

# INCITE

## 1<sup>st</sup> WORKSHOP ON INNOVATIVE TECHNIQUES IN THE IRON AND STEEL SECTOR A fast-track gate towards a greener and more competitive sector

*Draft Programme (19/03/2025, subject to changes)* 

#### 13th to 15th May 2025 in the JRC Seville, Spain.

The workshop will be composed of several thematic sessions covering some of the most important technological developments in the IS sector that will need to be considered when starting the revision of the Iron and Steel BREF due in 2026.

#### **Objectives of the workshop**

- Exchange on the state-of-play in terms of innovation in the IS sector for e.g. depollution /decarbonisation / circular economy. In particular, deep-dive into innovative technologies with the aim to frontload information in preparation of the IS BREF revision (planned 2026).
- Provide a unique forum to industry / technology providers for showcasing key innovative technologies to be deployed for reaching zero pollution, climate neutrality, increased resource efficiency / circular economy in the IS sector during the industrial transition.
- Discuss / debate among stakeholders (e.g. industry, technology providers, financiers, permit writers of first-of-a-kind installations) on the degree of maturity, environmental performance, cost-effectiveness, cross-media effects/trade-offs, framework conditions, permitting, financing aspects of innovative techniques.
- o **Mobilise stakeholders to actively engage with INCITE** and submit technical information on new technologies / processes / environmental performance.





DAY 1		
WORKSHOP INTRODUCTION		
Welcome of participants	Caroline Lambert  Head of Unit - Circular Economy and Sustainable Industry- JRC B5	9:00 to 9:05
Workshop objectives / INCITE introduction	Eric Aries (TBC) Scientific Officer – JRC B5	9:05 to 9:30
Policy Context  Revised IED  Steel and Metals Action Plan	<b>Toon Smets</b> Policy Officer, DG ENV C4 <b>Joan Canton</b> Head of Unit – Energy Intensive industries and raw material – DG GROW I1	9:30 to 10:00
Live demonstration of INCITE Platform	<b>Nicolas Bellomo</b> Scientific Officer – JRC B5	10:00 to 10:20
Status quo on the existing IS BREF	<b>TBC</b> Scientific Officer – JRC B5	10:20 to 10:35
EUROFER presentation: Activities of the EUROFER Transformation Working Group, pathways to decarbonisation / circularity	Danny Croon Jean Theo Ghenda EUROFER	10:35 to 10:50
Coffee Break		10:50 to 11:15
MS presentations (INCITE / National perspective on IS Sector advancement towards targets)	Sebastian Plickert UBA, Germany Matthis Persson EPA, Sweden	11:15 to 11:45
Environmental NGO presentation	<b>Domien Vangenechten</b> Programme Lead in Clean Economy - E3G	11:45 to 12:00
TECHNICAL INNOVATION IN THE IRON AND STEEL SECTO	DR – DECARBONISATION	
<b>Scene setting.</b> Decarbonisation challenges for the IS sector in the global context and added value of INCITE	<b>Professor Lars J Nilsson</b> Lund University	12:00 to 12:20
PATHWAY 1 – Optimised BF Process / CCUS / Smar	t carbon usage	
EasyMelt / Blue blast furnace	Klaus-Peter Kinzel Vice President - Paul Würth	12:20 to 12:40
MHI / D-CRBN plasma project (ArcelorMittal - Ghent)	Wim Van Der Stricht CTO - ArcelorMittal	12:40 to 13:00
Lunch		13:00 to 14:00
Lunch Steelanol / Lanzatech	Wim Van Der Stricht CTO - ArcelorMittal and Sanjeev Manocha Global Director of Business Development - Lanzatech	
	CTO - ArcelorMittal <b>and Sanjeev Manocha</b> Global Director of Business Development -	13:00 to 14:00
Steelanol / Lanzatech	CTO - ArcelorMittal <b>and Sanjeev Manocha</b> Global Director of Business Development -	13:00 to 14:00 14:00 to 14:20
Steelanol / Lanzatech  Exchange of views on Pathway 1  PATHWAY 2 - Direct smelting / reduction	CTO - ArcelorMittal <b>and Sanjeev Manocha</b> Global Director of Business Development -	13:00 to 14:00 14:00 to 14:20
Steelanol / Lanzatech  Exchange of views on Pathway 1  PATHWAY 2 - Direct smelting / reduction technologies	CTO - ArcelorMittal  and Sanjeev Manocha Global Director of Business Development - Lanzatech  Alexander Fleischanderl  CTO & Head of Green Steel - Primetals	13:00 to 14:00 14:00 to 14:20 14:20 to 15:20 15:20 to 15:40
Steelanol / Lanzatech  Exchange of views on Pathway 1  PATHWAY 2 - Direct smelting / reduction technologies  HYFOR / Hy4SMELT	CTO - ArcelorMittal  and Sanjeev Manocha Global Director of Business Development - Lanzatech  Alexander Fleischanderl CTO & Head of Green Steel - Primetals Technologies / Voestalpine / K1-MET  Thomas Buergler CEO Metallurgical Competence Centre -	13:00 to 14:00 14:00 to 14:20 14:20 to 15:20 15:20 to 15:40
Steelanol / Lanzatech  Exchange of views on Pathway 1  PATHWAY 2 - Direct smelting / reduction technologies  HYFOR / Hy4SMELT  SUSTEEL	CTO - ArcelorMittal  and Sanjeev Manocha Global Director of Business Development - Lanzatech  Alexander Fleischanderl CTO & Head of Green Steel - Primetals Technologies / Voestalpine / K1-MET  Thomas Buergler CEO Metallurgical Competence Centre -	13:00 to 14:00  14:00 to 14:20  14:20 to 15:20  15:20 to 15:40  15:40 to 16:00

# Day 2

### TECHNICAL INNOVATION IN THE IRON AND STEEL SECTOR - DECARBONISATION

> Pathway 3 - Direct reduction technologies		
H <sub>2</sub> -DRI – Melting - BOF steelmaking decarbonisation project in Duisburg	Florian Kremers Head of DRI & BOF Plant - Thyssenkrupp	09:00 to 09:20
Joint HYBRIT - LKAB presentations		
Part 1) The Hybrit pilot scale  Part 2: H <sub>2</sub> -DRI/EAF steelmaking / full scale plant in Gallivare (SE)	Gunilla Hyllander General Manager – Hybrit Development AG Dan Hallberg	09:20 to 09:50
POWER4STEEL	Michael Bott Head of Decarbonisation - SHS	09:50 to 10:10
Exchange of views on pathway 3		10:10 to 11:10
Coffee break		11:10 to 11:30
$\triangleright$ Pathway 4 - Electrification / H <sub>2</sub> integration in dow	nstream processes	
Electrification of energy intensive industries – the case of the steel industry	<b>Marco Giuli</b> Project Manager - Agora Industry	11:30 to 11:50
New EAF project (Sestao, Spain)	<b>Jordi Torné Darriba</b> CEO & General Manager, Gijon Long Products - ArcelorMittal Spain	11:50 to 12:10
Electrification of Ferrous Metal Processes and development of process heaters	<b>Dilip Chandrasekaran</b> Global Business Development Manager - Kanthal	12:10 to 12:30
Lunch		12:30 to 13:30
Exchange of views on pathway 4		13:30 to 14:30
Pathway 5 — Electrolysis of iron ore		
Molten Oxide electrolysis	Adam Rauwerdink SVP Business Development Boston Metal	14:30 to 14:50
Low temperature iron ore electrolysis – Volteron Project	<b>Pedro Prendes</b> Global R&D Process Portfolio Manager - ArcelorMittal	14:50 to 15:10
Coffee Break		15:10 to 15:30
Exchange of views on pathway 5		15:30 to 16:30
Closure Day 2		16:30 to 16:35

## Day 3

### TECHNICAL INNOVATION IN THE IRON AND STEEL SECTOR - CIRCULARITY

Circular economy / industrial symbiosis technologies (e.g. with cement, chemical sectors)

# Technologies for better scrap characterisation/ management

PURESCRAP	Peter Lundin (or Jonas Petersson) Group Manager - SWERIM	9:00 to 9:20
CAESAR	TBC	9:20 to 9:40
	CRM	3.20 to 3. 10
> Technologies for by-products valorisation		
GREENIRON	Edward Murray	9:40 to 10:00
	CEO - Greeniron	
REMFRA	Silvia Tosato	10:00 to 10:20
	Environment Regional Director – Tenaris	10:00 to 10:20
DUST2Value	M. Leuchtenmüller	10.70 to 10.40
	Senior Researcher - University of Loeben	10:20 to 10:40
Cambridge Electric Cement	Cyrille Dunant	10:40 to 11:00
	CTO - Cambridge Electric Cement	10:40 to 11:00
Coffee break		11:00 to 11:20
> Carbon Capture and Utilisation		
CALby2030	Malin Blomqvist	
	Swerim	11:20 to 11:40
	Eric Vandijk or Soledad Van Eijk	
INITIATE	(TBC)	11:40 to 12:00
	TNO	
Exchange of views on circular economy / industri	ial symbiosis	12:00 to 13:00
Workshop conclusions		
Wrap-up / Summary		
Review list of actions		13:00 to 13:20
Next steps		
Workshop Closure	TBC	13:20 to 13:30
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