RE4Industry

Factsheet

The main objective of the project is to facilitate for the energy intensive industry (EII) sector in Europe a smooth and more secure transition to the adoption of Renewable Energies (RE) in their production processes and facilities.

The project guides the EIIs and their organisations in their path for a total decarbonization towards 2050 by providing vision and guidance to establish their long-term strategy for a coherent and more secure retrofitting an integration of current and future RE solutions in their facilities and processes.

RE4Industry provides a technology catalogue of RE technologies currently available (regarding 2030 objectives) and to be available in the transition towards 2050. This, accompanied with roadmaps by Ell sector for transition to 100% RE based production, are to be placed in hands of decision makers from Ell sectors to provide a clear vision and develop their short- and long-term strategies in this transition. To this end, a thoughtfully review of existing RE technologies, technology roadmaps and papers is performed.

Specialised feedback and vision are gathered from targeted specialists and sector operators through meetings, consults to RE4Industry expert panelists and dialogue through specific actions (workshops, fora) with RE4Industry Collaborative Network. RE4Industry foresees the practical exploration of such transition by supporting 3 industrial players of the steel, aluminium and chemical sectors in the design of Action Plans for RE adoption.

What?

- 1. To set a multi-actor collaborative network, involved and actively compromised to gather and identify the needs of the sector, in order to make possible this transition:
- 2. To show the RE technologies with more potential to be utilised by EIIs or integrated in their industrial processes, and mark the path in the short (2030) and long term (2050);
- 3. To identify, visualise and share success stories of EIIs already adopting RE with the innovations
- 4. To promote the early transition of EIIs by means of a direct accompaniment within companies;
- 5. To achieve a common understanding and vision of the role that EIIs have to play towards 2050 RE consumers and potential RE promoters;
- 6. To promote a more favourable policy and market framework to allow the competitiveness of RE based Ells goods;
- 7. To ensure a growing interest and alignment of European society by means of a strong and coordinated communication campaign coherent with EII sector messages;
- 8. To empower the sector and key organizations through knowledge transfer, strategic positioning and cross-border actions

How?

- A strong engagement strategy following a multiactor approach
- A dialogue with and within Ells and Ell organizations
- A thoughtfully review of RE technologies and options for a 100% RE production by 2050
- Insights into industry retrofitting and promotion of RE integration Recommendations for the uptake of RE by EIIs and advocacy
- Multiplication and replication
- A solid dissemination and communication strategy



Consortium



Vision

2030

- CURRENT SECTOR NEEDS · Existing options for retrofit
- Cases already implemented
- Lessons learned
- Insight in cost / economics
- Opportunities
- Positive social perception Influence for a better framework
- TECHNOLOGY OPTIONS
- Conventional RE heating .
- Biomass • Bioenergy carriers
- Solar (high temperature)
- Geotherm ACHIEVABLE RATES
- CO2 balance > 0 (reduced
- according to RE use)
- RE use <50%

Who?

Collaborative Network

A **multi-actor network of stakeholders** that acts as a **key consultation body** offering insights into various aspects of the project. Based on their expertise, the stakeholders participate in **different RE4Industry groups at national or** EU level, offering advice on aspects such as the identification of sector needs, policy frameworks, appropriate technologies and barriers and drivers among others, thus facilitating the industrial energy transition to RE. Expert Groups Committees Clusters

2050

CURRENT SECTOR NEEDS

adopt e-fuels

TECHNOLOGY OPTIONS

captured) ACHIEVABLE RATES

 CO2 balance < 0 • RE use = 100%

Scope to understand the future options on RE

Implications for retrofitting to produce and

adopting each RE alternative (for an early

Energy balances and key indicators of

decision making in short-medium term)

Expected costs for RE use

H2 (electrolysis / syngas)

Conventional RE heating / power

E-fuels (synthesis fuels from RE

based hydrogeneration of CO2

New RE (solar thermal, bio syngas)



Industrial Success cases

Gathering experience from ongoing or planned industrial cases that have successfully implemented or are investigating, through demonstration projects, integration of various forms of renewable energy sourcing in the productive processes in an Energy Intensive Industry.

Project info

Coordination Fundación CIRCE Centro de Investigación de Recursos y Consumos Energéticos

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> > > in



