



RE4iINDUSTRY

Renewable energies for industries

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

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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

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 Ells 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 Ells already adopting RE with the innovations

4

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

5

To achieve a common understanding and vision of the role that Ells have to play towards 2050 a 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 Ell sector messages

8

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

SHORT-TERM VISION

2030

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 hydrogenation 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 adopt e-fuels
- Energy balances and key indicators of adopting each RE alternative (for an early decision making in short-medium term)
- Expected costs for RE use

2050

TECHNOLOGY OPTIONS

- Conventional RE heating
- Biomass
 - Bioenergy carriers
 - Solar (high temperature)
 - Geotherm

ACHIEVABLE RATES

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

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

Vision

RE4iNDUSTRY

Methodology

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



A strong engagement strategy following a multiactor approach



A dialogue with and within EIs and EI organizations



A thoughtful 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 EIs and advocacy



Multiplication and replication



A solid dissemination and communication strategy

Collaborative Network

RE4Industry clusters: GR/ES/NL/DE

ROLE

- **Technical Experts**, mainly focused on technical feedback, about processes, experiences with technologies and new developments
- **Multi-thematic**
- **Consultancy** on technical matters and to fill in information gaps.

BENEFIT

- Access to **project materials**, **knowledge exchange** with national and international actors
- **Networking** opportunities and possible participation in future **EU-funded** projects
- Receive information on events, seminars or other actions of their interest
- Insight in opportunities and barriers for decarbonisation of EILs
- **Visibility** (e.g. your dedicated section on project's website)

RE4Industry Expert Group: materials / non-ferrous metals / chemicals / renewables / regulation / society

ROLE

- **Sector oriented** with a **strategic perspective on an EU level**.
- With a wider view, **insights** on the market and **technical positioning of the sector**, roadmaps and overall view of different solutions for decarbonisation

BENEFIT

- Receive project reporting and **key materials**
- Participate in **constructing** the vision and **strategy** for the full decarbonisation of the sector
- Collaborate in shaping the key messages to be transferred to the sector, and base for advocating to policy makers
- **Networking** opportunities
- Insight in opportunities and barriers for decarbonisation of EILs
- **Visibility** (e.g. your dedicated section on project's website)

Collaborative Network

RE4Industry Committee GR/ES/NL/DE

ROLE

- **Policy and advocacy-oriented**
- Build together the project results and the vision of the **clusters** to transfer that knowledge and view to the **committees**
- **Transfer** the solutions approached in the project to national decision makers

BENEFIT

- Act as **representatives** of your country
- High level **networking** opportunities with possible participation in future **EU-funded** projects
- Participate in constructing the **vision and strategy** for the full decarbonization of the sector
- Promote among their members those **calls** for participation from which they can benefit or direct transfer of project results
- Take part in review process of project materials: **shape their key messages**
- **Visibility** (e.g. your dedicated section on project's website)

RE4Industry Committee EU

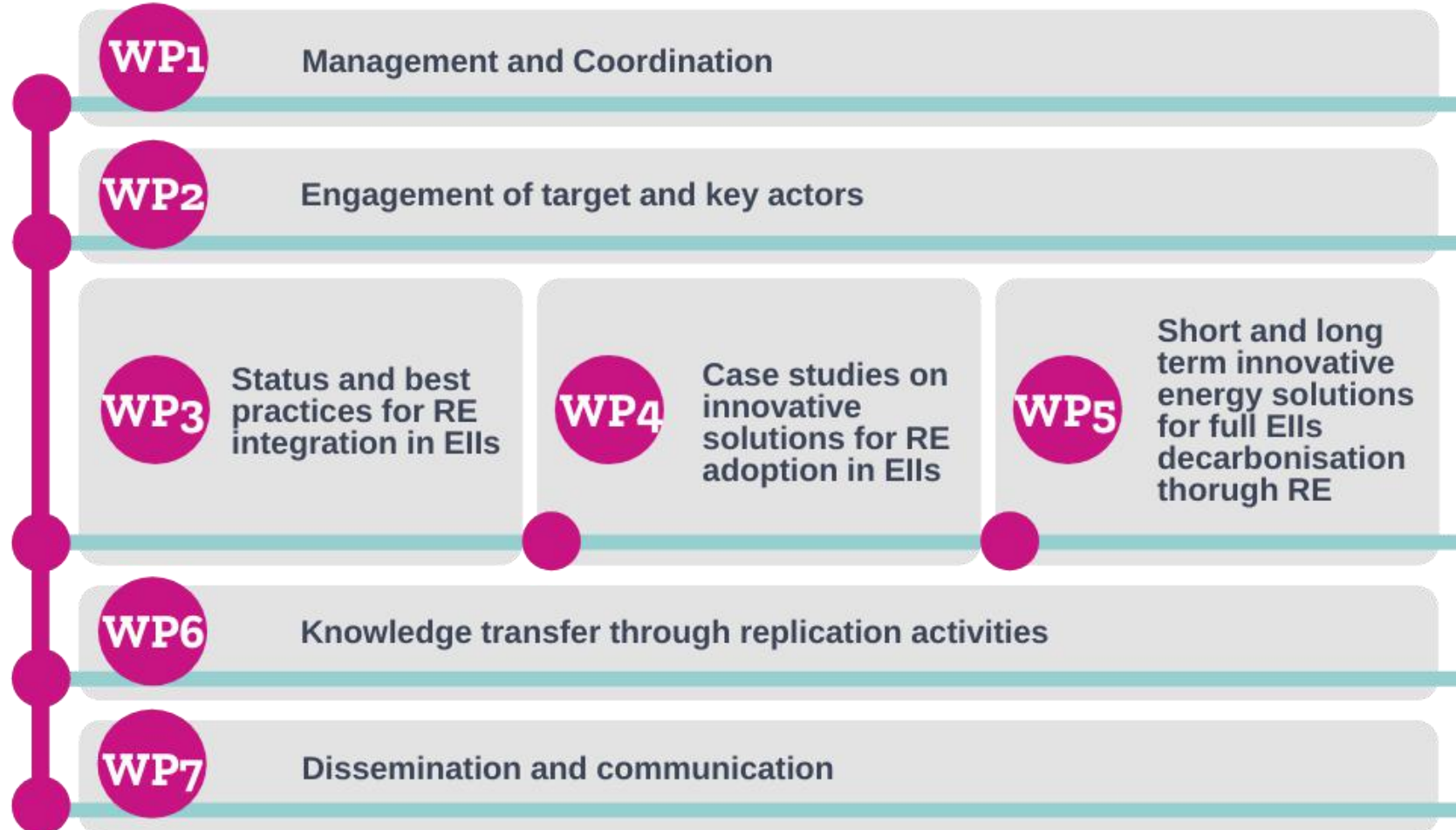
ROLE

- Similar role at a EU level (e.g. transfer solutions approached to EU policy makers)
- **Highest-level group of RE4Industry**

BENEFIT

- High-level **visibility** at EU level
- **Networking** opportunities with decision-making groups
- Ensure that the project properly maps your **interests**
- Contribute to **policy recommendations** for the sector, and base for advocating to policy makers
- **Visibility** (e.g. your dedicated section on project's website, interviews, personal promotion on communication materials)
- **Benefit** of cluster-related project's material

Project workflow



Consortium

TECHNOLOGICAL AND SOCIAL EXPERTS



biomass technology group



CERTH
CENTRE FOR
RESEARCH & TECHNOLOGY
HELLAS



RENEWABLE ENERGY-ORIENTED ASSOCIATIONS



ENERGY INTENSIVE INDUSTRIES



Thank you!

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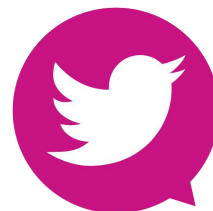
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