

# UNLOCKING INVESTMENTS FOR STEEL DECARBONISATION

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22 January 2025

The case of Emerging Markets & Developing Economies



# Overview of the OECD CEFIM Programme

**OECD programme** funded by Australia, Canada, Denmark, Egypt, Germany

- to help accelerate clean energy **finance & investment** by strengthening domestic enabling conditions
- renewable electricity, energy efficiency in buildings **industry decarbonisation**

## Activities:



CEFIM country partners: Colombia, Egypt, India, Indonesia, Philippines, South Africa, Thailand and Viet Nam



# OECD Framework for Industry's Net-Zero Transition



- **Country-driven** process
- Focus on specific industry **subsector** or **cross-cutting** technology
- A **collaborative** stakeholders' engagement with policy makers, industry, finance institutions & international partners.
- **Implementation** in various countries & sectors:
  - Steel and Textile in Indonesia 
  - Steel in South Africa 
  - Hydrogen use in industry sector in Egypt 
  - Petrochemicals & plastics in Thailand 

- Provide tailored **recommendations** to improve the enabling market conditions
- Identify relevant **financing instruments**



# Setting the Scene

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The iron & steel sector  
represents nearly



# 8%

of global CO<sub>2</sub> emissions  
from the energy sector

- **Massive investments** are needed to put industry on a net-zero pathway
- Need to mobilise **all sources of finance**: international, domestic, public and private
- Majority of investments are set to take place in **emerging markets and developing economies (EMDEs)**



# Increasing & channelling investments flows: A Double Imperative

Steel decarbonisation face **implementation challenges** ...

More than **90%** of global crude steel production in **countries** with **Net-Zero** target



**30%** of global crude steel production covered by **corporate's Net-Zero** target



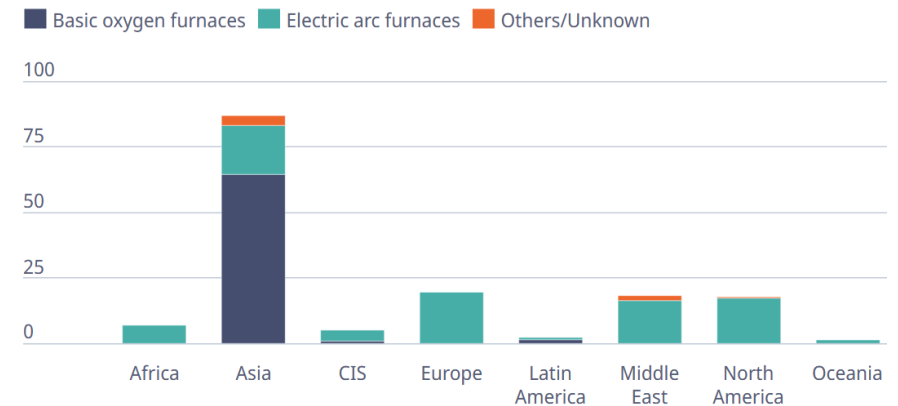
Primary **near zero emission steel** represents less than **1%** of global crude steel production

... with expanding capacity still highly relying on **emission intensive routes**

## EMDEs face an increasing risk of stranded assets

- **Growing** capacity
- EMDEs in Asia concentrate the vast majority of **new** emission intensive **projects**

**Projected steel capacity increases 2024-26, by technology**  
Million metric tonnes (mmt)



Source: OECD, 2023



# Barriers to attract investments in steel decarbonisation

**Multiple challenges** increase the risk profile of low-emission steel projects, even **more pronounced** for **EMDEs\***

## Technology



Low maturity /  
Scale-up breakthrough techno.

## Competitiveness



Higher costs of production /  
Green Premium

## Broader systemic challenges



Low-carbon infrastructure/  
Policy framework ...

## Further barriers for EMDEs\*, e.g:

- Regulatory & policy uncertainty
- Access to innovative techno.
- Access to finance
- Cost of capital
- Lack of low-carbon infrastructure



## Investment Scale

High capital intensity /  
upfront costs



## Market

Offtake risk/  
Lack of definition  
of 'green' products

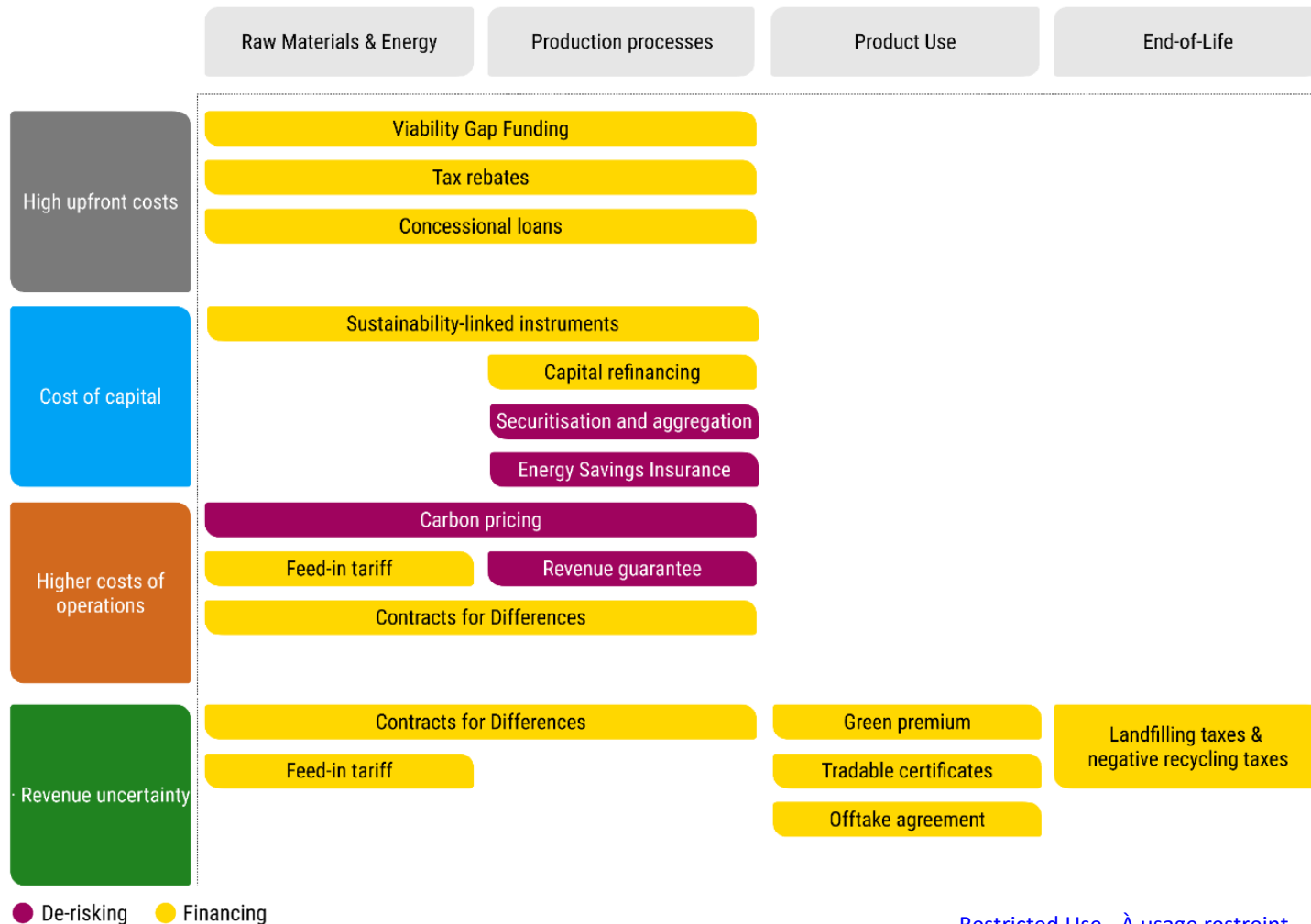
*\*Emerging Markets & Developing Economies*

Restricted Use - À usage restreint



# Tailoring de-risking and financing instruments

Addressing barriers to **attract financing** can build on a **wide range of instruments**



- Various **economic, de-risking & financial instruments** are available
- **Combining instruments** can help address multiple barriers





# Key learnings on successful approaches

## Financing instruments characteristics

- Multiple uses of **de-risking instruments** to optimise the leverage of public resources
- **Direct public support** for targeted or time-bound uses.

## Enabling conditions

- **Capacity-building** to improve institutional readiness and maturity of the domestic industry
- Importance of **sustainability taxonomies**

## Replicability & scale-up

- **Innovative financial instruments** (carbon contract for difference) **at very early stage**
- **Importance of project pipelines**

## Governance and implementation

- **Multi-stakeholder approach**
- **Knowledge-sharing & matchmaking platforms** for better and rapid implementation





# Financial & technical assistance for EMDEs



Assessing the **state of play & progress** in financial & technical assistance for industry decarbonisation in EMDEs

Provide insights at various levels:  
**sectoral, country, financial instrument, technology, project**

## IN ORDER TO ...



Identify key **trends** & areas for **action**



**Support international cooperation** by informing **global matchmaking** for industry decarbonisation projects in EMDEs:  
Which programs & funds available?



## Assistance for steel decarbonisation in EMDEs has not received the necessary attention so far ...

While representing 8% of global CO2 emissions, the **steel sector** has received **limited support** from mitigation related **public bilateral & multilateral development finance**

Around  
**0.6 billion USD**

- of [2000-2021] mitigation related **public bilateral & multilateral** development finance

Representing (on the same period)

**<< 1 %** of the total recorded  
mitigation related development finance

**< 50%** of total recorded  
development finance flows targeting the steel sector



... and providers, recipients, financial instruments, projects have been very little diversified

### Public Bilateral & Multilateral flows characteristics

Almost all support from 1 provider (EBRD)

Almost all directed to Ukraine & Türkiye

Debt instruments



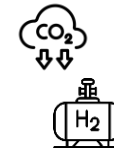
### Recipient projects mostly focused on



Energy efficiency, waste management, circularity



Research, capacity building




For most IFIs, industry decarbonisation projects based on **breakthrough technologies** are a nascent space



# Various funds & programmes cover the industry sector, but not necessarily in a targeted way

Most of existing **climate funds** are **transverse** or **not dedicated to industry**

**NDC PARTNERSHIP**  Analysis of the 'Climate Funds Explorer'\*

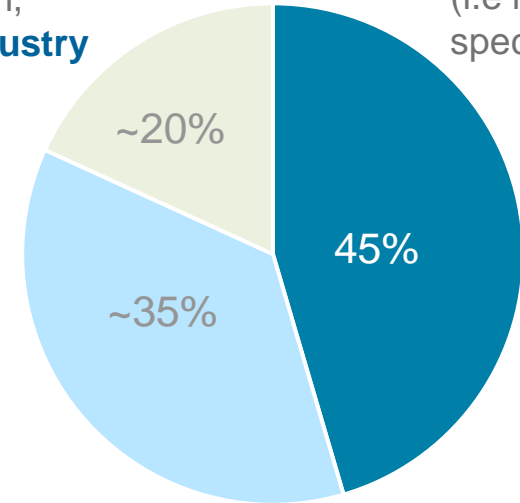
Database gathering around **100 funds** targeting climate change mitigation, adaptation, or resilience objectives



Around **20 funds** covering 'Industry'



Sectoral approach, **incl. Industry**



**Transverse Funds** (i.e. not sectoral specific)

Sectoral approach, but **indirect link** with industry (e.g. technologies, infrastructure...)

\*as of Q1 2024

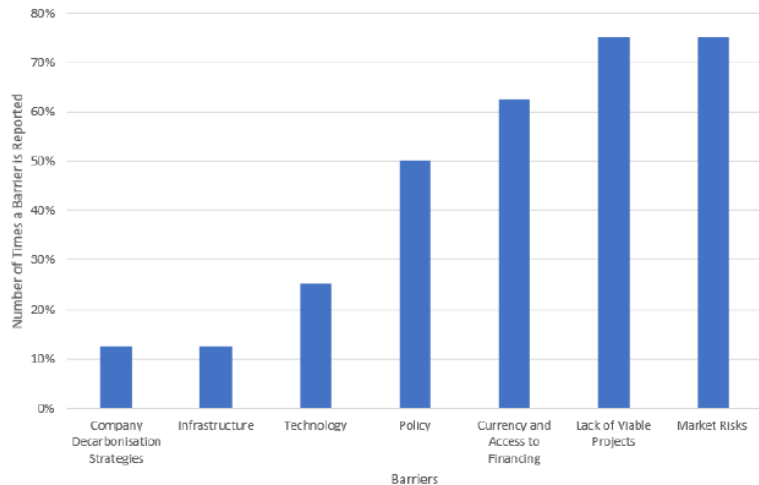


# There is a growing interest in developing specific funds & programs towards industry decarbonisation

## Key findings from interviews with IFIs & funds



Figure 4.3. Reported Barriers that IFIs and Funds Face in Providing Assistance for Industry Decarbonisation Project



Source: OECD analysis from IFIs interviews

- **Emerging programmes** supporting deep industry decarbonisation projects
- **Lack of project pipeline & market risks** appear as the most critical barriers towards industry decarbonisation projects
- **Blended finance, debt & concessional finance** reported as most relevant instruments for such projects
- **De-risking** considered as a valuable tool for industry decarbonisation projects specifically through guarantees



# Financial & technical assistance for EMDEs: Key areas for action



Include the industry sector when considering financial & TA for decarbonisation in EMDEs



Target more countries to tap into a significant emissions reduction potential



Target programmes / projects utilising disruptive low-carbon technologies



Design funds that target industry decarbonisation projects



Develop financing instruments that can address the specific challenges of industry decarbonisation



Track and monitor financial & TA for industry decarbonisation

**An opportunity to boost international cooperation & partnerships for financial & technical assistance for industry decarbonisation**

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