SHAREDH2 SUDOE:

The Renewable Hydrogen project: a solution for flexible and distributed energy storage in local energy communities

This project is part of the **Interreg Sudoe Programme**, which supports regional development in south-west Europe by financing transnational projects through the **ERDF Fund**.

MAIN OBJECTIVES

To promote and validate the use of renewable hydrogen as **a flexible and distributed energy storage solution in local energy communities**, serving as an alternative for the empowerment of strategic rural areas through the development of new sustainable economic activities, the mitigation of environmental impacts and the improvement of the quality of life of their inhabitants.

SPECIFIC OBJECTIVES

- Use renewable hydrogen as an alternative storage solution in local energy communities.
- Reduce the environmental impacts associated with the use of conventional energies.
- Promote the development of sustainable economic activities in strategic rural areas.
- Improving the quality of life for residents in these rural areas.

MORE INFORMATION AT HTTPS://INTERREG-SUDOE.EU/PROYECTO-INTERREG/SHAREDH2-SUDOE/

WHAT ARE WE DOING?

BEMBIBRE CONVERTS SURPLUS ENERGY INTO GREEN HYDROGEN

The Bembibre Town Council, a partner in the project, will transform its surplus CEL into renewable hydrogen for agricultural and personal mobility uses. More information

SHAREDH2 OPENS ITS FIRST GREEN HYDROGEN STATION

The first green hydrogen production station, intended for energy storage and hydrogen bicycle recharging, was launched in October 2025 in Bidart (France), led by ESTIA. More information.

HYDROGEN STRENGTHENS RURAL LIVESTOCK FARMING

In Périgord, we are promoting a pilot project for mixed livestock farming with ASSELDOR, combining solar energy, batteries and renewable hydrogen to increase the energy autonomy of a cheese farm. More information.

SIGNING OF THE SHAREDH2 PROJECT AGREEMENT

The project promotes the use of renewable hydrogen as an energy storage solution in rural self-consumption communities in Spain, Portugal and France. Through pilot projects, the initiative demonstrates the viability of green hydrogen in moving towards more sustainable and self-sufficient territories. More information.

WHAT ARE WE DOING?

HYDROGEN DRIVES SUSTAINABLE MOBILITY

The first hydrogen-powered electric bicycle arrives in Alto Alentejo. The initiative, promoted by AREANATejo, reinforces practical learning and innovation through a mini-laboratory that covers the entire renewable hydrogen cycle. More information.

ESTIA BRINGS HYDROGEN TO STUDENTS ON WORK EXPERIENCE

The ESTIA higher education institution has welcomed students on work experience placements at its hydrogen station, a pioneering facility that uses surplus photovoltaic energy to produce, store and reuse energy. The initiative reinforces practical training and sustainable mobility within the campus. More information.

THE ENERGY TRANSITION FROM THE TERRITORY

The University of Salamanca is participating in various energy meetings held in October 2024. The project reinforces its role in promoting energy communities and renewable hydrogen as the cornerstones of the energy transition. More information.

WE ATTEND THE 3RD EUROPEAN CONGRESS OF CEL

On 1 and 2 October 2024, the capital of Navarre will host the III European Congress of Energy Communities. Some SHAREDH2 partners will attend the Congress as stakeholders in the development of energy communities. More information.

PARTNERSHIP MEETINGS

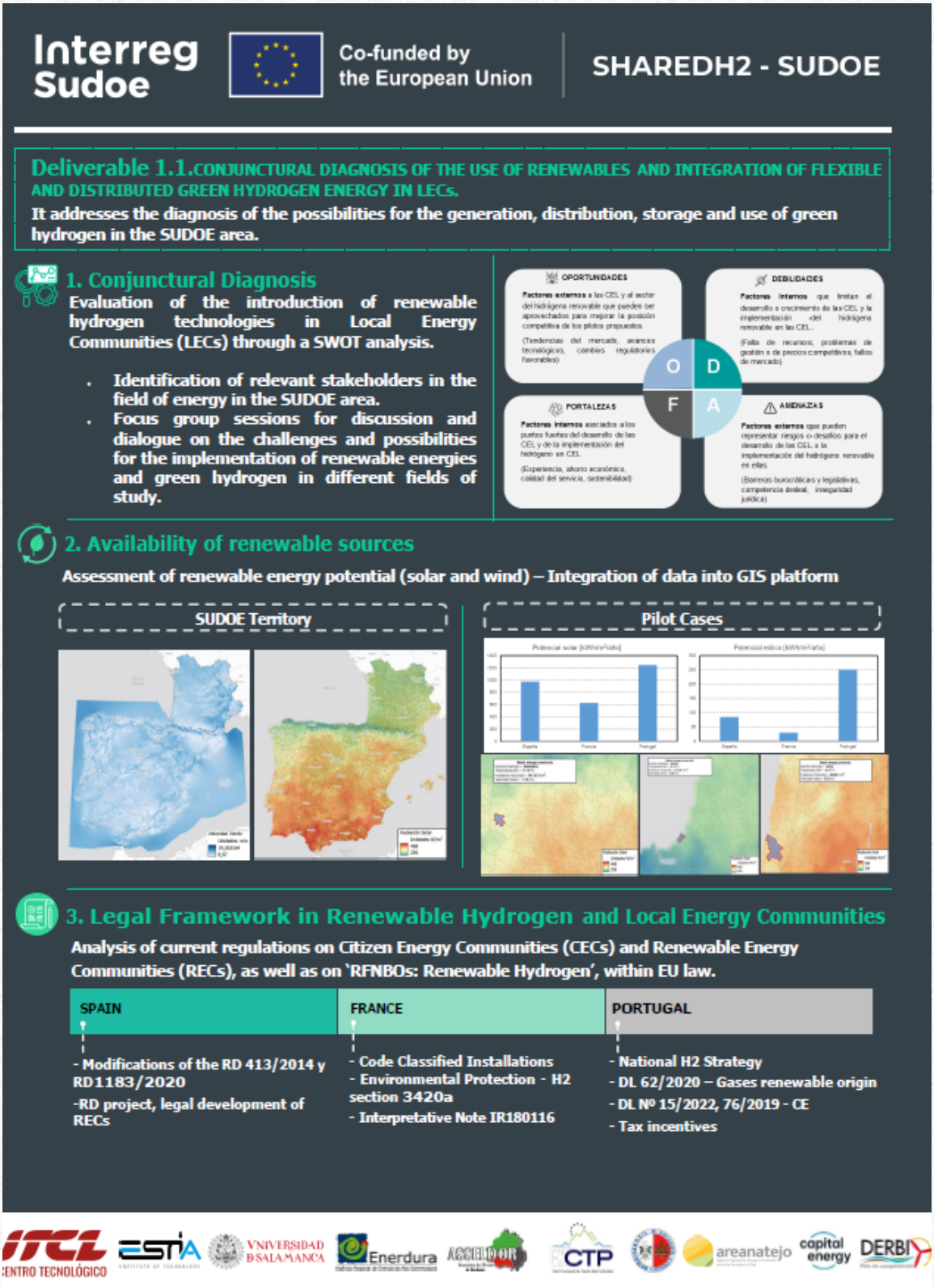
3rd FOLLOW-UP MEETING

The partners met in Leiria, hosted by the Region of Leiria and the Regional Energy Agency of Alta Estremadura, Enerdura. The partners met to advance the project tasks and had the opportunity to visit the facilities of a leading company in hydrogen innovation and development, PRF – Gás, Tecnologia e Construção.

4th FOLLOW-UP MEETING

The partners met in Bidart. During the meeting, the partners shared the latest project outputs, such as the launch of the first green hydrogen production station for energy autonomy and hydrogen bicycle refuelling, by partner ESTIA.

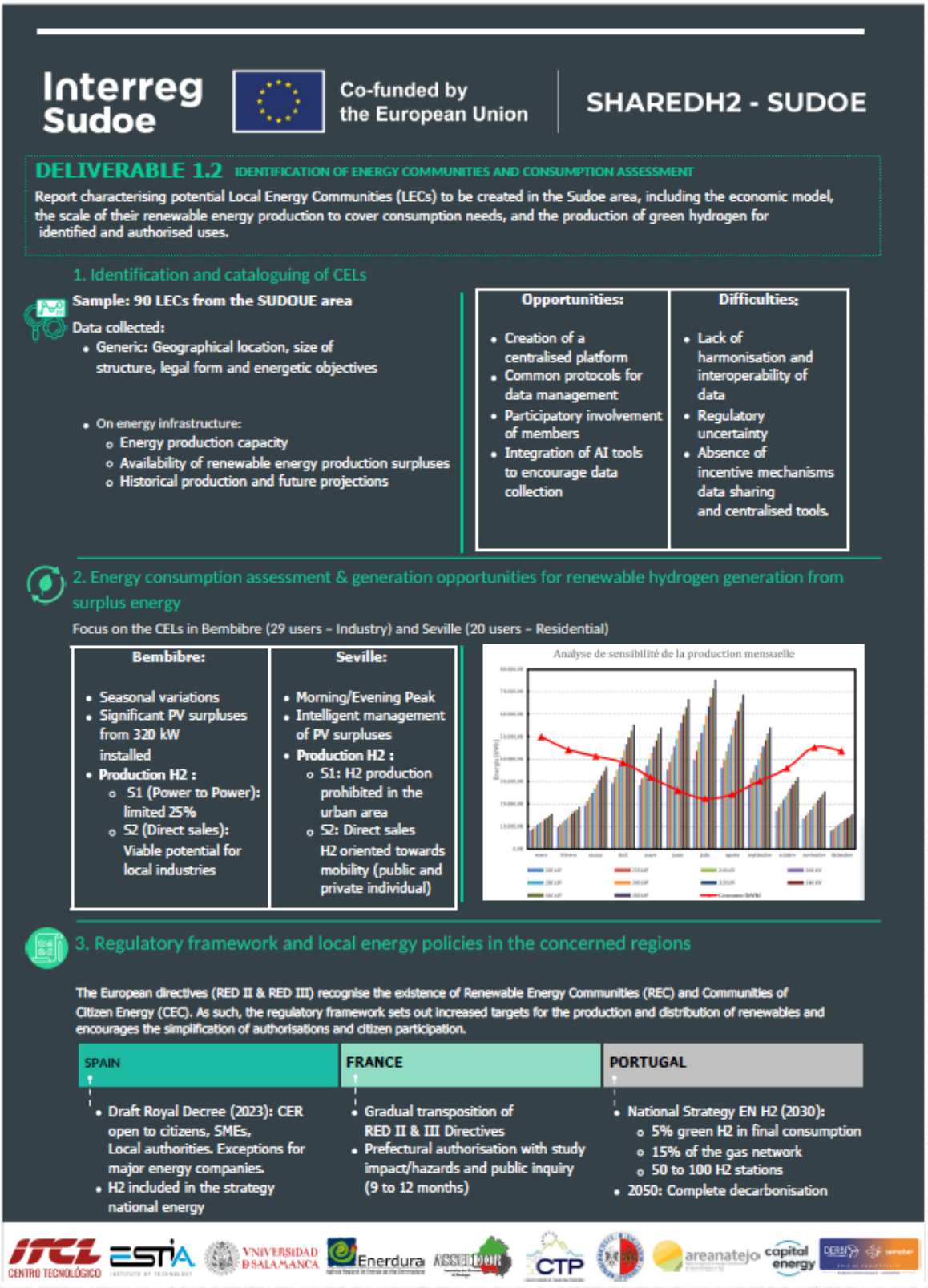
INFOGRAPHICS



INFOGRAPHIC DELIVERABLE fi.fi

Infographic on the diagnosis of renewable hydrogen use in energy communities in the SUDOE area. It addresses the diagnosis of the possibilities for the generation, distribution, storage and use of green hydrogen in the SUDOE area.

INFOGRAPHICS



DELIVERABLE INFOGRAPHIC fi.2

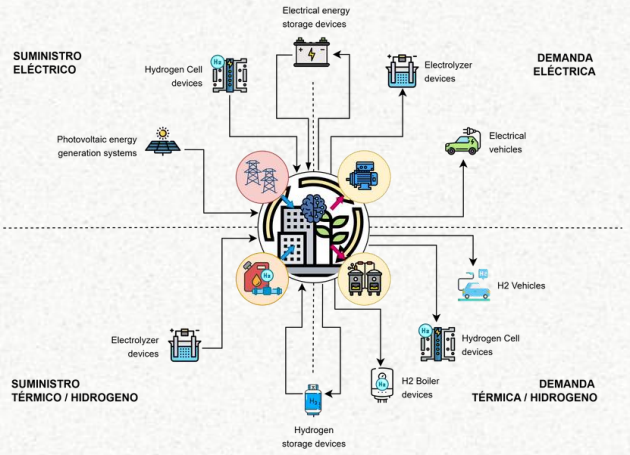
Infographic on the identification of Energy Communities and Consumption Assessment. It addresses the potential ECs that could be created in the Sudoe area, including the economic model, the scale of their renewable energy production to meet consumption needs, and the production of green hydrogen.

NEXT STEPS

SHAREDH2 TOOL

We are making progress in integrating the platform with the various energy models, ensuring smooth communication and automatic information exchange with the generation, pricing and hydrogen modules, which are being developed by the other project partners. At the same time, we are continuing to develop both the user interface and the advanced calculation models and processes that form the core of the platform, with the aim of offering reliable results and tools that provide real value to users, facilitating analysis and supporting decision-making. To speed up this process, we are using simulated data that allows us to validate information flows, operating logic and performance. Thus, when we incorporate real data from companies, the platform will be operational and will offer the same performance from day one.

The next steps will be to continue working on the tool and preparing the dissemination and training sessions, developing content and materials for the seminars within the SUDOE framework, with the aim of transferring knowledge and facilitating adoption.



NEXT FOLLOW-UP MEETING

The next partnership meeting is scheduled to take place on 15 and 16 April 2026 in Bembibre. There, the partners will have the opportunity to learn about the Bembibre Sostenible energy community *in situ*. This initiative is proposed as a public, non-profit model for producing, managing and sharing solar energy generated in municipal facilities, so that the population, including residents, businesses and associations, can reduce their electricity bills without having to install panels in their homes.

SOCIOS DEL PROYECTO

ITCL CENTRO TECNOLÓGICO

VNiVERSiDAD D SALAMANCA

areanatejo
Agência Regional de Energia e Ambiente do Norte Alentejano e Tejo

DERBI cemater
PÔLE DE COMPÉTITIVITÉ
ÉNERGIES RENOUVELABLES + INNOVATION

SIGILLUM CONSILII BETULBRENSIS

capital energy

Enerdura
Agência Regional de Energia da Alta Estremadura

ESTIA
INSTITUTE OF TECHNOLOGY

ASSELDOR
Association des Eleveurs de Bordaxe

CTP
Communauté de Travail des Pyrénées
Comunidad de Trabajo de los Pirineos
Comunitat de Treball dels Pirineus
Komunitate Lan Elkartea