Breakthrough Agenda

Update on plans over 2022/23

Mateus Oliveira, UK Government



DELIVERING THE GLASGOW CLIMATE PACT



The Breakthrough Agenda's goal is to accelerate clean technology transitions in each sector through strengthened international collaboration, cooperation and coordination.



Launched by world leaders at COP26 by 45 countries representing more than 70% of global GDP, with all G7 members endorsing the Agenda.



Countries committed to work together this decade to scale and speed up clean technologies, making them affordable and accessible for all, and agreeing on common goals across key sectors including power, road transport, steel and hydrogen.

Progress will be measured, and new recommendations made, in the Breakthrough Agenda report led by the IEA, IRENA and the UN High Level Action Champions.



By collaborating in this way, we can make the transition quicker, cheaper and easier for everyone - driving faster innovation, greater economies of scale, bigger incentives to invest, and level playing fields where needed.

Breakthrough Agenda process

Key outputs

- Breakthrough Agenda Report (Sept 2022): Independent report, led by the IEA, IRENA and the UN High Level Action Champions, drawing on a wide evidence base and with extensive consultation. Tracks progress and recommends priorities for strengthen collaboration.
- Breakthrough Agenda Priority Actions (November 2022) Plans: Developed in collaboration with Breakthrough Agenda signatories and major international initiatives.
 Responds to the Report recommendations by outlining commitments from countries and initiatives to ongoing and new collaborative actions.



BREAKTHROUGH Agenda



Accelerating Sector Transitions Through Stronger International Collaboration

Will Hall, International Energy Agency





UN Climate Change High-Level Champions in collaboration with:







"Near-zero emission steel is the preferred choice in global markets, with efficient use and nearzero emission steel production established and growing in every region by 2030."



Sources: IEA, 2021; Bataille, Stiebert and Li, 2021; E3G & PNNL, 2021; MPP, 2021; and Agora Industry, 2021.

How do we get there?





Current status of collaboration

Long-term Vision & Action Plans	Leadership Group for Industry Transition	Mission Possible Partnership	World Steel Association		
Demand Creation & Management	CEM's Industrial Deep Decarbonisation Initative	First Mover Coalition	SteelZero		
Infrastructure & Supply Chains	[under consideration]				
Finance & Investment	GFANZ	RMI Centre for Climate Aligned Finance			
Research & Innovation	Mission Innovation's Net Zero Industries Mission	IEA's Industrial Energy-related Technology and Systems TCP	Global Low-Carbon Metallurgical Innovation Alliance		
Market Structures	[under consideration]				
Standards & Certification	ResponsibleSteel	First Movers Coalition	CEM's Industrial Deep Decarbonisation Initiative		
Trade Conditions	OECD Steel Committee	WTO Trade and Environmental Sustainability Structures Discussions			
Knowledge, Capability & Skills	[under consideration]				
Social Engagement & Impact	[under consideration]				
Landscape Coordination	Steel Breakthrough in partnership with the initiatives below				

BREAKTHROUGH Agenda

Note: The diagram summarises the roles of many public and private sector initiatives in this sector. Initiatives have been included if they have a global scope, with active members from multiple regions of the world, and have at least one significant work programme specifically focused on accelerating emissions reduction in that sector. The list is not exhaustive and will be updated over time. Given where the steel sector currently stands in its transition, five areas stand out as priorities for strengthening international collaboration, where <u>we recommend the following</u>:

- Urgently agreeing on common standards for near zero emission steel
- Rapid scale-up of high-quality commitments to **purchase** near zero emission steel
- Agreeing 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
- Immediately increasing public and private funding for research and innovation, supported by effective collaborative networks
- Increasing international assistance to catalyse private sector investment in pilot, demonstration and commercial-scale plants



ANNEX

Urgently agreeing common **standards** for near zero emission steel





Source: Achieving Net Zero Heavy Industry Sectors in G7 Members (IEA, 2022)

Recommendation 1

Governments and companies willing to lead the transition in the steel sector should collectively agree on common definitions for low emission and near-zero emission steel, along with a time frame for the adoption of standards by the mid-2020s. This is an important market signal and will be vital for unlocking a series of subsequent actions, most notably high-quality demand commitments and trade agreements.

Rapid scale-up of high-quality commitments to purchase near zero emission steel

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private sector procurement are indicative.

Recommendation 2

Governments and companies should increase the scale of near-zero emission steel procurement commitments to cover a significant share of their future demand. These commitments should be high quality, supported by appropriate legal and implementation frameworks, such as advance purchase commitments. They should also consider joining public and private sector initiatives where these commitments are aggregated. This will strengthen the global demand signal for near-zero emission steel, increasing the incentives for industry to invest in its production.

Agreeing an approach to enable the **trade** of near zero emission steel that rewards fast movers, whilst providing support for a broader set of fast followers

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Global steel trade accounts for around 700 Mt CO2 annually

Source: Green transition will disrupt steel trade flows (CRU, 2022)

Recommendation 3

Governments of major steel producing and consuming countries should urgently launch a strategic dialogue with the purpose of agreeing ways to ensure near-zero emission steel can compete in international markets. This is needed to prevent trade acting as a brake on the transition. *This should be supported by agreements to cooperate on data, standards, comparability of policies, RD&D, finance and procurement.*

Recommendation 4

Governments and companies should urgently identify several commercial-scale pilot projects, in all major steel producing regions, where international collaboration can support shared technology learning, infrastructure deployment, business case development and policy support. Collaborative networks should deliver operational projects in these countries by the late 2020s at the latest. Emerging markets and developing countries' participation in key research, development and demonstration initiatives should be increased in support of this aim. *This will help eliminate technology availability issues, providing multiple case studies for a large group of countries and companies to further improve upon.*

Increasing international assistance to catalyse private sector investment in pilot, demonstration and commercial-scale plants

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Recommendation 5

Donor countries should coordinate with multilateral development banks (MDBs) to led by the priorities of developing countries, in consultation with recipient country, should significantly increase funds supporting industry transition to near-zero emission technologies in emerging and developing countries. *This will provide much needed, near-term technology and financial support to unlock additional private sector capital for the first wave of near-zero emission projects in key steel producing countries, especially for EMDEs.*