











# RE4Industry Knowledge Transfer Seminar Finland 100 % Renewable for Energy Intensive Industries

Hosted by Savonia University of Applied Sciences

Friday, 25 November 2022 | Varkaus, Finland & remotely

Draft programme with confirmed speakers as of 11 July 2022 Preprogramme (24.11.) and Postprogramme (25-26.11.) available for participants in the KT Seminar

## How can Energy-Intensive Industries shift away from fossil fuel dependence?

As the need to mitigate climate change and the cost of fossil fuels grows increasingly, renewable energies become an essential driver of the shift toward a low-carbon future. To succeed in this systemic transition, Energy-intensive Industries (EIIs), which make up more than half of the energy consumption of the EU industry, must rapidly align their growth strategy with societal needs for sustainable development and climate action. How can this transition be accomplished without jeopardizing their competitiveness or endangering essential industrial processes?

The RE4Industry Knowledge Transfer Seminar Finland will provide a platform to debate how EIIs can succeed in this challenge and accelerate the already ongoing shift towards renewable energy solutions initiated with the RE4Industry project, funded by the European Commission under Horizon 2020. By bringing together experts from various backgrounds with industry representatives, the event will provide a comprehensive overview of European success cases, best practices, policy recommendations, and technological roadmaps for promoting renewable energy adoption.

## Friday 25 November 2022

## 8.30 – 9.30 Welcome Reception & Statements

Welcome statements provided by Ministry of Economic Affair and Employment of Finland (tbc), Additional statements by European Commission Representative (tbc), **Satu Vehreävesa**, Director, North-Savo Regional Council, **Joonas Hänninen**, Mayor, City of Varkaus, **Mikko Vuoristo**, Vice Rector, Savonia UAS

















Moderated by ESEIA Director and Director ISP TU Graz **Brigitte Hasewend** and Manager of Education and RDI (energy technology) **Markku Huhtinen**.

#### 9:30 – 10.45 RE4Industry Project Presentation

During this session, the RE4Industry Project will be presented by Project Experts.

- Project Manager & Researcher Industry and Energy at CIRCE Alessandro Carmona (Spain): project overview
- ESEIA Vice-President and Former Managing Director Regional Innovation Centre (RIC) Josef
   Fürlinger (Austria): RE4Industry Expert Group Society
- Metallurgical Engineer at Centre for Research & Technology Hellas at CERTH Aimilia Lympeti (Greece), Topic: Status and best practices for RE integration in Ells
- Senior Consultant at BTG Biomass Technology Group **Martijn Vis** (Netherlands), Topic: Case studies on innovative solutions for RE adoption in Ells
- Project Manager & Researcher Industry and Energy at CIRCE **Alessandro Carmona** (Spain), Topic: Short and long-term innovative energy solutions for full EIIs decarbonisation through RE

#### 10.45-11.00 Coffee Break

#### 11.00–11.50 Industrial Energy Needs

- Fit for 55, Representative of Stora Enso Oyj (TBC)
- Regional climate road map, Climate specialist Tapio Kettunen, Centre for Economic Development, Transport and the Environment (TBC)
- Discussion

## 11.50-12.40 Bio Energy (wood, biogas)

- Biofuel boiler industry trends and development prospects, Sales director Ilkka Venäläinen, Andritz
- Effect of wood fuel on the emissions of heat and power boilers, Associated professor Olli
   Sippula, University of Eastern Finland
- Discussion on links/synergies of presented technologies with applications in EII

#### 12.40 - 13.30: Lunch Break: lunch buffet

#### 13.30-14.20 Circular Bioeconomy

Utilization of side streams in kraft pulping, A-Recovery + Director Lauri Pehu-Lehtonen, Andritz

















- Hydrothermal liquefaction, extraction methods and chemical product applications, Professor Janne Jänis, University of Eastern Finland
- Discussion on links/synergies of presented technologies with applications in EII

#### 14.20-15.10 Energy Storage (thermal, thermochemical, mechanical)

- Energy Storage (TCES, LAES), Principal Research Engineer Jenö Kovacs, Sumitomo SHI FW (TBC)
- Energy storages technology and role in future energy systems, Education and RDI Manager
   Markku Huhtinen
- Discussion on links/synergies of presented technologies with applications in EII

15.10-15.30 Coffee Break

#### 15.30-16.20 Green Hydrogen (CCU, synthetic fuels)

- OXY combustion combined to Hydrogen production, Senior Research Engineer Magdeldin Mohamed, Sumitomo SHI FW (TBC)
- Hydrogen economy, Professor Pertti Kauranen, LUT University
- Discussion on links/synergies of presented technologies with applications in EII

#### 16.20 – 16.30 Summary

17.00 – 18.30 Dinner at Hotel Oscar (cost-covering fee)

19.00 – 21.00 Rock with You musical at Warkaus Sali Hall (cost-covering fee)

## Before and After the KT Seminar

#### Thursday 24 November: PRE-PROGRAMME

15.00 – 17.00 Site visit to Riikinvoima (max. 30 participants, please register soon)

19.00 – 21.00 Get together & Buffet at Hotel Oscar (cost-covering fee)

## Saturday 26 November: POST-PROGRAMME

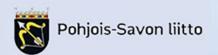
9.00 – 13.15 Sightseeing Kuopio & Transport to the Airport

















# **Practical Details**

#### **Accomodations**

Hotel Oscar
Kauppatori 4, FI-78250 Varkaus, Finland
Phone +358 (0)293 200 520 | Fax +358 (0)17 5790500
reception@hoteloscar.fi | https://www.hoteloscar.fi/en/

Price: from €104,00 per day for the EcoPlus Single Room to €169 Prime Suite Single Room Included in Price: breakfast, free parking, sauna and fitness room, as well as all taxes and duties.

To book: by e-mail to <a href="mailto:reception@hoteloscar.fi">reception@hoteloscar.fi</a> and reference RE4Industry Knowledge Transfer Seminar Finland and the code for on-line booking is 231122SAV

#### **Fees**

Please note that the RE4Industry Knowledge Transfer Seminar Finland is free of charge as the seminar is paid for by the European Commission Horizon 2020 R&I Programme RE4Industry Grant No 952936.

Those who participate in the dinner event after the seminar as well as in the pre- and post programme events will be charged a moderate cost-covering fee.

#### Registration

Please <u>register here</u> by **23 November 2022**. Please note that there is a limited number of attendees for the pre- and post-programmes. First come first served.



