



## ESTEP & CLEAN STEEL PARTNERSHIP

## INFORMATION DAYS

6 - 7 June 2023

Krakow (Poland)



Łukasiewicz  
GIT

08.45 – 09.00

*Welcome coffee*

09.00 – 09.10

**Opening**

Klaus Peters (ESTEP)

09.10 – 09.25

**Welcome address**

Wojciech Szulc (Łukasiewicz - GIT)

09.25 – 09.40

**How to get involved ?**

Klaus Peters

09.40 – 10.20

**Strategic Research Innovation Agenda  
of the Clean Steel Partnership (CSP)**

Patrick Lafontaine (ESTEP)

10.20 – 10.50

*Coffee break*

10.50 – 11.20

**Clean Steel Partnership calls and projects**

Patrick Lafontaine

11.20 – 11.30

**Upcoming ESTEP & CSP events**

Delphine Snaet (ESTEP)

11.30 – 11.50

**Future perspectives of CSP**

Franz Hörzenberger (ArcelorMittal)

11.50 – 12.50

**Feedback & questions from stakeholders**

All

12.50 – 13.00

**Concluding remarks**

Klaus Peters

13.00

*End of event & lunch*

# ESTEP & CSP events

Delphine SNAET  
Project Manager



# Past successful thematic workshops

- 2018 : Digital Twins technology in the steel industry , Charleroi (BE)
- 2019: Green steel by EAF route, Bergamo (IT)
- 2020 : Impact & opportunities of AI in the steel sector (online)
- 2020: Resi4Future - Residue Valorization in iron and steel industry (online)
- 2020 : H2 for Greensteel workshop (online)
- 2021 : Waste Heat Recovery & utilisation for steel plants (online)
- 2021 : SDGs in the steel industry (online)
- 2022 : Second H2 for Greensteel, Versailles (FR)

**PROGRAMME**  
21 - 22 November 2018  
Charleroi, Belgium

Digital Twin technology in the steel industry: from concept to operational benefits

"Digital Twinning" technology plays a key role in the progressive Digitalisation of the Process Industry for increasing its competitiveness and sustainability. However, what is behind it? How should we consider it? What will be the benefit when using this approach?

The ESTEP Focus Group "2M - Smart factory: Integrated Intelligent Manufacturing for the Steel production" is proud to present this workshop.

**FINAL**  
PROGRAMME

**Four-part web-workshop**  
6<sup>th</sup>, 13<sup>th</sup>, 20<sup>th</sup>, 27<sup>th</sup> November 2020

The Focus Group "Circular Economy" of European Steel Technology Platform announces the 4<sup>th</sup> ESTEP workshop.

**Resi4Future:**  
Residue valorization in iron and steel industry - sustainable solutions for a cleaner and more competitive future Europe

Sharing experiences, needs, best practices, innovative solutions for use and valorization of residue streams from both, BF-BOF, and EAF routes. During this event, technical solutions contributing to the overall goals defined in the Circular Economy Action Plan and the Green Deal of the European Union will be presented.

**CALL FOR ABSTRACTS**  
The 3<sup>rd</sup> ESTEP WORKSHOP (Webinar)  
Impact and Opportunities of Artificial Intelligence in the Steel Industry

October & November 2020

Web-Session 1	October 15	9:00 - 13:00
Web-Session 2	October 22	9:30 - 12:00
Web-Session 3	October 29	9:30 - 12:00
Web-Session 4	November 5	9:30 - 12:00

With the support of: STEELMASTER®

**13 November 2019**  
Visit to TenarisDalmine Plant

14:00 Transfer from Hotel San Marco to Dalmine  
14:30 Registration desk at main entrance  
15:00 Welcome  
15:30 Site visit  
17:00 Transfer to Hotel San Marco by bus (30 minutes)

**14 November 2019**  
Workshop Sessions

8:30 Registration desk at Hotel San Marco  
Opening plenary session - Chairman: C. De Mare

09:00 Welcome and opening  
09:10 Key note: C. De Mare (ESTEP President)  
09:20 Steel Production from EAF: achievements and future challenges by Circular Economy and Sustainability - A. Schwager (InductoAcad), A. Baccaro (EUROFER)  
10:30 CO<sub>2</sub> integration in Electric Arc Furnace steelmaking: Perspectives from LowCarbonFuture project - F. Chah (IFIP)

10:25 Coffee Break and Poster Session

11:30 Scrap management and integrated EAF process control - DTI et al.  
11:35 A model for advance of Scrap Quality on the Environmental Performance evaluation - Delfino  
12:00 Heat input determination and tracking in CMO Marten  
12:20 Sustainable and flexible EAF production with low emissions and energy consumption - Prinsloo  
12:40 Panel with authors

12:45 Lunch and Poster Session

13:00 Circular Economy - Chairman E. Malifa  
14:00 The green way of CMO Marten - CMO Marten  
14:20 The Energy efficiency in continuous development of 2<sup>nd</sup> generation Steel Production and Circular Economy Concept for Environmental and Sustainability - F. Chah  
14:50 New EAF: all gas heat recovery systems benefit steelmakers and the environment - Inceur (Inducto)  
15:30 Eco-friendly steelmaking slag identification with energy recovery to produce a high quality slag product for a sustainable recycling (IFIP) et al.  
16:00 Advanced EAF steelmaking low-emission models for development of energy and environmental sectors: Sustainable Steelworks (Inducto)  
16:20 Panel with authors

16:50 Closure plenary session - Chairman: F. Prinsloo, K. Pötsch  
17:10 End of Work Shop

**Call for ABSTRACT**

The Focus Group "Low Carbon and Energy Efficiency" of ESTEP is pleased to announce the **H2GREENSTEEL WEB-WORKSHOP**

**Hydrogen route for a green steel making process**  
Overview, state of the art, recent developments and future trends

7<sup>th</sup>, 21<sup>st</sup>, 28<sup>th</sup> MAY - 11<sup>th</sup> JUNE 2021

**DEADLINES**

Submission of abstracts	March 31, 2021
Sponsor request	March 31, 2021
Information of abstract acceptance	April 15, 2021
Opening online registration	April 16, 2021
Submission of paper for post-event proceedings to be published in a SCOPUS indexed journal/book - more information will be provided soon	optional July 31, 2021

The Focus Group "Low Carbon and Energy Efficiency" of ESTEP is pleased to present the webinar & workshop

**WASTE HEAT RECOVERY & UTILIZATION FOR STEEL PLANTS**

Overview, state of the art, advanced options and future developments

**MAY 4, 11, 18 JUNE 1, 2021**

ESTEP - Av. de Courbevoie, 172 - B-1050 Brussels - Tel. +32 2 7379 42 - econtact@steelresearch-estep.eu - Disclaimer

**Sustainable Development Goals in the Steel Industry**  
ESTEP Webinar 26 November 2021

Time	Presentation	Speaker	Organisation
9:30	Opening and welcome	Klaus Peters	ESTEP
9:35	What do the SDGs mean for the steel industry and vice versa?	Carlo Brendi	CNR STIMA
10:05	Monitoring tools such as LCA/LCC/SILCA	Ron Zeevenhou	Abo Akademi
10:30	How other sectors approach SDGs:	Keen Coppenehlo	CEMBUREAU
	Cement	Christian Lersy	European Aluminium
	Water	Bertrand Garnier	Suez
11:15	Steel industrial cases:		
	The Celsa Nordic Sustainability roadmap	Susanne Navarre-San	Celsa Nordic
	Environmental Declaration Products	Anne-Laure Hettiger	ArcelorMittal
	LCA application to Pomini Digital Texturing (PDT)	Claudio Trevisan	Tenova
12:00	Standards certification in the steel sector	Jan Bollen	ArcelorMittal
12:30	Open discussion Q&A with the speakers and follow-up activities	Moderator: Enrico Malifa	Tenova
13:00	Closure		

**Announcement and Call for Abstract**

The Focus Group "Low Carbon and Energy Efficiency" of ESTEP is pleased to announce the **FOR GREEN STEEL 2<sup>nd</sup> INTERNATIONAL CONFERENCE**

Hosted by **Air Liquide** and **SAINT-GOBAIN tenova**

**Hydrogen route for a green steelmaking process and applications**  
Overview, state of the art, recent developments and future trends

November 29 - December 1, 2022

**Key dates**

29 November: Full day visit of Air Liquide Normandie plant (start at 8:00 - end at 18:00)  
30 November: Conference - Dinner  
1 December: Conference - Farewell Greetings

Conference Venue (more info on the Conference website)  
The conference will take place in person at Innovation Campus Paris Air Liquide, close to Versailles France

**Deadlines**

Extended deadline for abstract submission: October 25, 2022  
Abstract selection, sharing of presentation template and info registration: October 28, 2022  
Registration: October 31 - November 18, 2022  
Paper submission for publication (optional): January 31, 2023

- 29 & 30 March : ESTEP Spring Dissemination event , Pisa (IT)
- 11 May : ESSA Final Conference, Duisburg (DE)
- 15-19 May : EurosteelMaster 2023 (IT)
- 31 May : EUROFER Steel Day, Brussels (BE)



- 13 June: RFCS annual call – info day, Brussels (BE) (REA)
- 3-5 Oct: ESTEP Annual event : Circular Economy conference in Barcelona, Spain (Spanish Presidency)
- Feb 2024: Digital 4 Environment ESTEP workshop, Italy



Smart Factory and Circular Economy & Sustainability ESTEP Focus Groups are pleased to announce

Digital-4-Environment ESTEP Workshop

Overview, recent developments and future trends

27<sup>th</sup> and 28<sup>th</sup> FEBRUARY 2024

2 days conference

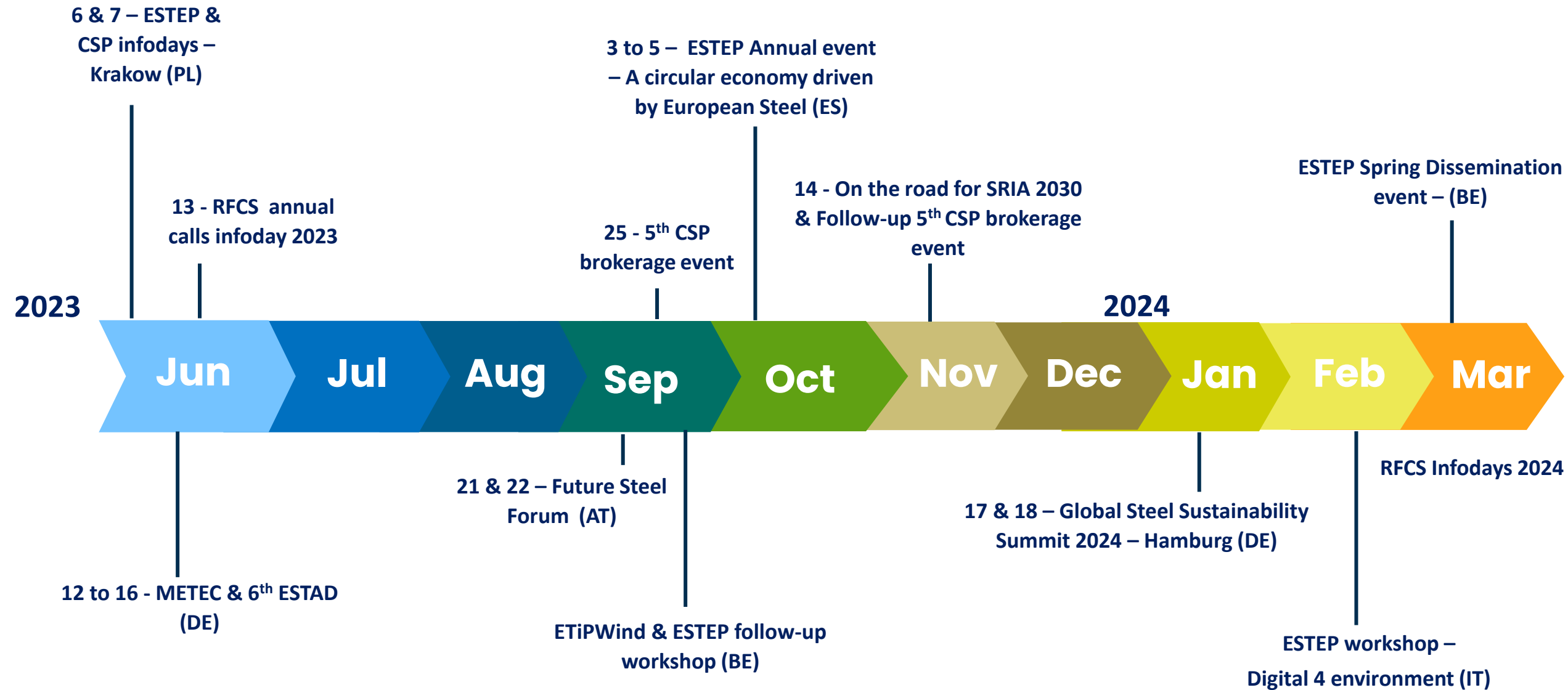
Location to be defined

DEADLINES:  
Abstract submission: November 3<sup>rd</sup> 2023  
Abstract selection: November 27<sup>th</sup>, 2023

SPONSORSHIP OPPORTUNITIES

Sponsorship is always welcome and members of ESTEP interested in sponsoring the event (cost 1,200 €) are invited to contact the ESTEP Secretariat via e-mail: D.Snaet@estep.eu. As soon as sponsorship availability is provided, the logo of the sponsor will be included in the updated version of the flyer.

The poster is vertically oriented with an orange top section and a blue bottom section. It includes a circular inset image showing a workshop setting with people at tables. The text is arranged in a clean, professional layout.



# Thank you for your attention



## The European Steel Technology Platform (ESTEP)

ESTEP represents the European steel value chain and the research & innovation interests in the steel industry



<https://www.linkedin.com/company/the-european-steel-technology-platform-estep/>

[www.estep.eu](http://www.estep.eu)