

100% Renewable

Energies for

Industries

www.re4industry.eu

At a

glance

RE4Industry: 100% Renewable Energies for Energy Intensive Industries

Project Coordinator: FUNDACION CIRCE - CENTRO DE INVESTIGACION DE RECURSOS Y CONSUMOS ENERGETICOS

11 partners from 6 countries (AT, BE, DE, ES, GR, NL)

Total EU contribution: € 2 999 500 (total cost)

Starting date: 1st September 2020 - Duration: 36 months

RE4iNDUSTRY

Context

The EU has started a progressive decarbonisation with the **aim to become carbon neutral by 2050**. Energy Intensive Industries (EII) are expected to play an important role in this transition as they represent 24% of the final energy consumption, but **a clear long-term vision and strategy is required** in order to remain competitive while contributing to the decarbonization targets of the EU.

RE4Industry has been conceived under this framework with a twofold aim:



to support EII in the **identification and integration of renewable energy (RE) solutions** together with the definition of **Action Plans for decarbonisation**



to transform the EU industrial landscape into a large market niche for the uptake of RE while defining the appropriate framework conditions for short- and long-term scenarios.



Goals

RE4INDUSTRY



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





To show the RE technologies with more potential to be utilised by Ells or integrated in their industrial processes, and mark the path in the short (2030) and long term (2050)



To promote the early transition of Ells by means of a direct accompaniment within companies



To achieve a common understanding and vision of the role that Ells have to play towards 2050 a RE consumers and potential RE promoters



To promote a more favourable policy and market framework to allow the competitiveness of RE based Ells goods



To ensure a growing interest and alignment of European society by means of a strong and coordinated communication campaign coherent with Ell sector messages



To empower the sector and key organizations through knowledge transfer, strategic positioning and cross-border actions

SHORT-TERM VISION

LONG-TERM VISION

TECHNOLOGY OPTIONS

- Conventional RE heating / power
- New RE (solar thermal, bio syngas)
- H2 (electrolysis / syngas)
- E-fuels (synthesis fuels from RE based hydrogeneration of CO2 captured)

ACHIEVABLE RATES

- CO2 balance ≤ 0
- RE use = 100%

CURRENT SECTOR NEEDS

- Scope to understand the future options on RE
- Implications for retrofitting to produce and <u>adopt e-fuels</u>
- Energy balances and key indicators of adopting each RE alternative (for an early decision making in shortmedium term)
- Expected costs for <u>RE use</u>

TECHNOLOGY OPTIONS

Conventional RE heating

• Biomass

2030

2050

- Bioenergy carriers
- Solar (high temperature)
- Geotherm

ACHIEVABLE RATES

- CO2 balance > 0 (reduced according to RE use)
- RE use <50%

CURRENT SECTOR NEEDS

- Existing options for retrofit
- Cases already implemented
- Lessons learned
- Insight in cost / economics
- Opportunities (e.g. for financing, long term RE contracting)
- Positive social perception
- Influence for a better framework

RE4INDUSTRY

Vision

RE4Industry actions

RE4Industry methodology can be expressed through 7 action axes targeted to generate confidence, facilitate vision, provide support and ensure market options to Ells.



A strong engagement strategy following a multiactor approach



Insights into industry retrofitting and promotion of RE integration Recommendations for the uptake of RE by Ells and advocacy



A dialogue with and within EIIs and EII organizations



A thoughtfully review of RE technologies and options for a 100% RE production by 2050



Multiplication and replication

A solid dissemination and communication strategy

Collaborative Network

RE4Industry clusters: GR/ES/NL/DE

Technical Experts, focused on technical feedback, approaching the topic on the technical side and on a multi-thematic level

RE4Industry Committee GR/ES/NL/DE

Policy and advocacy-oriented group at national level, acting as main national leaders in transferring the solutions developed to national decision makers

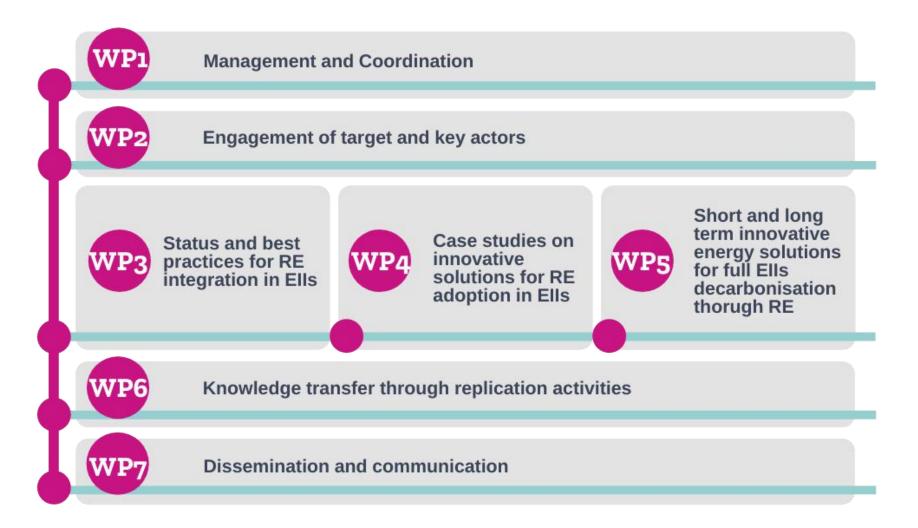
RE4Industry Expert Group: sector oriented

Sector oriented with a strategic perspective on an EU level, providing insights on the market and technical positioning of the sector

RE4Industry Committee EU

Highest-level group of RE4Industry, acting as main responsible people to shape and transfer the solutions at EU policymaking side

Project workflow





Consortium

TECHNOLOGICAL AND SOCIAL EXPERTS



RENEWABLE ENERGY-ORIENTED ASSOCIATIONS





ENERGY INTENSIVE INDUSTRIES







Thank you!

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