



Global Forum on Steel Excess Capacity

CONNECTING THE DOTS ON STEEL DECARBONISATION
INITIATIVES

CONTRIBUTING TO A GLOBAL INCLUSIVE DIALOGUE

GFSEC STAKEHOLDER EVENT

21st September 2022

With the participation of:



Agora
Energiewende



UN CLIMATE
CHANGE
CONFERENCE
UK 2021

worldsteel
ASSOCIATION

RESOURCES
for the FUTURE

SWP



SCIENCE
BASED
TARGETS

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and Security Affairs

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and Security Affairs

lea



E3G



WORLD
RESOURCES
INSTITUT



STEEL MANUFACTURERS
ASSOCIATION



MISSION
POSSIBLE
PARTNERSHIP



First Movers
Coalition



清华大学
Tsinghua University

EXECUTIVE SUMMARY

With direct emissions accounting for more than a quarter of total industrial emission, the steel sector is of critical importance for achieving the Paris Agreement's climate goals. While the mission of decarbonising steel is an urgent and compelling one, it remains a challenging task to accomplish, requiring a profound and complex transformation of its production processes. To set this transformation in motion, many initiatives have been launched in recent years aiming at providing roadmaps, action plans, tools, insights and recommendations on how to accelerate the decarbonisation of the steel sector.

On the 21st of September 2022, the OECD facilitated the Global Forum on Steel Excess Capacity stakeholder event on steel decarbonisation. The objective of the event was to bring together, and “connect the dots” between the different initiatives that are promoting, supporting and implementing decarbonised steelmaking practices, together with steel industry associations and steel policymakers from GFSEC member countries. Moreover, the event aimed to investigate and identify where **gaps** may exist across these initiatives and where **synergies** can be created and nurtured.

As even the definition of green steel has yet to be commonly agreed upon, international cooperation will be key to ensure that countries and industries stand aligned and initiatives don't duplicate their work, while they implement the steel decarbonisation agenda.

The event highlighted that there are two particular fields where steel decarbonisation efforts are increasing but where further coordination will be crucial:

1. **Data:** being instrumental to measure and monitor progress towards steel decarbonisation targets, data is essential to foster implementation. Moreover, data is the foundational building block of definitions for near zero emission steel, standards and other criteria shaping trade measures. This data needs to be granular, comprehensive, comparable, standardised and trackable.
2. **Trade:** since steel is a highly traded material worldwide, trade is an indispensable ally in the transition of the steel industry towards decarbonisation. However, without a level playing field, trade can also represent an obstacle to decarbonisation efforts, contributing to carbon leakage and trade distortions. Finding an effective and inclusive approach to the trade and emissions nexus will be vital to ensure the implementation of steel decarbonisation.

The OECD steel policy community stands ready to support further dialogue, transparency and cooperation across governments, industry associations and initiatives that are committed to the goal of creating a more sustainable steel industry.



1st BLOCK: THE STEEL DECARBONISATION PUZZLE: GETTING TO KNOW THE VARIOUS ACTORS AND INITIATIVES WORKING TOWARDS GREENER STEEL

Participants: *The UK Department for Business, Energy and Industrial Strategy (BEIS) as the President of COP26, International Energy Agency (IEA), Steel Zero, Responsible Steel, First Movers Coalition (FMC), Mission Possible Partnership (MPP), LeadIT, International Renewable Energy Agency (IRENA), The Energy and Resources Institute (TERI), European Climate Foundation.*

This first session of the event was devoted to introducing different actors and initiatives involved in the field of steel decarbonisation, which presented their ongoing projects, objectives and partners.

The UK Department for Business, Energy and Industrial Strategy, as President of COP26, presented the [Breakthrough Agenda](#) that was launched in Glasgow in 2021. The Breakthrough Agenda aims to accelerate clean technology transition in high emitting sectors through strengthened international cooperation and collaboration.

The IEA introduced the [Breakthrough Agenda Report 2022](#) which it prepared in partnership with IRENA and the UN High Level Action Championship, and presented specific recommendations for steel decarbonisation:

1. Urgently agreeing on common **standards** for near zero emission steel.
2. Rapid scale-up of high-quality commitments to **purchase** near zero emission steel.
3. Agreeing on an approach to enable the **trade** of near zero emission steel that rewards first movers, whilst providing support for a broader set of fast followers
4. Immediately increasing public and private funding for **research and innovation**, supported by effective collaborative networks.
5. Increasing international assistance to catalyse private sector **investment** in pilot, demonstration and commercial-scale plant.



Connected to the Breakthrough Agenda and beyond, there are more than 30 global initiatives working on promoting the steel decarbonisation agenda. Some are government-led, some represent alliances of climate leaders or of steel companies, some again are philanthropic organisations or think tanks. Moreover, their work varies a lot in terms of focus and scope: some are committed to scaling up public or private procurement of green steel, others to implementing steel companies transition to near-zero steel production, some focus on collecting data, others on fostering innovation, others again are creating standards that define what to account as low carbon steel. The workshop offered a podium for these initiatives to present themselves and their respective work on these different domains.

2nd BLOCK: AN INDUSTRY ROUNDTABLE: ASSESSMENT OF STATE OF PLAY AND HOW TO IMPLEMENT

Participants: *worldsteel, US Steel Manufacturers Association, Eurofer, South East Asia Iron and Steel Institute, Canadian Steel Producers Association.*

The second session of the event saw the active participation of several steel industry associations that offered their views on the implementation of the steel decarbonisation agenda across different geographical regions.

KEY TAKE AWAYS FROM THE DISCUSSION:

- ▶ **WHAT ARE THE KEY COMPONENTS OF AN EFFECTIVE GLOBAL ACTION PLAN ON STEEL DECARBONISATION FROM AN INDUSTRY PERSPECTIVE?**
 - **Common definitions, standards and methodologies:** Agreement on a global standard that defines what low carbon emission steel is and how to account for embodied carbon emission will be key to ensuring a global level playing field in the industry.
 - **Transparent and homogenous regulation:** The role of Governments is crucial to harmonise regulatory frameworks, which should be open, transparent, non-discriminatory and WTO compatible.
 - **Demand side measures** that favour the consumption of green steel.
 - **Investments in R&D innovation**, not just in commercially mature technologies.
 - Sufficient access to **transition finance** and **technology transfers** for decarbonisation.
 - Share **best practices** among different actors.

- ▶ **WHAT ARE THE MAIN CHALLENGES THAT WILL HAVE TO BE ADDRESSED?**
 - **Carbon leakage** that risks to undermine the level playing field and set back decarbonisation efforts, by causing low emitting firms to lose market shares vis-à-vis higher carbon intensive steelmaking jurisdictions.
 - **Disagreement** between **product vs process focus standards**.
 - **Global excess steel capacity** that maintains business uncertainty and creates barriers to investments that are needed for the transition.
 - **Geographical differences:** hinging on different stages of development, energy mix and resources availability, some countries are expected to increase carbon-intensive steelmaking production and capacity in the near future. Moreover, in these countries investment in “green” technologies are still seen as risky and expensive.
 - **Export restrictions**, for instance of raw materials that are crucial for the clean energy transition, like scrap, are hampering decarbonisation efforts.
 - **Duplications:** risk that different regulatory systems and standards will be created and will compete with each other.
 - **Absence of a forum** where different steel stakeholders are represented and can discuss their perspectives and cooperate to avoid duplication and foster implementation.



BLOCK 3: THE KNOWN AND UNKNOWN: IMPROVING AVAILABILITY OF STEEL EMISSIONS RELATED DATA

Participants: *IEA, OECD Steel Unit, worldsteel, CRU Group, Responsible Steel, Rocky Mountain Institute (RMI), Resources for the Future, Carbon Emission Accounts & Datasets for emerging economies (from Tsinghua University), The Science Based Targets Initiative (SBTi), Mission Possible Partnership (MPP), Agora Energiewende, European Commission Joint Research Centre (JRC), World Resources Institute (WRI).*

KEY TAKE AWAYS FROM THE DISCUSSION:

▶ WHAT ARE THE CURRENT DATA GAPS FOR AN EFFECTIVE STEEL DECARBONISATION DELIVERY?

- Lack of **data at disaggregated level**: need for comprehensive and granular data, at national and plant level. In particular, data at the plant level is key to monitor production compliance with low-carbon / near-zero emission steel definitions and standards.
- Absence of a **single, verifiable and consistent system for carbon accounting** in steel production.

▶ HOW TO OVERCOME SUCH GAPS?

- Stimulating companies to be **transparent and open** with their data.
- **Collaborating** across different stakeholders (industries, governments and initiatives) to agree on a common emissions accounting methodology and standard(s) for near-zero /low-carbon emission steel.
- Need for a **third party audit** to ensure data reliability.
- Need for a **system** where **data can be shared** openly and in a standardised way
- Developing **decarbonisation scenarios** for companies and helping companies to set their emission reduction targets.

BLOCK 4: HOW ABOUT TRADE? INCLUSIVE CARBON ALLIANCES TO ENSURE A GLOBAL LEVEL PLAYING FIELD

Participants: *Agora Energiewende, German Institute for International and Security Affairs (SWP), CEPS, E3G, Grantham Research Institute on Climate Change and the Environment (LSE), First Movers Coalition.*

KEY TAKE AWAYS FROM THE DISCUSSION:

▶ HOW TO AVOID THE RISK OF CARBON LEAKAGE WITH RESPECT TO STEEL DECARBONISATION?

- Develop **consensus** and share **good practices** on **anti-carbon leakage policies** that are compatible with **carbon neutrality**.
- Agree on and adopt **standards** and **definitions** to contribute to mitigating carbon leakage.
- Pursue **innovation** to reconcile carbon leakage risk while increasing industry competitiveness.
- Support **commitments by governments and companies to purchase low carbon steel** and establish green steel markets open to domestic and foreign competition.

► HOW TO ENCOURAGE A LEVEL PLAYING FIELD?

- Foster **inclusiveness** and **cooperation** among developed and developing countries, by mobilising finance, technology transfers and capacity building.
- Prevent **environmental protectionism** from becoming **trade protectionism**.
- Use **proceeds from anti-carbon leakage policies** to invest in decarbonisation projects in developing countries.
- Consider **creating a platform** across developed and developing countries to agree on methodologies, definitions, data and policies on the steel trade and climate nexus.

