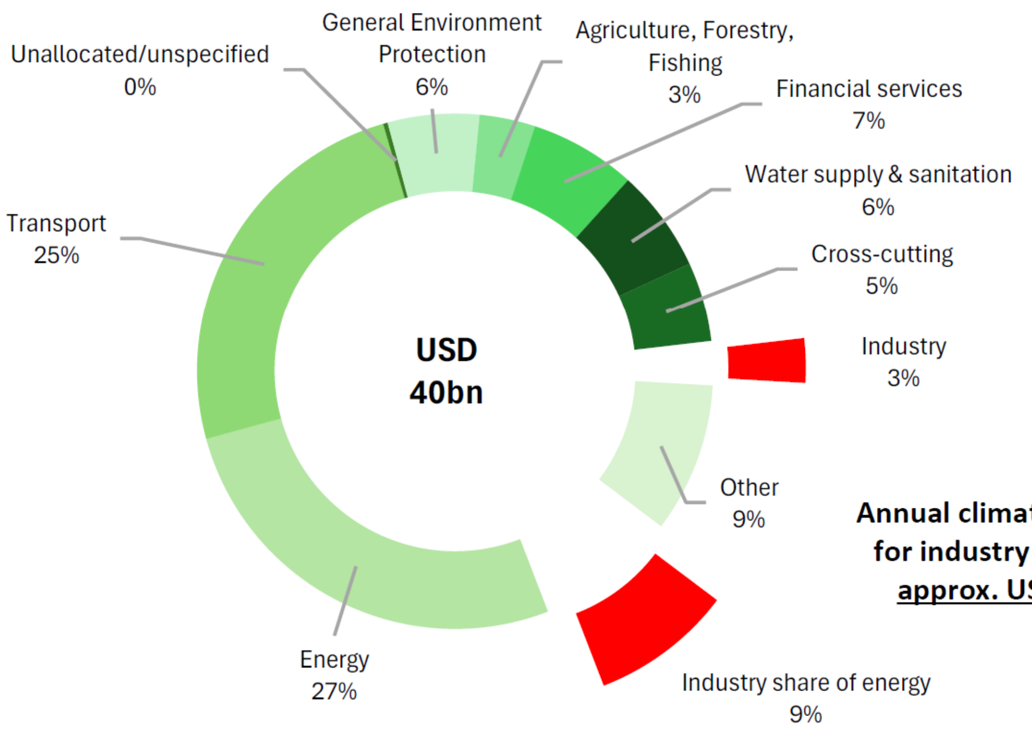
Climate finance for industry transition – Not yet sufficient

Climate finance (mitigation), 2002-2021



Source: SEI Aid Atlas

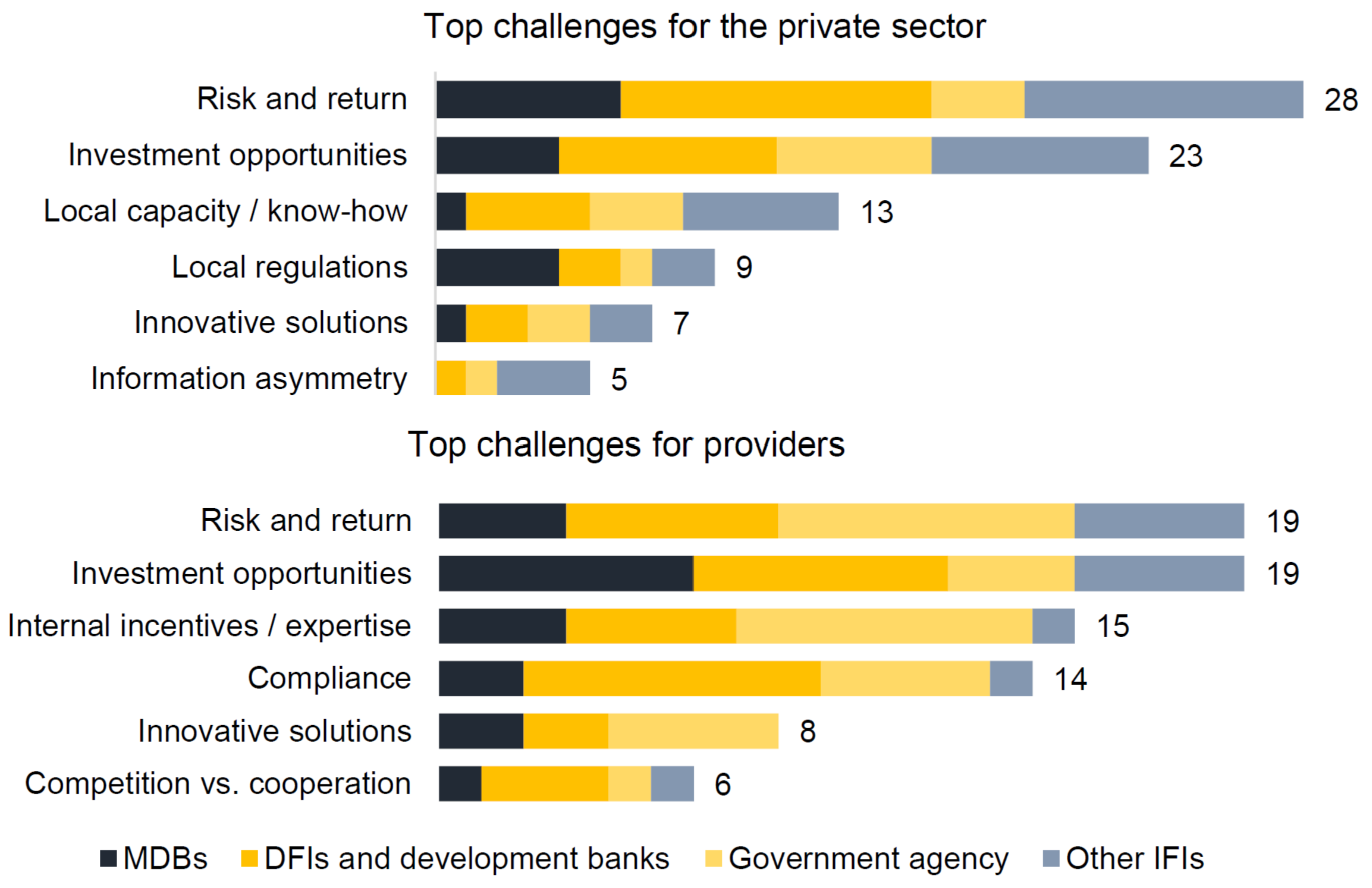
Climate finance (mitigation), 2021



Annual climate finance for industry in 2021: approx. USD 4bn

While clean power and electrification, which will be an important mitigation lever for industry decarbonisation, has been a focus of climate finance over the past 20 years, a gap for industry-focused assistance remains.

Barriers to mobilizing climate finance to EMDEs



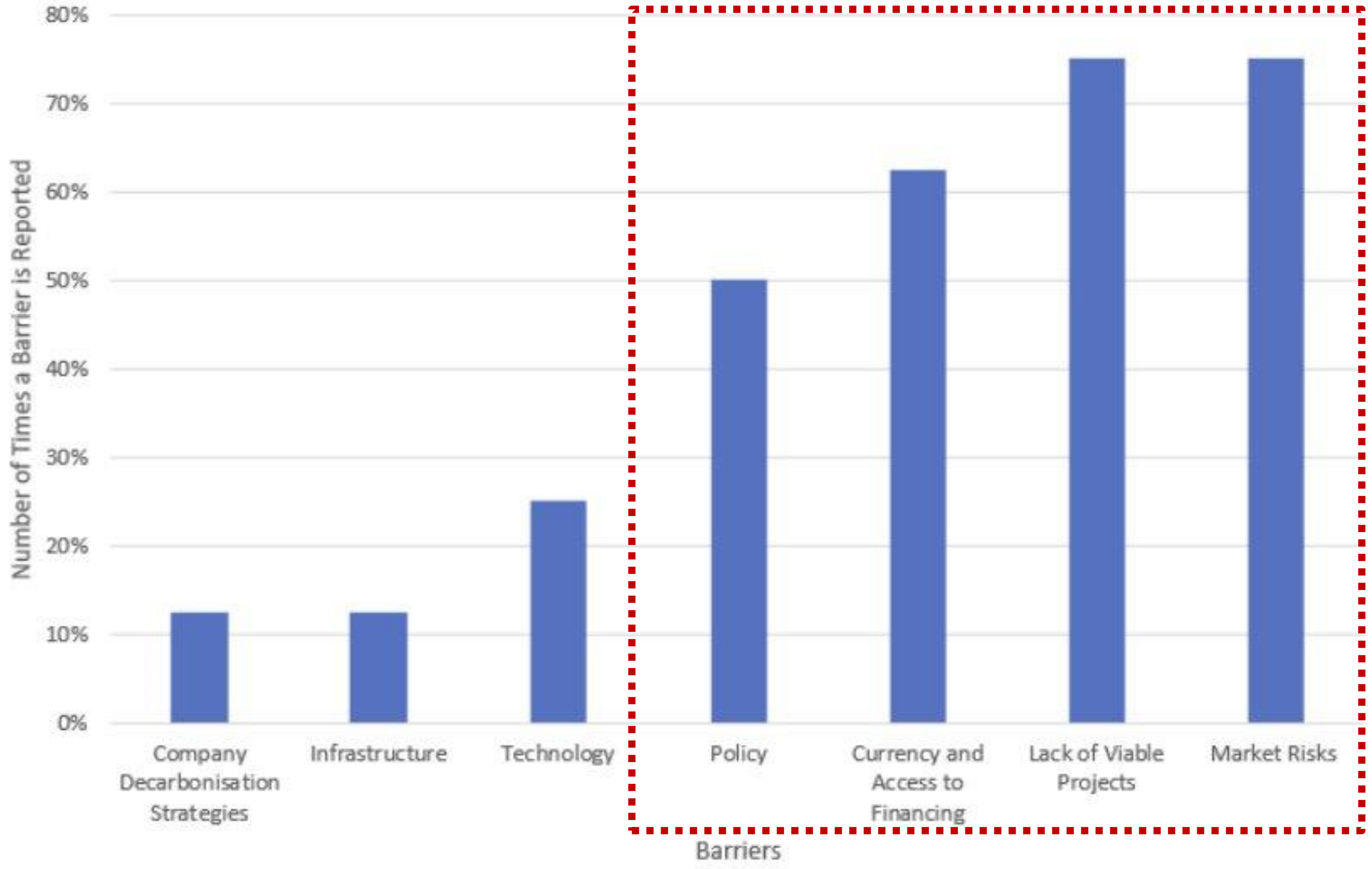


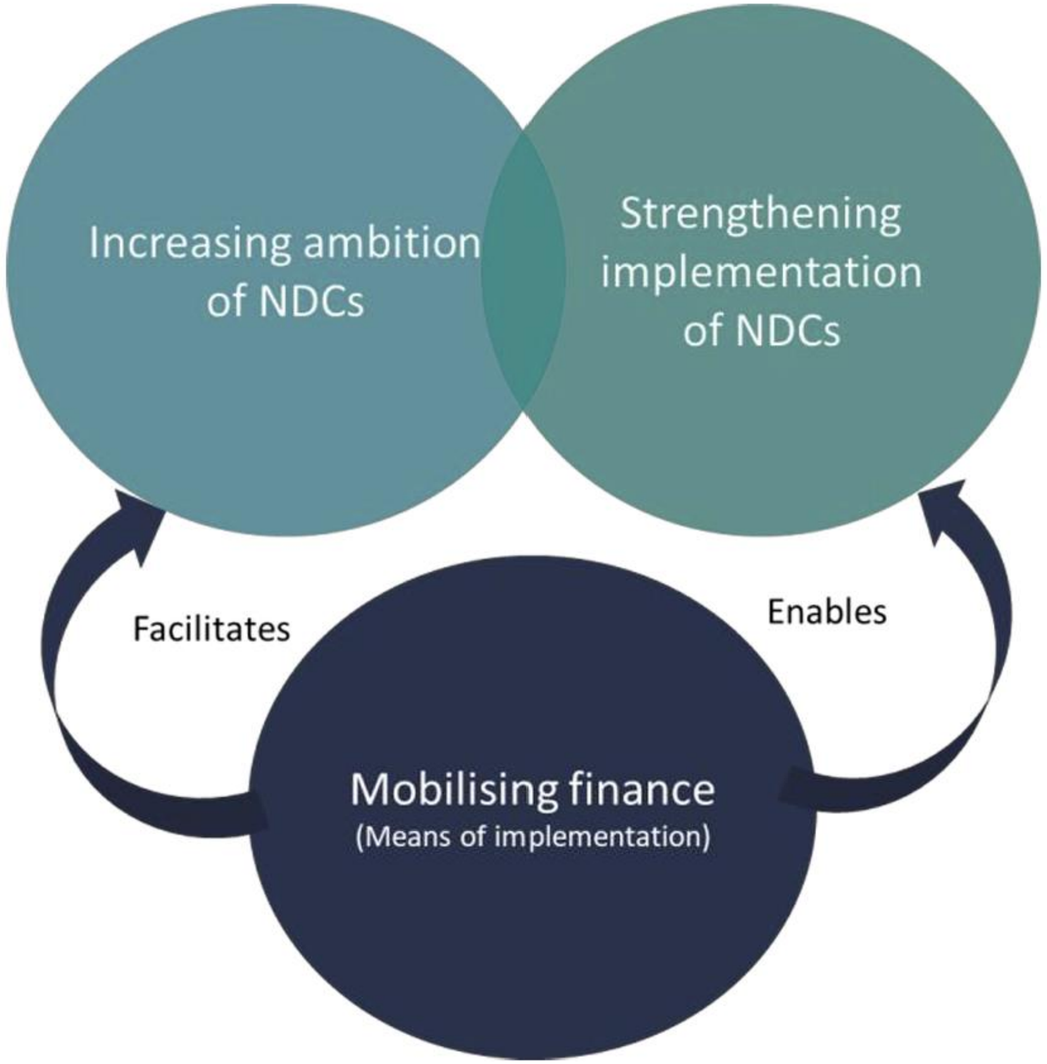
Figure 1: Challenges for climate/ SDGs mobilization

Figure 2: Reported Barriers that IFIs and Funds Face in Providing Assistance for Industry Decarbonisation Projects

Source: 2022 OECD DAC Survey on Providers' Portfolios

Source: OECD (2024)

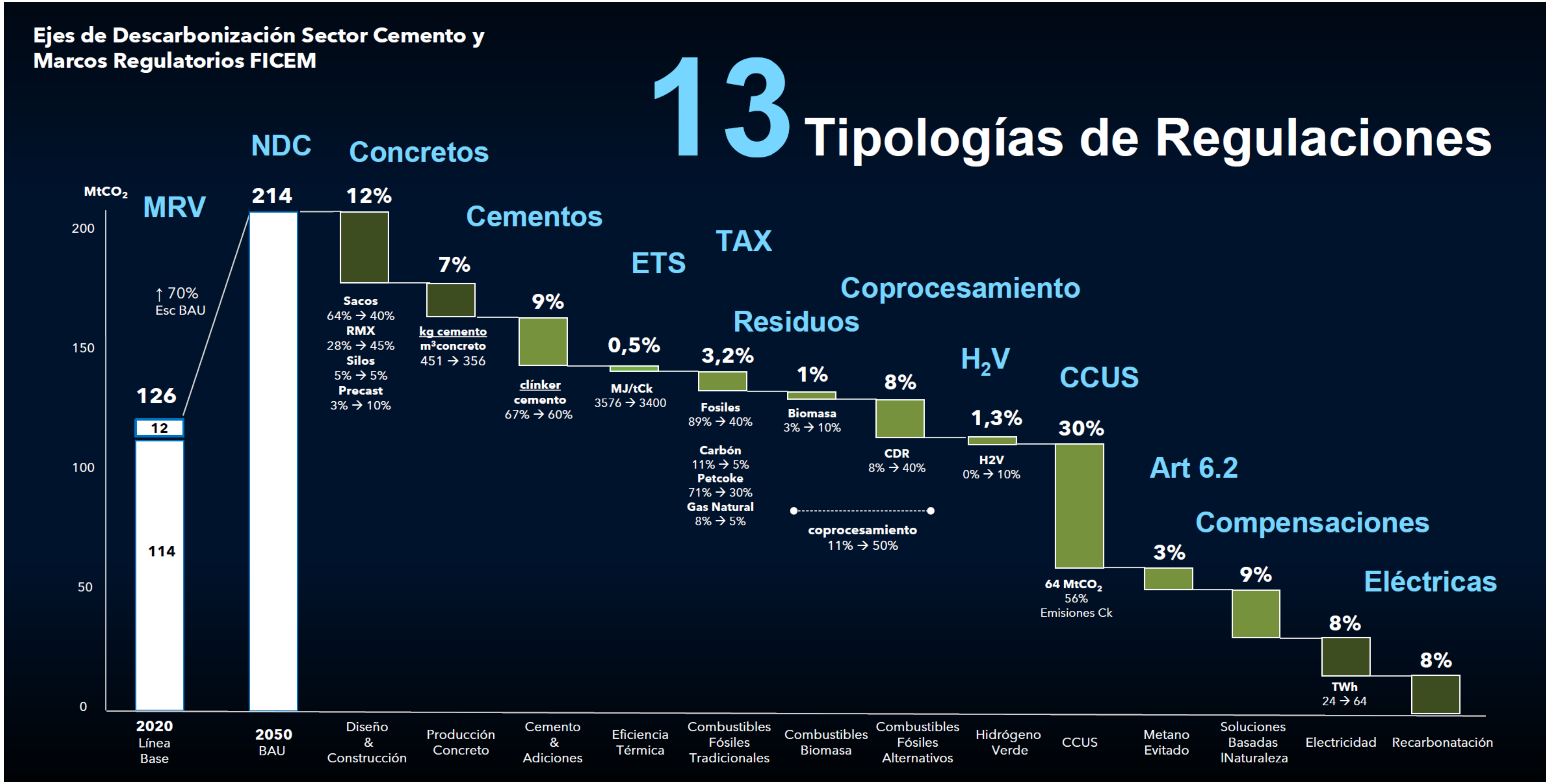
1. Strengthening the implementation of NDCs as the starting point of strategic finance for industrial decarbonization



Source: OECD (2024)

- Sectoral NDC targets
- **Implementable**: Clear, actionable plans with legal, regulatory, and sectoral frameworks.
- **Investable**: Detailed investment needs, financing strategies, and clear roles for domestic and external finance.

2. Sectoral roadmap is critical to channel public and private finance for sustainable industries



Source: FICEM (2025)

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3. A comprehensive policy framework to enable financing for industrial decarbonization

Vision

i Targets/objectives

(National-level/ Sector & sub-sector level targets/ Company-level targets)

Core policy pillars

Supply-side regulatory measures

- **i** **Carbon pricing instruments** – Implement tools such as Emissions Trading Systems (ETS) and carbon taxes
- **ii** **Mandates and industry guidelines** – Establish standards for product certifications, efficiency improvements, and circular economy practices

Demand-side regulatory measures

- **iii** **Green building standards & certification systems** – Establish and promote certifications to encourage sustainable construction
- **iv** **Green public procurement (GPP)** – Set procurement criteria to prioritize low-carbon and eco-friendly materials for public infrastructure projects

Direct funding

- **v** **Subsidies, grants, and direct investments** – Provide government financial support to businesses to incentivize and assist with the implementation of emission-reduction initiatives

Financial incentives

- **vi** **Tax credits and exemptions** – Offer tax incentives for business to voluntarily adopt low carbon technologies and practices
- **vii** **Innovative financing mechanisms (debt instruments)** – Increase access to sustainable finance by offering loans, bonds, guarantees, tax incentives, etc.

Enablers

- **i** Institutional structure
- **ii** Monitoring, reporting, and verification
- **iii** Multi-stakeholder collaboration
- **iv** Promotion of sector & market awareness
- **v** Social and workforce development

Source: UNIDO (2025)

4. Taxonomies and criteria for eligible transitional activities

Taxonomy	Eligibility criteria	Reference road-maps/ pathways	Separate screening criteria for hydrogen, CCS, and cross-cutting factors (such as DNSH[ii])
EU *Framework to Facilitate Sustainable Investments, 2020; Technical Screening Criteria, 2021*	Quantitative thresholds	Paris Agreement 1.5 °C pathway	
Japan *Technology roadmap for Transition Finance in Iron and Steel Sector, 2021*	Lists of activities	IEA ETP; Green Material economics; SBTi; Internal plans	
Singapore – MAS *Singapore-Asia Taxonomy, 2023*	Quantitative thresholds + list of activities	EU taxonomy, CBI Steel criteria	
ASEAN *Transition Finance Guidance, 2023; Sustainable Finance Taxonomy, 2024*	Refers to criteria set and roadmaps used by ASEAN member countries		
Climate Bonds Initiative *Steel Criteria, 2024*	Quantitative thresholds + list of activities	Sustainable STEEL principles, IEA NZE pathway	

Source: CPI Analysis

Green - Yes,
Red - No Clear Guidelines

- Global and Regional Collaboration: International Platform on Sustainable Finance (IPSF) and the Network for Greening the Financial System (NGFS), ISSB
- Tailoring to Local Contexts: Guidance must be flexible to address regional and sectoral differences and support a just transition, especially in emerging markets.
- Private Sector and Voluntary Initiatives: Leading private sector groups set benchmarks for transition plans, increasingly aligning with international standards.
- Challenges and Gaps: The EU's regulatory framework for transition finance remains fragmented, highlighting the need for further harmonization.

5. Global landscape for technical and financial assistance for industrial decarbonisation

Technical assistance

- Specialised programs and institutions
- Global collaborative initiatives
- Bilateral assistance
- Commercial and private sector
- Industrial decarbonisation hubs

Financial assistance

- MDBs
- Philanthropies
- Climate funds
- Bilateral and multilateral finance
- Commercial and private finance
- Institutional investors

Recent developments in climate finance for industry

Brazil Announced as the First Country Partner of the Industrial Transition Accelerator (ITA)

Industry is one of the leading sources of carbon emissions - and may become the biggest source in less than a decade unless investments in zero-carbon alternatives are rapidly accelerated. In the pathway to net-zero, carbon emissions from heavy industry need to decline by 20 percent by 2030 and by 93 percent by 2050.[1]

CIF's Industry Decarbonization Program is accelerating the transition of high-emitting industries in developing countries to more sustainable practices and unlocking investments in net zero-carbon, climate-resilient business models and technologies.

CLIMATE CLUB | Global **Matchmaking** Platform

COP29 Global Pledge: Scaling international assistance for industry decarbonisation

Baku, Azerbaijan, 18.11.2024

The Federal Government · UK Government · Canada · CIF Climate Investment Funds · Mission Possible Partnership · Climate Club · Alliance for Industry Decarbonization · UNIDO · Breakthrough Agenda

New Industrial Decarbonization Hub to accelerate net zero projects in Brazil

04 April 2024

There has been a recent focus from governments, civil society organisations and IFIs on both the amount of climate finance being provided, and the quality of the financial and technical assistance being provided

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THE CHAIN REACTION

1 Enabling Environment

Setting countries on the right path

- UNIDO works with countries to develop a tailored roadmap that identifies challenges, gaps and how to fix them in a functional plan to deliver on the net zero commitment.
- These solutions could be policy and regulatory changes, new technology and newly-needed technical expertise.

2 Financial Environment

Finance for first movers

- CIF's Industry Decarbonization program delivers concessional finance with our MDB partners
- Funding supports pilot projects, policy advances, bringing to market solutions that do not have a proven record

3 Finance at Scale

Scaling up

MDBs can unlock finance at unprecedented scale to:

- Speed up mobilization through underwriting
- Reduce risk through blended finance
- Catalyze innovation through venture capital

4 Net Zero for high emitting Industries

A framework to mobilize resources and enable the net-zero transition in industries

Remarks: Key levers for Strategic finance for Industrial decarbonization

Policy Frameworks
- NDCs & Green industrial policies
- Sectoral transition pathways (local)
- National sustainable finance taxonomies

Financing Instruments
- Sustainability-linked loans/bonds
- Risk-sharing facilities
- Concessional lending

Capacity & Data
- Strengthen MRV systems
- Standardized reporting
- Third-party verification

Stakeholder Engagement
- Industrial Decarbonization Platforms
- Industry- MDBs - finance collaboration
- Knowledge sharing

Final thought: Unlocking local currency financing in EMDEs – macro effort – not yet reaching out to Industry

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Short-term measures:

- Unlock the local currency potential of development finance: Mandate MDBs and DFIs to review currency risk frameworks and collaborate on treasury functions to improve local currency financing.

- Unlock the potential of local financial actors: Prioritize engagement with local financial actors and structure transactions to support local currency assets and SME lending.

- Support existing mitigation and market-building initiatives: Scale up targeted initiatives like FrontClear and LSF to streamline donor resources and strengthen market-building efforts.

Long-term measures:

- Reform frameworks: Review MDBs' founding documents to enable more local currency debt issuance and financing.

- Develop local capital markets: Prioritize financial infrastructure, scalable instruments, gap analyses, and tailored concessionality for market maturity.

- Co-ordinate donor efforts: Harmonize regulatory standards, improve cross-border cooperation, and integrate local markets to boost efficiency and attract private investment

Source: OECD (2025)

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Thank you for your attention!

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