

Industrial Energy-Related Technologies and Systems

A Technology Collaboration Program established under the auspices of the International Energy Agency

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Industry is Key

- The IETS TCP has a broad scope and is the only one focusing on energy efficient industrial technologies and systems.
- All industrial sectors and technologies/systems can be addressed, which creates flexibility when starting projects.
 - Today the industry sector represents 29% of the world's energy consumption.** The potential is huge.

** IEA, Paris (2015), Key World Energy Statistics



Facts & Figures

- The IETS is a TCP under the IEA, focusing on energy efficient industrial technologies and systems.
- IETS was established in 2005 as the result of merging, revamping and extending activities formerly carried out by separate industrial IEA Programs.
- IETS currently has 10 member countries: Austria, Canada, Denmark, France, Germany, Italy, the Netherlands, Norway, Portugal and Sweden.
- And 6 sponsor organizations from: Finland, Ireland, Japan, Spain, Switzerland and the US





The IETS Collaboration

General aims:

- To strengthen international cooperation on energy saving and GHG mitigation in industry
- To include all industrial sectors and technologies/systems in the IETS area

Tasks:

- Technologies and Systems
- Industry type oriented or cross-cutting

Workshops/conferences

Mainly through networking and sharing of experiences, results and methods

No calls, no means for funding projects

Ideally, all participants bring their own already financed project(s)





The ongoing IETS Tasks



Task XI	Industry-based biorefineries towards sustainability
Task XV	Industrial Excess Heat Recovery
Task XVII	Membrane Processes in Biorefineries
Task XVIII	Digitalization, Artificial Intelligence and Related Technologies for Energy Efficiency and GHG Emissions Reduction in Industry
Task XIX	Electrification in Industry
Task XXI	Decarbonizing industrial systems in a circular economy framework
Task XXII	Climate Resilience and Energy Adaptation in Industry under Uncertainty
Task XXIII	Drivers and Barriers for the Transformation of Industrial Energy, Technologies and Systems
Task XXIV	Process Integration for Industry Decarbonization



Workshops and Conferences (recent examples)

- **IEA IETS International Conference** Energy Future in Industry (2023 in Gothenburg)
- Joint online workshop with IEA GHG on CCUS Technologies in Industrial Systems. (March 2022)
- Joint online workshop with EFCE Process Integration for the Energy Transition in Industry, To initiate networking in novel PI methods for deep decarbonization. (November 2020)
- International Expert Workshop on Deep Decarbonization in Industry (2019 in Vienna)
- Roadmaps for Industry in IETS Member Countries (May 2019 Paris)
- Joint workshop with the IEA Bioenergy TCP on Industrial Biorefineries (2017 in Gothenburg)
- **IEA Expert Workshop** The role of process integration for greenhouse gas mitigation in industry (2017 in Berlin)
- Several workshops in different Annexes/Tasks





Recent reports

Deep Decarbonization in Industry

Report and Executive Summary from the International Expert Workshop, Vienna, October 2019

The Role of Process Integration for Greenhouse Gas Mitigation in Industry

Report and Executive Summary from the IEA Expert Workshop, Berlin, April 2017

Current projects and novel technologies in the steel industry

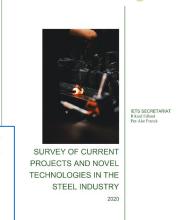
Survey performed by the IETS Secretariat

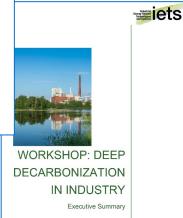
Final Reports from Annexes/Tasks

- Decarbonizing Industrial Systems in a Circular Economy Framework
- Digitalization, Artificial Intelligence and Related Technologies for Energy Efficiency and GHG Emissions Reduction in Industry
- Electrification in Industry
- Energy Efficiency in SMEs
- Industrial Excess Heat Recovery
- Membrane filtration for energy-efficient separation of lignocellulosic biomass components

Annual Reports







VIENNA, 9-11 October 2019



Topic Sheets

For example on

- Process Integration
- Industrial Biorefineries
- Membrane Processes
- Digitalization
- Industrial Excess Heat Recovery
- Energy efficiency in SMEs
- Decision Support Tools and Ex-Ante Research



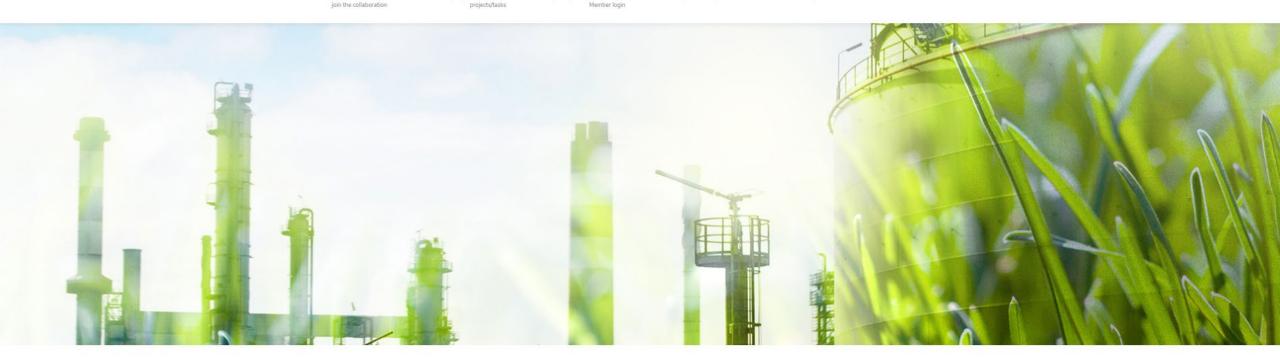
Website: iea-industry.org

Twitter: @IEA_IETS LinkedIn/LinkedIn group

Technology Collaboration Programme Follow us y in Industrial Energy-Related Technologies and Systems Search **Publications** About Tasks Members Events Contact

List of participating countries and

Reports and Topic Sheets



News

About the IETS TCP and how to

All ongoing and completed

High interest for circular bioeconomy

"The high level of participation demonstrates the adequacy of setting up cooperation focusing on this tonic!

Publications

Topic Sheet: IEA EUWP Webinar on Deep Decarbonization in Industry

Having a common goal - the deep decarbonization in Industry, the main aim of this workshop was to identify key areas for col-

Newsletters

Meetings and other events

Contact details

Email address: Your email address SIGN UP

Contact



Chair: <u>Johanna Mossberg</u>, Sweden Vice Chairs: René Hofmann, Austria Secretariat: Per-Åke Franck & Heléne Johansson Twitter: @IEA_IETS Linked in Industrial Energy-Related Technologies and Systems (IETS TCP) All contact details: iea-industry.org/contact iea-industry.org/members



Why participate in a certain Task





What you get...

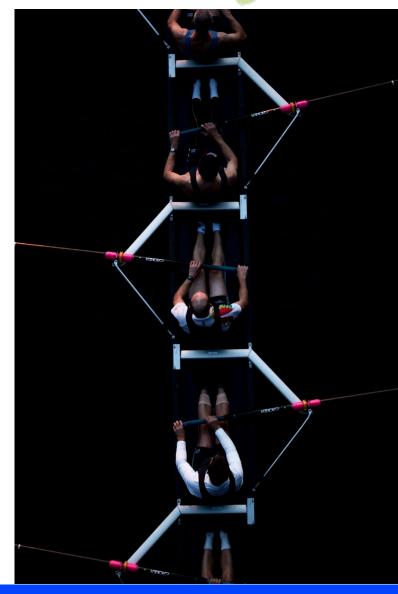
- Synergy effects reduced costs and avoidance of duplication of work
- International collaboration
- Access to synthesis and analysis reports
- Networking and direct communication with leading research groups
- Strengthened national RD&D capabilities
- Accelerated development and deployment
- Knowledge transfer between countries and industries





...and how you contribute

- Bring your (already funded) project
- Share your experiences and results
- Actively participate in the international networking
- Dedicated participation in Task work (meetings, workshops, publications)





How to join a Task



- Contact the Task Manager and the IETS Secretariat
- Define your group/project
- Dedicate resources





Contracting party: Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology Sabine Mitter (Sabine.Mitter@bmk.gv.at)

Alternate Delegate: Rene Hofmann, TU Wien (Rene.Hofmann@tuwien.ac.at)

