



UNFCCC COP 27
Sharm El-Sheikh, Egypt

Implementation Lab
Concept Note & Draft Session Structure

***Steel Breakthrough: Going beyond demonstration
projects by 2030 to put steelmaking on a 1.5°C
pathway***

Marrakech Partnership for Global Climate Action

DATE 11 November

TIME 14:30 – 16:00

LOCATION Lotus Room, Climate Action Zone

Organised by Mission Possible Partnership, WBCSD, U.N. High-Level Champions

MP “Implementation Lab”: Steel Breakthrough Concept note

Description	This Implementation Lab will offer a deep-dive into how the steel sector can take critical decarbonisation steps in this decade to get on track to achieve the Steel Breakthrough in line with the 1.5°C aligned Industry Action Pathway. It will consider the latest analysis on what is needed across technology, policy, finance and demand levers to get low-carbon steel plants in the ground around the world – and how action can be accelerated and scaled across regions, in particular, emerging markets and developing economies.
Headline	Steel Breakthrough: Going beyond demonstration projects by 2030 to put steelmaking on a 1.5C pathway
Guiding Questions	<p>What action has, to date, been undertaken to achieve the Steel Breakthrough of 70 (near-) zero emission steel plants operational by 2030, producing 170Mt of low-carbon steel per annum, and in which near-zero emission steel is the preferred choice in global markets, with efficient use and near-zero emission steel production established and growing in every region by 2030?</p> <p>How can investment in industrial scale near-zero emission iron-based steel production be unlocked over the next 5 years to achieve the Steel Breakthrough?</p>
Targeted Outcomes	<p>Practical feedback based on experience on how to mobilize policy, demand, finance, energy, and supply to build a positive investment case in first projects.</p> <p>By bringing leaders from the supply side together with a growing pool of off-takers (from the private and public space), energy suppliers, net-zero committed financiers and country representatives, this Lab can shed light on the progress that is being made, common challenges and what more needs to be done to get the sector on track for a net-zero future.</p>
Objectives	<ul style="list-style-type: none"> • Achieve a deepened and common understanding of what is required in this decade across upstream energy and raw materials feedstocks needs, supply-side production, demand-side offtake commitments, public policy and investment to get the steel sector on a pathway of net-zero emissions by 2050 (derived from the recent MPP Steel Sector Transition Strategy). • Showcase solutions that bring us closer to the 2030 Breakthrough - and demonstrate how these solutions could work/be tailored to the market environment in developing economies. • Enable an action-oriented discussion to accelerate decision-making and collaborations for low-carbon steel production, exploring how different levers can be combined at the project level to unlock investment decisions..
Participants	<ul style="list-style-type: none"> • Representatives from leading governments with green steel policies/targets • Representatives from governments in developing economies • Leading steel companies, energy suppliers and iron ore companies



	<p>Private buyers of steel from various different sectors (transport, construction, equipment, etc.)</p> <ul style="list-style-type: none"> • Public procurement representatives • Representatives from trade-focused bodies and institutions • Representatives from circularity-focused bodies • Representatives from initiatives focusing on industry decarbonisation (MPP, FMC, SteelZero, STEEL Principles, LeadIT, IDDI) • Representatives from labour-focused bodies, just transition, or that bring a perspective on industrial resilience and rejuvenation • Representatives from local governments (with steel industry nearby or who host major steel production assets) • Representatives from a variety of financial instruments needed to provide the blended finance for ramping up green steel production, including public finance institutions and institutional investors • Representatives from industrial clusters/hubs
Logistics	<p>Room layout: Round Table room. Capacity: 150 pax 50 seats at the inner circle table with microphones.</p>

Session Flow

Timing	Session Description	Speakers (Name, Title, Organisation)
Pre-event	<p>Breakthroughs video plays on the big screen as participants enter the room.</p> <p>Mission Possible Partnership video/infographic on key steel statistics displayed</p>	
14:30 – 14:34 (4 mins)	<p>Welcome remarks, event overview and housekeeping notes.</p> <p>Framing question: What does it take today – and in the coming 12 months to COP28 – to move from demonstration projects to a pipeline of industrial-scale projects able to deliver the Steel Breakthrough of 70 operational (near-) zero emission steel plants by 2030, producing 170Mt of low-carbon steel per annum?</p>	<p>Moderator:</p> <p>Annie Heaton CEO ResponsibleSteel [CONFIRMED]</p>
14:34 – 14:42	Scene setting	Speakers:

<p>(8 mins)</p>	<p>The steel sector is responsible for 7% of total energy sector emissions and is expected to grow by 30% by 2050, spurred by its centrality to the energy transition.</p> <p>To reach our global climate targets in the Paris Agreement, this crucial sector must decarbonise at a higher pace than current project pipelines imply. By 2030, 70 near-zero emission iron-based steel production plants should be up and running, producing 170 Mt of near-zero steel.</p> <p>There are encouraging signs of stakeholders across supply, demand, policy and finance stepping up to ensure action is undertaken this decade to get the sector on track for net-zero. But to move away from demonstration projects to a self-sustaining pipeline of projects, collaboration across these levers needs to be accelerated and scaled to bridge the remaining cost difference between low-carbon and high-carbon steel and de-risk first-of-a-kind projects in different geographies. Notably, the net-zero steel game will be mostly won outside of the actual mills as significant ramp-up of clean power and enabling infrastructure is critical.</p>	<p>- Lord Adair Turner Chair of the Energy Transitions Commission [CONFIRMED]</p> <p>- Nigel Topping COP26 High-Level Climate Action Champion [CONFIRMED]</p>
<p>14:42 – 15:06 (24 mins)</p>	<p>Supply – Demand</p> <p>How can steel buyers in the private and public sectors help unlock supply-side investment while securing access to low-carbon products?</p> <p>Guiding questions for a curated discussion (16 mins)</p> <ul style="list-style-type: none"> ● What is the pipeline of supply-side projects? What role did buyers play to date in the progression of these projects? ● What is needed from demand-side actors to help us achieve the Steel Breakthrough? How can the green premium of low-carbon steel be addressed by supply-demand collaboration? ● What radical collaborations or new partnership models between the demand-side and others in the ecosystem should we explore to achieve the Steel Breakthrough? ● What is the role of data, tracking and common 	<p>Speakers:</p> <p>- Maria Persson Gulda Chief Project Officer and Chief Technology Officer at H2 Green Steel (H2GS) [CONFIRMED]</p> <p>- Dr. Stephan Krinke, Head of Strategy and Decarbonisation, VW [CONFIRMED]</p> <p>- Fortescue Representative [tbc]</p>

	<p>standards?</p> <p>Targeted engagement of inner circle (6 mins)</p>	
<p>15:06 – 15:30 (24 mins)</p>	<p>Finance – Policy</p> <p>How can policy interventions help unlock financial flows in industrial-scale projects?</p> <p>Guiding questions for a curated discussion (16 mins)</p> <ul style="list-style-type: none"> • What are the prerequisites to the involvement of financial institutions in breakthrough steel projects – in terms of technology maturity, business case, policy certainty, demand, etc.? • What policy mechanisms can enhance the cost-competitiveness of low-carbon steel? What is needed to replicate similar policy instruments like the IRA to scale green steel in emerging markets and developing economies? • Which financial instruments are required to get a pipeline of projects up and running for steel decarbonisation? • How can public and private sector financial institutions combine in blended finance models to scale impact? • Are there financial models or instruments already in use that should be replicated in emerging markets and developing economies to stimulate green steel productions in these markets? If so, how can we make progress? <p>Targeted engagement of inner circle (6 mins)</p>	<p>Speakers:</p> <p>- Solomon Quaynor Vice-President for Private Sector, Infrastructure and Industrialisation, African Development Bank [Invited]</p> <p>- Nili Gilbert Vice Chairwoman, Carbon Direct and Chair of the GFANZ Advisory Panel of technical experts [CONFIRMED]</p> <p>- Representative from India [TBD]</p>
<p>15:30 – 15:54 (24 mins)</p>	<p>Energy Needs</p> <p>What is required to develop the energy supply infrastructure required to power new near-zero emissions steel plants?</p> <p>Guiding questions for a curated discussion (16 mins)</p> <ul style="list-style-type: none"> • Will the electricity and clean hydrogen required to power future steel plants be available at low cost at the appropriate time in different geographies? 	<p>Speakers:</p> <p>- James Mnyupe Green Hydrogen Commissioner, Namibia [CONFIRMED]</p> <p>- Sumant Sinha Chairman and Managing Director, ReNew Power [CONFIRMED]</p>



	<ul style="list-style-type: none"> • How can steel producers and energy producers collaborate to build that infrastructure? What is the role of cross-sector hubs? • What role can policy play in speeding up that infrastructure build-up? • What does the geography of cheap renewable energy potentially mean for energy and steel trade flows? <p>Targeted engagement of intimate circle (6 min)</p>	
<p>15:54 – 16:00 (6 mins)</p>	<p>Closing remarks</p> <p>A summary of the key action areas arising from the discussions across policy, finance and the demand-side that the room should take away and look to further progress ahead of the Global Stocktake at COP28.</p>	<p>H.E. Rania Al-Mashat Minister for International Cooperation, Egypt [TENTATIVELY CONFIRMED]</p>