

Call: I3-2026-CAP2B
(I3-2026-CAP2B - CAPACITY BUILDING)

Topic: I3-2026-CAP2B

Type of Action: I3-PJG
(I3 Project Grants)

Proposal number: 101335728

Proposal acronym: H2EIR

Type of Model Grant Agreement: I3 Action Grant Budget-Based

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Application forms

Proposal ID 101335728

Acronym H2EIR

1 - General information

Field(s) marked * are mandatory to fill.

Topic	I3-2026-CAP2B	Type of Action	I3-PJG
Call	I3-2026-CAP2B	Type of Model Grant Agreement	I3-AG
Acronym	H2EIR		
Proposal title	Hydrogen Ecosystems for Interregional Investment Readiness		
	Note that for technical reasons, the following characters are not accepted in the Proposal Title and will be removed: < > " &		
Duration in months	24		
Fixed keyword 1	Investment readiness		
Free keywords	Hydrogen; Regional development; Smart Specialisation Strategies; Action Plans; Policy improvement; New value chains; New business cases; Replication in outermost regions		

Abstract *

H2EIR is an interregional innovation project aimed at strengthening hydrogen innovation ecosystems in Less Developed Regions (LDRs) by enabling their transition from strategic planning to investment-ready project development. Despite strong policy momentum at EU level, many regions still face structural barriers in translating clean hydrogen strategies into concrete value chains and bankable initiatives. H2EIR addresses this gap through an implementation-oriented approach that bridges policy frameworks and concrete investment opportunities, combining ecosystem activation, value-chain mapping, business case development and investment readiness.

The project brings together five LDRs (Campania, Alentejo, Azores, Małopolskie and Centru) and partners from Transition and More Developed Regions to foster interregional cooperation and knowledge transfer. Through Regional Stakeholder Groups, targeted capacity-building programmes and talent attraction, training and retention strategies, H2EIR strengthens coordination among public authorities, industry, research organisations and innovation intermediaries.

Key outputs include regional and interregional hydrogen roadmaps aligned with Smart Specialisation Strategies, at least four investment-ready business cases, and corresponding investment pathways positioned for future I3 Strand 2a proposals and other EU funding instruments. The project also delivers practical tools, such as a Permitting Compass and a Matchmaking Platform, supporting regulatory clarity and value-chain formation.

H2EIR will validate a replicable model for hydrogen ecosystem development, with a specific focus on island and outermost regions, by connecting peripheral and mainland ecosystems. By bridging policy learning, capacity building and investment preparation, the project contributes to strengthening European territorial cohesion, enhancing innovation capacity and integrating emerging regions into competitive European hydrogen value chains.

Remaining characters 17

Has this proposal (or a very similar one) been submitted in the past 2 years in response to a call for proposals under any EU programme, including the current call? ☐ Yes ☒ No

Please give the proposal reference or contract number.

Previously submitted proposals should be with either 6 or 9 digits.

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Declarations

Field(s) marked * are mandatory to fill.

1) We declare to have the explicit consent of all applicants on their participation and on the content of this proposal. * ☒

2) We confirm that the information contained in this proposal is correct and complete and that none of the project activities have started before the proposal was submitted (unless explicitly authorised in the call conditions). * ☒

3) We declare:
- to be fully compliant with the eligibility criteria set out in the call
- not to be subject to any exclusion grounds under the [EU Financial Regulation 2018/1046](#)
- to have the financial and operational capacity to carry out the proposed project. * ☒

4) We acknowledge that all communication will be made through the Funding & Tenders Portal electronic exchange system and that access and use of this system is subject to the [Funding & Tenders Portal Terms and Conditions](#). * ☒

5) We have read, understood and accepted the [Funding & Tenders Portal Terms & Conditions](#) and [Privacy Statement](#) that set out the conditions of use of the Portal and the scope, purposes, retention periods, etc. for the processing of personal data of all data subjects whose data we communicate for the purpose of the application, evaluation, award and subsequent management of our grant, prizes and contracts (including financial transactions and audits). * ☒

The coordinator is only responsible for the information relating to their own organisation. Each applicant remains responsible for the information declared for their organisation. If the proposal is retained for EU funding, they will all be required to sign a declaration of honour.

False statements or incorrect information may lead to administrative sanctions under the EU Financial Regulation.

Application forms

Proposal ID 101335728

Acronym H2EIR

2 - Participants

List of participating organisations

#	Participating Organisation Legal Name	Country	Role	Action
1	SVILUPPO TECNOLOGIE E RICERCA PER L'EDILIZIA SISMICA	Italy	Coordinator	
2	ADRAL - AGENCIA DE DESENVOLVIMENTO REGIONAL DO	Portugal	Partner	
3	VICE-PRESIDENCIA DO GOVERNO REGIONAL DOS ACORES	Portugal	Partner	
4	STOWARZYSZENIE GMIN POLSKA SIEC ENERGIE CITES	Poland	Partner	
5	AGENTIA PENTRU DEZVOLTARE REGIONALA CENTRU	Romania	Partner	
6	Hydrogen Power Storage & Solutions e.V.	Germany	Partner	
7	FONDAZIONE BRUNO KESSLER	Italy	Partner	
8	VRIJE UNIVERSITEIT BRUSSEL	Belgium	Partner	
9	FUNDACION CENER	Spain	Partner	

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **STRESS**

Organisation data

PIC	Legal name
966010294	SVILUPPO TECNOLOGIE E RICERCA PER L'EDILIZIA SISMICAMENTE SICURA ED ECOSOSTENIBILE SCARL

Short name: STRESS

Address

Street VICO II SAN NICOLA ALLA DOGANA 9

Town NAPOLI

Postcode 80133

Country Italy

Webpage www.stress-scarl.com

Specific Legal Statuses

Legal person	yes
Public body	no
Non-profit	yes
International organisation	no
Secondary or Higher education establishment	no
Research organisation	yes

SME Data

Based on the below details from the Participant Registry the organisation is an SME (small- and medium-sized enterprise) for the call.

SME self-declared status.....	21/10/2025 - yes
SME self-assessment	31/12/2015 - yes
SME validation sme	unknown

Application forms

Proposal ID **101335728**
Acronym **H2EIR**
Short name **STRESS**

Departments carrying out the proposed work

Department 1

Department name Technical Department ☐ not applicable

☒ Same as proposing organisation's address

Street VICO II SAN NICOLA ALLA DOGANA 9

Town NAPOLI

Postcode 80133

Country Italy

Links with other participants

Type of link	Participant

Application forms

Proposal ID 101335728

Acronym H2EIR

Short name STRESS

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

Title

Dr

Gender

☐ Woman

☒ Man

☐ Non Binary

First name

Nicola

Last name

Di Giulio

E-Mail

nicola.digiulio@stress-scarl.it

Position in org.

Senior Researcher

Department

Technical Department

☐

Same as organisation name

☒

Same as proposing organisation's address

Street

VICO II SAN NICOLA ALLA DOGANA 9

Town

NAPOLI

Post code

80133

Country

Italy

Website

https://www.stress-scarl.com/it/

Phone

+39 329 943 3210

Phone 2

+xxx xxxxxxxxx

Other contact persons

First Name	Last Name	E-mail	Phone
Carmine	Pascale	carmine.pascale@stress-scarl.it	+393472982847

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **ADRAL**

PIC	Legal name
950152346	ADRAL - AGENCIA DE DESENVOLVIMENTO REGIONAL DO ALENTEJO SA

Short name: ADRAL

Address

Street RUA 24 DE JULHO 1 1 E

Town EVORA

Postcode 7000 673

Country Portugal

Webpage www.adral.pt

Specific Legal Statuses

Legal person	yes
Public body	no
Non-profit	yes
International organisation	no
Secondary or Higher education establishment	no
Research organisation	no

SME Data

Based on the below details from the Participant Registry the organisation is an SME (small- and medium-sized enterprise) for the call.

SME self-declared status.....	03/07/2013 - yes
SME self-assessment	unknown
SME validation sme	unknown

Application forms

Proposal ID **101335728**
Acronym **H2EIR**
Short name **ADRAL**

Departments carrying out the proposed work

Department 1

Department name

External Relations and Foreign Direct Investm

☐ not applicable

☐ Same as proposing organisation's address

Street

R. Circular Norte do Parque Industrial,

Town

Évora

Postcode

7005-841

Country

Portugal

Links with other participants

Type of link	Participant

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **ADRAL**

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

Title **Mr**

Gender ☐ Woman ☒ Man ☐ Non Binary

First name **Daniel**

Last name **Janeiro**

E-Mail **daniel.janeiro@adral.pt**

Position in org. **Coordinator**

Department **External Relations and Foreign Direct Investment**

☐ Same as organisation name

☐ Same as proposing organisation's address

Street **R. Circular Norte do Parque Industrial, 35**

Town **Évora**

Post code **7005-841**

Country **Portugal**

Website **www.adral.pt**

Phone **+351 266769 150**

Phone 2 **+xxx xxxxxxxxx**

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **VICE-PRESIDENCIA DO GOVERNO REGIONAL D**

PIC	Legal name
884509051	VICE-PRESIDENCIA DO GOVERNO REGIONAL DOS ACORES

Short name: VICE-PRESIDENCIA DO GOVERNO REGIONAL DOS ACORES

Address

Street LARGO PRIOR DO CRATO

Town PONTA DELGADA

Postcode 9700-157

Country Portugal

Webpage <https://portal.azores.gov.pt/web/vpgr>

Specific Legal Statuses

Legal person yes

Public body yes

Non-profit yes

International organisation no

Secondary or Higher education establishment no

Research organisation no

SME Data

Based on the below details from the Participant Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

SME self-declared status..... 28/10/2022 - no

SME self-assessment unknown

SME validation sme unknown

Application forms

Proposal ID **101335728**
Acronym **H2EIR**
Short name **VICE-PRESIDENCIA DO GOVERNO REGIONAL D**

Departments carrying out the proposed work

Department 1

Department name

Regional Directorate for Science

☐ not applicable

☐ Same as proposing organisation's address

Street

LARGO PRIORua do Mercado, nº 2R DO CRATO

Town

Ponta Delgada

Postcode

9500-326

Country

Portugal

Links with other participants

Type of link	Participant

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **VICE-PRESIDENCIA DO GOVERNO REGIONAL D**

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

Title **Dr**

Gender ☐ Woman ☒ Man ☐ Non Binary

First name **Francisco**

Last name **Pinto**

E-Mail **francisco.jb.pinto@azores.gov.pt**

Position in org. **Senior technician**

Department **Regional Directorate for Science**

☐ Same as organisation name

☐ Same as proposing organisation's address

Street **LARGO PRIORua do Mercado, nº 2R DO CRATO**

Town **Ponta Delgada**

Post code **9500-326**

Country **Portugal**

Website **https:\\portal.azores.gov.pt\\web\\drcid**

Phone **+351 296 308 947**

Phone 2 **+xxx xxxxxxxxx**

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **PNEC**

PIC	Legal name
996730582	STOWARZYSZENIE GMIN POLSKA SIEC ENERGIE CITES

Short name: PNEC

Address

Street UL SLAWKOWSKA 17 LOK 30

Town KRAKOW

Postcode 31 016

Country Poland

Webpage www.pnec.org.pl

Specific Legal Statuses

Legal person	yes
Public body	no
Non-profit	yes
International organisation	no
Secondary or Higher education establishment	no
Research organisation	no

SME Data

Based on the below details from the Participant Registry the organisation is unknown (small- and medium-sized enterprise) for the call.

SME self-declared status.....	unknown
SME self-assessment	unknown
SME validation sme	unknown

Application forms

Proposal ID **101335728**
Acronym **H2EIR**
Short name **PNEC**

Departments carrying out the proposed work

No department involved

Department name

Name of the department/institute carrying out the work.

☒ not applicable

☐ Same as proposing organisation's address

Street

Please enter street name and number.

Town

Please enter the name of the town.

Postcode

Area code.

Country

Please select a country

Links with other participants

Type of link	Participant

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **PNEC**

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

Title Mrs

Gender ☒ Woman ☐ Man ☐ Non Binary

First name **Izabela**

Last name **Kuśnierz**

E-Mail **izabela.kusnierz@pnec.org.pl**

Position in org. Project Manager

Department STOWARZYSZENIE GMIN POLSKA SIEC ENERGIE CITES ☒ Same as organisation name

☒ Same as proposing organisation's address

Street UL SLAWKOWSKA 17 LOK 30

Town KRAKOW Post code 31 016

Country Poland

Website https://www.pnec.org.pl/pl

Phone +48882776144 Phone 2 +48124291793

Other contact persons

First Name	Last Name	E-mail	Phone
Anna	Jaskuła	anna.jaskula@pnec.org.pl	+48124291795

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **THE REGIONAL DEVELOPMENT AGENCY ADR C**

PIC	Legal name
999550954	AGENTIA PENTRU DEZVOLTARE REGIONALA CENTRU

Short name: THE REGIONAL DEVELOPMENT AGENCY ADR CENTRU RDA CENTRU

Address

Street STRADA DECEBAL 11

Town ALBA IULIA

Postcode 510093

Country Romania

Webpage www.adrcentru.ro

Specific Legal Statuses

Legal person	yes
Public body	no
Non-profit	yes
International organisation	no
Secondary or Higher education establishment	no
Research organisation	no

SME Data

Based on the below details from the Participant Registry the organisation is unknown (small- and medium-sized enterprise) for the call.

SME self-declared status.....	unknown
SME self-assessment	unknown
SME validation sme	unknown

Application forms

Proposal ID **101335728**
Acronym **H2EIR**
Short name **THE REGIONAL DEVELOPMENT AGENCY ADR C**

Departments carrying out the proposed work

Department 1

Department name

Regional Policies, Programming Unit

☐ not applicable

☐ Same as proposing organisation's address

Street

32 D Consiliul Europei

Town

Alba Iulia

Postcode

510096

Country

Romania

Links with other participants

Type of link	Participant

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **THE REGIONAL DEVELOPMENT AGENCY ADR C**

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

Title Ms

Gender ☒ Woman ☐ Man ☐ Non Binary

First name **Ovidia**

Last name **Caba**

E-Mail **ovidia.caba@adrcentru.ro**

Position in org. Director

Department Regional Policies, Programming Unit

☐ Same as organisation name

☐ Same as proposing organisation's address

Street 32 D Consiliul Europei

Town Alba Iulia

Post code 510096

Country Romania

Website www.adrcentru.ro

Phone 0040740175204

Phone 2 0040358 401 276

Other contact persons

First Name	Last Name	E-mail	Phone
Gabriela	Tarau	gabriela.tarau@adrcentru.ro	0040766213764

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **HYPOS e.V.**

PIC	Legal name
867619411	Hydrogen Power Storage & Solutions e.V.

Short name: HYPOS e.V.

Address

Street Heinrich-Damerow-Strasse 3

Town Halle (Saale)

Postcode 06120

Country Germany

Webpage <https://www.hypos-germany.de/>

Specific Legal Statuses

Legal person	yes
Public body	no
Non-profit	yes
International organisation	no
Secondary or Higher education establishment	no
Research organisation	no

SME Data

Based on the below details from the Participant Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

SME self-declared status.....	04/12/2025 - no
SME self-assessment	unknown
SME validation sme	unknown

Application forms

Proposal ID 101335728

Acronym H2EIR

Short name HYPOS e.V.

Departments carrying out the proposed work

No department involved

Department name

Name of the department/institute carrying out the work.

☒ not applicable

☐ Same as proposing organisation's address

Street

Please enter street name and number.

Town

Please enter the name of the town.

Postcode

Area code.

Country

Please select a country

Links with other participants

Type of link	Participant

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **HYPOS e.V.**

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

Title **Mr**

Gender ☐ Woman ☒ Man ☐ Non Binary

First name **Steffen**

Last name **Ziemann**

E-Mail **ziemann@hypos-germany.de**

Position in org. **Project and cluster manager**

Department **Hydrogen Power Storage & Solutions e.V.**



Same as
organisation name

☐ Same as proposing organisation's address

Street **Schillerstrasse 5**

Town **Leipzig**

Post code **04109**

Country **Germany**

Website **https://www.hypos-germany.de/**

Phone **+49 157 855 188 55**

Phone 2

+xxx xxxxxxxxx

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **FBK**

PIC	Legal name
999625450	FONDAZIONE BRUNO KESSLER

Short name: FBK

Address

Street VIA SANTA CROCE 77

Town TRENTO

Postcode 38122

Country Italy

Webpage www.fbk.eu

Specific Legal Statuses

Legal person	yes
Public body	no
Non-profit	yes
International organisation	no
Secondary or Higher education establishment	no
Research organisation	yes

SME Data

Based on the below details from the Participant Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

SME self-declared status.....	06/09/2022 - no
SME self-assessment	31/12/2021 - no
SME validation sme	18/09/2008 - no

Application forms

Proposal ID **101335728**
Acronym **H2EIR**
Short name **FBK**

Departments carrying out the proposed work

Department 1

Department name

Sustainable energy

☐ not applicable

☐ Same as proposing organisation's address

Street

Via Sommarive, 18

Town

Trento

Postcode

38123

Country

Italy

Links with other participants

Type of link	Participant

Application forms

Proposal ID **101335728**
Acronym **H2EIR**
Short name **FBK**

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

TitleDr

Gender

Woman

Man

Non Binary

First nameMatteo

Last nameTesti

E-Mailtesti@fbk.eu

Position in org. Head of unit

DepartmentSustainable energy

Same as organisation name

Same as proposing organisation's address

StreetVia Sommarive, 18

TownTrento

Post code38123

CountryItaly

Websitehttps://energy.fbk.eu/

Phone+XXX XXXXXXXXXX

Phone 2+XXX XXXXXXXXXX

Other contact persons

First Name	Last Name	E-mail	Phone
Silvia	Ricciuti	sricciuti@fbk.eu	+XXX XXXXXXXXXX
Sonia	Decaminada	decaminada@fbk.eu	+XXX XXXXXXXXXX
Sookyung	Kang	skang@fbk.eu	+XXX XXXXXXXXXX
Yasaman	Nosrat Tajoddin	ynosrattajoddin@fbk.eu	+XXX XXXXXXXXXX
Michele	Urbani	murbani@fbk.eu	+XXX XXXXXXXXXX

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **VUB**

PIC	Legal name
999902094	VRIJE UNIVERSITEIT BRUSSEL

Short name: VUB

Address

Street PLEINLAAN 2

Town BRUSSEL

Postcode 1050

Country Belgium

Webpage www.vub.be

Specific Legal Statuses

Legal person	yes
Public body	yes
Non-profit	yes
International organisation	no
Secondary or Higher education establishment	yes
Research organisation	yes

SME Data

Based on the below details from the Participant Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

SME self-declared status.....	12/01/2022 - no
SME self-assessment	12/01/2022 - no
SME validation sme	unknown

Application forms

Proposal ID **101335728**
Acronym **H2EIR**
Short name **VUB**

Departments carrying out the proposed work

Department 1

Department name

EVERGi Research Group

☐ not applicable

☒ Same as proposing organisation's address

Street

PLEINLAAN 2

Town

BRUSSEL

Postcode

1050

Country

Belgium

Links with other participants

Type of link	Participant

Application forms

Proposal ID 101335728

Acronym H2EIR

Short name VUB

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

Title

Dr

Gender

☐ Woman

☒ Man

☐ Non Binary

First name

Ander

Last name

Martinez Alonso

E-Mail

ander.martinez.alonso@vub.be

Position in org.

Senior researcher

Department

ETEC

☐

Same as organisation name

☒

Same as proposing organisation's address

Street

PLEINLAAN 2

Town

BRUSSEL

Post code

1050

Country

Belgium

Website

https://mobi.research.vub.be/evergi-homepage

Phone

+XXX XXXXXXXXXX

Phone 2

+XXX XXXXXXXXXX

Other contact persons

First Name	Last Name	E-mail	Phone
Alex	Felice	alex.felice@vub.be	+XXX XXXXXXXXXX

Application forms

Proposal ID **101335728**

Acronym **H2EIR**

Short name **CENER**

PIC	Legal name
999745342	FUNDACION CENER

Short name: CENER

Address

Street AVENIDA CIUDAD DE LA INNOVACION 7

Town SARRIGUREN

Postcode 31621

Country Spain

Webpage www.cener.com

Specific Legal Statuses

Legal person	yes
Public body	no
Non-profit	yes
International organisation	no
Secondary or Higher education establishment	no
Research organisation	yes

SME Data

Based on the below details from the Participant Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

SME self-declared status.....	31/12/2017 - no
SME self-assessment	31/12/2017 - no
SME validation sme	08/09/2008 - yes

Application forms

Proposal ID **101335728**
Acronym **H2EIR**
Short name **CENER**

Departments carrying out the proposed work

Department 1

Department name

Grid Integration, Electric Storage and HydrogTechnical Department

☐ not applicable

☒ Same as proposing organisation's address

Street

AVENIDA CIUDAD DE LA INNOVACION 7

Town

SARRIGUREN

Postcode

31621

Country

Spain

Links with other participants

Type of link	Participant

Application forms

Proposal ID 101335728

Acronym H2EIR

Short name CENER

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

TitleDr

Gender

☒ Woman

☐ Man

☐ Non Binary

First nameMónica

Last nameAguado

E-Mailmaguado@cener.com

Position in org.Director of Grid Integration, Electric Storage and Hydrogen

DepartmentGrid Integration, Electric Storage and Hydrogen

☐ Same as organisation name

☒ Same as proposing organisation's address

StreetAVENIDA CIUDAD DE LA INNOVACION 7

TownSARRIGUREN

Post code31621

CountrySpain

WebsitePlease enter website

Phone+34948252800

Phone 2+XXX XXXXXXXXXX

Other contact persons

First Name	Last Name	E-mail	Phone
Raquel	Garde Aranguren	rgarde@cener.com	+34 948252800
Xabier	Sevillano	xsevillano@cener.com	+34 948252800
Gabriel	Garcia	ggarcia@cener.com	+34 948252800
Eduardo	Fernandez	efernandez@cener.com	+XXX XXXXXXXXXX

Application forms

Proposal ID 101335728

Acronym H2EIR

3 - Budget ?

No.	Name of beneficiary	Country	Role	Personnel costs - without volunteers/ EUR	Subcontracting costs/ EUR	Purchase costs - Travel and subsistence/ EUR	Purchase costs - Equipment/ EUR	Purchase costs - Other goods, works and services/ EUR	Financial support to third parties/ EUR	Indirect costs/ EUR	Total eligible costs/ EUR	Ineligible costs/ EUR	Total estimated project costs and contributions/ EUR	Funding rate	Maximum EU contribution to eligible costs/ EUR	Requested EU contribution to eligible costs/ EUR	Max grant amount/ EUR	Income generated by the project/ EUR	In kind contributions/ EUR	Financial contributions/ EUR	Own resources/ EUR	Total estimated project income/ EUR
									Special Funding rate 100													
1	Sviluppo Tecnologie E Ricerca Per L'edilizia Sismicamente Sicura Ed Ecosostenibile Scart	IT	Coordinator	303 800	0	14 300	0	8 000	0	22 827.00	348 927.00	0	348 927.00	100	348 927.00	348 926.99	348 926.99	0.00	0.00	0.00	0.01	348 927.00
2	Adral - Agencia De Desenvolvemento Regional Do Alentejo Sa	PT	Partner	165 640	0	8 461	0	13 000	0	13 097.07	200 198.07	0	200 198.07	100	200 198.07	200 198.06	200 198.06	0.00	0.00	0.00	0.01	200 198.07
3	Vice-presidencia Do Governo Regional Dos Acores	PT	Partner	46 408	0	11 890	0	11 950	0	4 917.36	75 165.36	0	75 165.36	100	75 165.36	75 165.35	75 165.35	0.00	0.00	0.00	0.01	75 165.36
4	Stowarzyszenie Gmin Polska Siec Energje Cites	PL	Partner	169 350	0	13 540	0	23 950	0	14 478.80	221 318.80	0	221 318.80	100	221 318.80	221 318.79	221 318.79	0.00	0.00	0.00	0.01	221 318.80
5	Agentia Pentru Dezvoltare Regionala Centru	RO	Partner	104 640	0	5 910	0	9 000	0	8 368.50	127 918.50	0	127 918.50	100	127 918.50	127 918.49	127 918.49	0.00	0.00	0.00	0.01	127 918.50
6	Hydrogen Power Storage & Solutions E.v.	DE	Partner	65 000	2 560	7 004	0	0	0	5 219.48	79 783.48	0	79 783.48	100	79 783.48	79 783.47	79 783.47	0.00	0.00	0.00	0.01	79 783.48
7	Fondazione Bruno Kessler	IT	Partner	183 500	0	8 850	0	0	0	13 464.50	205 814.50	0	205 814.50	100	205 814.50	205 814.49	205 814.49	0.00	0.00	0.00	0.01	205 814.50
8	Vrije Universiteit Brussel	BE	Partner	110 000	0	9 900	0	2 000	0	8 533.00	130 433.00	0	130 433.00	100	130 433.00	130 432.99	130 432.99	0.00	0.00	0.00	0.01	130 433.00
9	Fundacion Cener	ES	Partner	86 350	0	7 874	0	0	0	6 595.68	100 819.68	0	100 819.68	100	100 819.68	100 819.67	100 819.67	0.00	0.00	0.00	0.01	100 819.68
	Total			1 234 688	2 560	87 729	0	67 900	0	97 501.39	1 490 378.39	0	1 490 378.39		1 490 378.39	1 490 378.30	1 490 378.30	0.00	0.00	0.00	0.09	1 490 378.39

TECHNICAL DESCRIPTION (PART B)

COVER PAGE

Part B of the Application Form must be downloaded from the Portal Submission System, completed and then assembled and re-uploaded as PDF in the system. Page 1 with the grey IMPORTANT NOTICE box should be deleted before uploading.

Note: Please read carefully the conditions set out in the Call document (for open calls: published on the Portal). Pay particular attention to the award criteria; they explain how the application will be evaluated.

PROJECT	
Project name:	Hydrogen Ecosystems for Interregional Investment Readiness
Project acronym:	H2EIR
Coordinator contact:	Nicola Di Giulio, STRESS (nicola.digiulio@stress-scarl.it)

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#APP-FORM-I3@#

#PRJ-SUM-PS@# [This document is tagged. Do not delete the tags; they are needed for the processing.]

PROJECT SUMMARY

Project summary

See Abstract (Application Form Part A).

#PRJ-SUM-PS\$# #REL-EVA-RE@# #PRJ-OBJ-PO@#

1. RELEVANCE

1.1 Background and general objectives

Background and general objectives

Describe the background and rationale of the project.

How is the project relevant to the scope of the call? How does the project address the general objectives of the call? What is the project's contribution to the priorities of the call?

The European policy framework - including the European Green Deal, REPowerEU, the Net-Zero Industry Act, the Fit for 55 package and the EU Hydrogen Strategy - positions **renewable hydrogen** as a strategic pillar for climate neutrality, industrial competitiveness and energy system resilience. These initiatives highlight the need not only to accelerate hydrogen deployment, but also to strengthen regional industrial ecosystems capable of translating strategic ambitions into concrete investment pipelines and operational value chains.

Despite this strong policy momentum, **significant territorial disparities persist** across European regions. While advanced regions have already consolidated hydrogen clusters, investment-ready projects and industrial partnerships, many Less Developed Regions (LDRs) continue to face fragmented ecosystems, limited access to technical expertise, weak integration into European value chains and insufficient capacity to structure bankable hydrogen initiatives. As a result, hydrogen strategies often remain at planning level, without generating tangible investment opportunities or industrial transformation.

In this context, H2EIR addresses this structural gap by supporting the transition from policy alignment to implementation. **The project brings together 9 organisations from 7 EU Member States**, including **5 Less Developed Regions** (Campania, Alentejo, The Azores, Małopolskie, Centru) complemented by **1 Transition Region** (Sachsen-Anhalt) and **3 More Developed Regions** (Provincia Autonoma di Trento, Vlaams Gewest and Comunidad Foral de Navarra), and that contribute advanced methodological, industrial and investment-related expertise. The consortium integrates industry driven consortia, regional governments and S3 (Smart Specialisation Strategy) authorities, regional development agencies, municipal networks, hydrogen clusters, universities and research organisations, ensuring a balanced quadruple-helix approach and strong territorial anchoring.

The five Less Developed Regions face common challenges but also complementary opportunities in relation to hydrogen deployment:

- **Campania (IT)**, a densely populated region with significant industrial and energy-transition needs, where hydrogen can support hard-to-abate sectors and integrated energy solutions, provided that ecosystem coordination and investment pipelines are strengthened.
- **Alentejo (PT)**, characterised by high renewable energy potential and emerging hydrogen ambitions, yet requiring stronger SME-oriented policy instruments and structured pathways towards bankable projects.
- **The Azores (PT)**, an oceanic archipelago, one of the outermost regions of Europe, has high potential to develop alternative hydrogen-based energy solutions, but with limited know-how and a strong need to create collaborative networks with mainland and other regions, to help deployment of a hydrogen-based business ecosystem.
- **Małopolskie (PL)**, a region facing acute air-quality and decarbonisation challenges, where hydrogen value chains could play a transformative role if local stakeholders are better mobilised and supported through robust policy and business-case frameworks.

- **Centru (RO)**, an inland region with industrial activities and growing innovation actors, where hydrogen can contribute to industrial decarbonisation but where ecosystem fragmentation and limited know how and exposure to EU networks still represent key barriers.

The project is fully aligned with the scope, objectives and priorities of the I3 cap2b call, by **strengthening interregional innovation ecosystems in clean hydrogen initiatives**. Through the **co-design of regional roadmaps, policy recommendations and investment-oriented actions**, the project **supports regions in moving from strategic alignment to implementation and project development**.

H2EIR **reduces innovation and investment gaps** by combining the industrial and methodological expertise of Transition and More Developed Regions with the territorial needs of Less Developed Regions, enabling structured knowledge transfer that directly **supports business case development, regulatory preparedness and investment planning**. By **fostering interregional value-chain integration, industry-driven matchmaking and access to European networks and funding opportunities**, the project **contributes to the creation of credible investment pipelines and concrete hydrogen deployment pathways**, strengthening the attractiveness of Less Developed Regions as emerging H2 hubs within the European hydrogen economy.

The overall objective of H2EIR is therefore to enable Less Developed Regions to **transform clean hydrogen from a strategic ambition into a concrete development and investment opportunity, fostering resilient regional ecosystems, investable project pipelines and stronger integration into European hydrogen value chains**, in line with EU climate objectives and I3 priorities.

Table 1: Relevance to the call scope, objectives and priorities

Asked by the call	H2EIR
Help create connected and well-performing regional innovation ecosystems, establishing the right framework conditions for interregional cooperation.	Strengthens the framework conditions for interregional cooperation by activating Regional Stakeholder Groups and formalising three strategic cooperation initiatives : an interregional S3 hydrogen partnership (between all H2EIR partners) and two emerging macro-regional hydrogen alliances: the Atlantic Hydrogen Alliance (Alentejo–Azores–Navarra) and the Central-Eastern Hydrogen Innovation Alliance (Małopolskie–Centru–Sachsen-Anhalt).
Contribute to the preparation of interregional innovation projects in shared smart specialisation areas, laying the groundwork for future cooperation, in particular under Strand 2a.	Prepares the ground for future interregional innovation investments by developing S3-aligned regional hydrogen roadmaps , selecting mature business cases and defining investment pathways that can evolve into follow-up I3 Strand 2a proposals and other regional, national and EU-funded initiatives.
Facilitate the validation process of investment ideas through improved knowledge and practical skills in business and investment planning, working with companies, in particular SMEs, in a specific value chain and defining a clear path towards developing I3 application(s).	Works directly with companies, clusters and innovation intermediaries within regional hydrogen value chains to identify and validate business ideas, support techno-economic assessment, and define concrete financing and deployment pathways. This process is designed to generate a clear projects pipeline for future I3 strand2a applications in all LDRs.
Identify and address gaps and business opportunities that may hinder or enable the reinforcement of existing value chains or the creation of new ones, with a clear link to S3 priorities and value chain positioning.	Through ecosystem mapping, benchmarking, value-chain analysis and policy gap assessment , identifies the main structural, regulatory and investment barriers affecting hydrogen value chain development in the participating regions. These findings are translated into S3-aligned action plans , business cases and policy recommendations and are also aligned with previous or parallel initiatives.
Experiment “out-of-the-box” approaches to deliver validated solutions and tested models that can increase the capacity of regional actors to engage effectively in interregional innovation processes.	Applies an integrated methodology combining ecosystem activation, Entrepreneurial Discovery Process workshops, value-chain design, business case development, Permitting Compass and Matchmaking tools, and interregional talent and capacity-building actions . This creates a tested and replicable model for moving from policy learning to investment readiness.

Ensure that the knowledge and capabilities gained during the project can be replicated, adapted, and embedded in the regional ecosystem, contributing to long-term institutional learning, RIS3 (Research and Innovation Strategies for Smart Specialisation) updates and policy development beyond the project lifetime.	Embeds its results into regional governance through S3-aligned hydrogen roadmaps, policy recommendations, stakeholder networks, replication plans and exploitation strategies . H2EIR results will be aligned with other existing initiatives, ongoing regional policy learning and funding frameworks, creating a mutually reinforcing dynamic between H2EIR and other projects and ensuring continuity beyond the project duration. Specific attention will be given to replication activities in island and outermost regions , thanks to the work carried out by AZORES.
Ensure the active involvement of companies and civil society, alongside public administrations, academia, and other quadruple-helix stakeholders.	Ensures continuous quadruple-helix participation through Regional Stakeholder Groups, Discovery Workshops, business case validation activities and interregional capacity-building events , actively involving public authorities, SMEs, clusters, research organisations, academia and civil society actors. A large share of these actors is already involved in established Regional Stakeholder Groups from previous initiatives, which strengthens the feasibility and credibility of the project activities.

In this way, H2EIR responds directly to the core objectives of the call by combining ecosystem strengthening, interregional cooperation, investment validation and long-term institutional embedding within shared smart specialisation priorities.

1.2 Needs analysis and specific objectives

Needs analysis and specific objectives

Describe how the objectives of the project are based on a sound needs analysis in line with the specific objectives of the call. What issue/challenge/gap does the project aim to address?

The objectives should be clear, measurable, realistic and achievable within the duration of the project. For each objective, define appropriate indicators for measuring achievement (including a unit of measurement, baseline value and target value).

Despite the strong policy momentum generated by the European hydrogen policy framework, **significant territorial disparities persist in the capacity of European regions to translate hydrogen strategies into concrete investments and operational value chains**. These gaps are particularly evident in Less Developed Regions (LDRs), where structural constraints limit the ability to move from planning to implementation.

The five LDRs involved in the project - **Campania (IT), Alentejo (PT), The Azores (PT), Małopolskie (PL) and Centru (RO)** - share a set of recurring challenges, despite their different socio-economic and industrial profiles:

- **Fragmented hydrogen ecosystems**, characterised by weak coordination between public authorities, SMEs, research actors and large industrial players;
- **Limited industrial anchoring of hydrogen strategies**, with roadmaps often remaining at a conceptual or policy level and not sufficiently linked to real demand, off-takers or value-chain integration;
- **Insufficient capacity to design bankable business cases**, due to gaps in techno-economic expertise, lack of standardised business modelling tools, and limited experience with investment-grade project development;
- **Regulatory and permitting complexity**, which represents a major barrier for project promoters, especially SMEs and local authorities unfamiliar with hydrogen-specific procedures;
- **Difficult access to finance**, including limited capacity to combine EU, national and private funding sources into coherent funding mixes, and low attractiveness for private investors due to perceived risks and small project scale;
- **Skills and talent gaps**, particularly in emerging hydrogen technologies, system integration, safety, and project development roles.

These challenges have been consistently identified in regional consultations, strategic documents and policy learning activities carried out under previous initiatives, notably the Interreg project **PRHyUS (Promoting Renewable Hydrogen Utilization for a Sustainable and Greener Europe)**, which involves three of the five partners from the LDRs participating in this project, plus one of the partners from MDRs. While PRHyUS successfully supports policy learning, stakeholder engagement and strategic alignment, it also highlights a critical gap: **the lack of structured pathways from improved policy frameworks to concrete, investment-ready hydrogen projects**, which would be addressed in H2EIR.

When diving more into details of regional territories, every single region has specific gaps and challenges:

- Campania:** The region combines strong research and development capacities in hydrogen and integrated energy systems with a significant industrial base in sectors such as transport, logistics, agri-food, and manufacturing. However, the regional hydrogen ecosystem remains fragmented, with limited coordination between research actors, industrial players, local authorities and SMEs. A key challenge lies in translating emerging strategic initiatives into concrete industrial applications and scalable value chains, particularly within the industrial and transport sectors, but also within local energy communities and critical infrastructure (ports, airports, hospitals, etc.) Additional gaps include the need to strengthen techno-economic expertise for investment-ready project development, improve clarity on permitting procedures, and enhance the capacity of SMEs and municipalities to participate in innovation and investment processes. Building on the policy learning and stakeholder coordination achieved through the Interreg project PRHyUS, Campania now requires structured support to consolidate its hydrogen ecosystem, develop bankable project pipelines and position itself as an attractive destination for hydrogen-related investments within Southern Italy and the wider Mediterranean context.
- Alentejo:** The region possesses exceptional renewable energy resources (solar and wind) and strategic infrastructure (e.g., the Sines industrial and port complex), potentially positioning it as a highly competitive hub for green hydrogen production. However, the critical gap lies in the disconnection between large-scale production ambitions and the integration of the regional SME ecosystem. Key challenges include the lack of techno-economic capacity among local actors to structure mature, bankable business cases, the need to stimulate localised off-taker demand (e.g. in regional heavy transport and decentralised industries), and the struggle of local authorities and project promoters to navigate complex regulatory and permitting frameworks. The region urgently needs to translate its high production potential into concrete, investment-ready value chains that retain economic value locally.
- The Azores:** The region has been long focusing on the use of renewable energy sources, mainly geothermal, wind and solar that, overall, already support more than 30% of the energy needs, and has tremendous potential to produce green hydrogen. However, some critical gaps that the region faces in implementing hydrogen production and value-chains are the inexistence of regional based know-how and the low involvement of regional research teams as a result of the lack of skills and difficulties in attracting and retaining talents, the difficulty to attract industry actors and investment capital resulting in a almost inexistence of SMEs that could be involved in development of hydrogen value-chains and business ecosystems, and the distance to mainland Portugal, and Europe in general, that limits the access to know-how and technology needed to develop green hydrogen production and promote the development of a regional hydrogen business ecosystem able to expand in and out of Azores. To surpass the critical gaps found, it is essential to promote and develop interregional alliances and collaborative networks with mainland Portugal, and other European regions, that can help capacitate the region for the development of a hydrogen ecosystem involving production, distribution and usage. The acquisition of scientific and technical know-how and its transfer to the industry, promoting innovation, is an essential factor for this development. To maximize results, the ecosystem should integrate all elements of the quadruple helix, research organizations, industry, civil society and public stakeholders, creating conditions for the development of an effective and efficient hydrogen-based business model adapted to the reality of oceanic islands, enabling Azores to attract talents and investment, create new value-chains, promote energy sustainability, retain economic value and position the region in the emerging European hydrogen ecosystem, being these the reasons why the regional S3, RIS3 Açores 2022/2027, has as a specific line of action to be developed “Promoting hydrogen production using renewable energy and resources”.
- Małopolskie:** The region focuses on decarbonising energy-intensive industries and improving air quality, while building on its strong academic and research base concentrated around Kraków. Although Małopolskie has recognised “Sustainable Energy” as a Smart Specialisation priority, the regional hydrogen ecosystem remains at an early stage of development. The main structural gap lies in the weak translation of R&D potential into market-ready and investment-ready hydrogen applications. There is a limited portfolio of mature hydrogen projects at higher TRL levels (6–9), and insufficient experience in structuring bankable business cases aligned with European value chains.

Cooperation between research institutions, industry and public authorities remains fragmented, which slows down the development of coordinated hydrogen initiatives. A key challenge is the limited capacity of SMEs and local authorities to integrate into interregional hydrogen value chains and participate in EU-level partnerships. Additional barriers include insufficient pilot infrastructure, limited expertise in combining funding sources into coherent investment pathways, and gaps in specialised skills related to hydrogen technologies and project development. To move from strategic ambition to implementation, Małopolskie requires structured support in asset mapping, technology transfer, investment readiness and interregional cooperation, enabling the region to better position itself within emerging European hydrogen ecosystems while retaining economic value locally.

- **Centru:** The region has emerging potential to develop hydrogen value chains due to its industrial base and research capacity. However, the hydrogen ecosystem remains fragmented, with limited green hydrogen production and weak integration between industrial demand, SMEs, and innovation actors. The key challenge is to translate existing industrial demand into integrated, investment-ready interregional hydrogen value chains, mobilising industry, research organisations, SMEs, and public stakeholders while attracting new investments. A key actor is Azomures Targu Mures, one of Romania's largest hydrogen users through ammonia and fertiliser production. Centru was selected by EU to receive a Regional Innovation Valley (RIV) label and is committed to strengthening its research and innovation ecosystem. According to the JRC map for RIV labelled regions, reducing dependency on fossil fuels remains a pressing challenge, particularly in transport and heavy industry. Focus is being given to addressing key gaps in hydrogen development by strengthening infrastructure (H2 infrastructure and pilot projects), creating stable industrial demand, improving regulatory clarity, and building regional coordination to unlock its renewable energy potential in transport and heavy industry.

At the same time, Transition and More Developed Regions involved in the consortium have accumulated **advanced experience in hydrogen value-chain development**, industrial clustering, permitting procedures and investment mobilisation. However, this expertise remains unevenly distributed across Europe and insufficiently accessible to LDRs without structured interregional cooperation mechanisms. The evidence gathered therefore highlights the urgency of moving beyond strategy formulation towards **implementation-oriented support** capable of generating investment-ready initiatives. It also stresses the importance of **reinforcing interregional value-chain complementarities**, fostering industry-driven project development rather than fragmented regional initiatives, and positioning Less Developed Regions as **credible and attractive territories for hydrogen investment and industrial deployment**.

Based on the identified needs and in line with the specific objectives of the I3 instrument, the project pursues the following interlinked specific objectives:

- **OB1. Strengthen hydrogen innovation ecosystems in Less Developed Regions** by activating regional and interregional partnerships/alliances and structured multi-helix stakeholder groups, improving coordination between policy, industry and research actors, and embedding hydrogen initiatives within regional Smart Specialisation Strategies.
- **OB2. Reduce territorial disparities in project development capacity** through the transfer of methodologies, tools and know-how from Transition and More Developed Regions to LDRs, enabling them to design, assess and structure hydrogen projects according to investment-grade standards.
- **OB3. Address regulatory and permitting barriers** building on existing initiatives (e.g. PRHyUS) and developing practical, user-oriented tools (permitting compass) that clarify approval procedures, competent authorities and regulatory requirements for hydrogen projects across different regional contexts.
- **OB4. Foster interregional value-chain creation and matchmaking** by connecting regional assets, industrial demand and technological capabilities across regions, promoting cross-border cooperation and the emergence of integrated European hydrogen value chains.
- **OB5. Enable the development of investable hydrogen business cases** by providing a shared methodology for business modelling, techno-economic and financial feasibility assessment, and value-chain integration, tailored to the specific conditions and maturity levels of each LDR.
- **OB6. Improve access to finance and investment readiness** by supporting LDR partners in identifying appropriate funding mixes, engaging with private investors, intermediaries and preparing scale-up pathways beyond the project lifetime, including joint applications to major EU funding programmes (e.g. I3, Horizon Europe, CleanH2 Partnership, Innovation Fund).

- **OB7. Build long-term human capital and institutional capacity** through targeted capacity-building actions and talent development strategies aligned with emerging hydrogen skills needs, favouring women participation and gender mainstreaming.
- **OB8. Promote replication and transferability of H2EIR methodologies and ecosystem development approaches beyond the consortium**, with a specific focus on island and outermost regions, by developing and validating a replication framework and **enabling its uptake by external regions and stakeholders**.

Table 2: Specific objectives and performance indicators

OB	Indicator (impact dimension)	Unit of Measurement	Baseline value	Target value	Means of verification
OB1	Less Developed Regions supported in hydrogen ecosystem development (interregional)	Number of LDRs	0	5	Consortium agreement / Final report
	Transition and More Developed Regions involved (interregional)	Number of Regions	0	4	Consortium agreement
	Interregional S3 Partnerships activated (policy)	Number of partnerships	0	1	MoU
	Interregional alliances established (policy)	Number of alliances	0	2	MoU
	Regional/interregional stakeholder groups activated (socio-economic)	Number of groups	3	5	Minutes of RSG meetings
	Stakeholders involved in H2EIR activities (socio-economic)	Number of Stakeholders	41	≥90	Minutes of RSG meetings
	SMEs involved in stakeholders group (socio-economic)	Number of SMEs	5	≥20	Minutes of RSG meetings
OB2	Methodologies for value chain and business case identification transferred from TR and MDR to LDR (socio-economic)	Number of methodologies	0	2	Deliverable 2.1 Deliverable 3.1
	Tools developed and transferred from TR and MDR to LDR. (socio-economic)	Number of tools	0	2	Deliverable 3.4
OB3	Policy recommendations addressing hydrogen regulatory barriers (policy)	N. of policy measures conceived	0	7	Deliverable 2.2
OB4	Existing value chains identified and analysed (socio-economic)	Number of value chains	0	≥4	Deliverable 2.1
	New value chains identified and analysed (socio-economic)	Number of value chains	0	≥4	Deliverable 2.1
OB5	Number of preliminary business cases identified (socio-economic)	N. of business cases	0	≥8	Deliverable 2.3
	Advanced techno-economic hydrogen business cases developed (socio-economic)	N. of business cases	0	≥4	Deliverable 3.2
OB6	Investment pathways for LDRs (socio-economic)	Number of LDRs involved	0	5	Deliverable 3.3
	I3 strand2a projects proposal initiated (socio-economic)	Number of proposals	0	4	Deliverable 3.3
	Companies involved in the business cases (socio-economic)	Number of companies	0	≥20	Deliverable 3.2

	Intermediaries engaged in interregional activities (socio-economic)	Number of intermediaries	8	14	Deliverable 3.2
OB7	Talent attraction and retention strategies for hydrogen ecosystems	Number of strategies	0	1	Deliverable 4.3
	Engagement with EU hydrogen networks (socio-economic)	Number of networks	0	≥4	Deliverable 4.2
	Capacity building workshops organised (socio-economic)	Number of workshops	0	8	Deliverable 4.1
	Female participation in workshops and capacity-building activities (gender)	Percentage of participants	n.a.	≥30%	Minute of meetings / Attendance list
	Visibility of women talents in project meetings presentation and talent showcases (gender)	Percentage of participants	n.a.	≥30%	Minute of meetings / Attendance list
OB8	Replication framework for island and outermost regions developed (socio-economic)	Number of frameworks	0	1	Deliverable 4.4
	External outermost regions engaged in replication activities (socio-economic)	Number of regions	0	≥2	Deliverable 4.4
	Expressions of interest / follow-up collaborations for replication (socio-economic)	Number of regions	0	≥2	EOIs / Deliverable 4.1

Taken together, these objectives define a coherent intervention logic that moves beyond policy alignment towards concrete implementation, enabling Less Developed Regions to transition from fragmented hydrogen initiatives to coordinated, investment-ready ecosystems fully integrated into European value chains.

#@COM-PL-CP@#

1.3 Complementarity with other actions and innovation — European added value

Complementarity with other actions and innovation

Explain how the project builds on the results of past activities carried out in the field and describe its innovative aspects. Explain how the activities are complementary to other activities carried out by other organisations.

Illustrate the European dimension of the activities: trans-national dimension of the project; impact/interest for a number of EU countries; possibility to use the results in other countries, potential to develop mutual trust/cross-border cooperation among EU countries, etc.

Which countries will benefit from the project (directly and indirectly)? Where will the activities take place?

Complementarity with other actions and capitalisation of previous initiatives

H2EIR is firmly grounded in, and complementary to, a set of previous **European, national and interregional initiatives** addressing hydrogen deployment, Smart Specialisation Strategies and regional innovation ecosystems. Rather than duplicating existing efforts, the project capitalises on accumulated knowledge, public-private networks and translates it into implementation-oriented activities aimed at reducing persistent territorial gaps in hydrogen investment readiness.

A key reference is the **Interreg Europe project PRHyUS**, which involves four partners participating in H2EIR (STRESS, PNEC, CENTRU and VUB). PRHyUS, which started in May 2025 and will end its core phase in April 2028, is significantly contributing to policy learning, stakeholder engagement and strategic alignment on hydrogen across participating regions. In particular, the Region of Campania acts as project coordinator, while STRESS (coordinator of H2EIR) serves as the sole technical advisor responsible for coordinating the drafting of the **Regional Hydrogen Strategy for Campania Region**. PNEC, CENTRU, VUB and STRESS are also coordinating the **Regional Stakeholder Groups** and supporting the translation of interregional policy exchange into operational regional frameworks.

H2EIR also builds on the experience of the project **HyMantovalley**, an **I3 Strand 1** flagship hydrogen valley initiative representing a mature investment-oriented ecosystem in the north of Italy. Within HyMantovalley, STRESS is responsible for replication and capitalisation activities in Campania, analysing governance models, ecosystem requirements and transferability conditions for hydrogen deployment in the south of Italy. **It is precisely through this replication-oriented work that the concept of PRHyUS emerged, ultimately leading to the development of the H2EIR proposal.**

While both PRHyUS and HyMantovalley are generating progress in policy alignment and stakeholder engagement, they have highlighted the structural gap that persists across many Less Developed Regions: the difficulty in moving from strategic planning and policy coordination to concrete, investment-ready hydrogen initiatives. **H2EIR is explicitly designed to address this transition phase.**

An additional complementarity and baseline to boost H2EIR's ambition is provided by initiatives carried out by ADRAL, the regional development agency representing the Alentejo region. ADRAL has participated in previous European initiatives focused on innovation ecosystems and hydrogen deployment, which provide an important operational foundation for the activities foreseen in H2EIR.

In particular, ADRAL has been involved in the I3 capacity-building project **Allon I3**, which focuses on strengthening innovation investment ecosystems and supporting the scale-up of clean-tech projects through cooperation between less and more developed regions. The experience gained through Allon I3 contributes directly to ADRAL's role in H2EIR WP2, particularly in structuring regional hydrogen ecosystem governance.

Furthermore, ADRAL participates in the Horizon Europe project **H2tALENT**, which is supporting the development of a large-scale Green Hydrogen Valley pilot in Alentejo centred around the strategic Port of Sines, with plans for up to 2.1 GW of electrolysis capacity. Through H2tALENT, ADRAL is actively engaged in stakeholder mobilisation, workforce development and regional hydrogen ecosystem integration, generating valuable knowledge and data on industrial demand, skills needs and infrastructure planning.

Finally, the Azores Regional Government is actively involved in several European initiatives addressing energy transition and hydrogen deployment in outermost regions, which provide a strong operational and analytical baseline for H2EIR.

In particular, the LIFE project **H2AZORES** is exploring the techno-economic feasibility of green hydrogen as a storage vector for excess renewable energy and as a solution for decarbonising local transport systems, while also assessing potential inter-island and external export routes. In parallel, the Interreg Europe project **REMOTE (2025–2029)** focuses on improving policy frameworks and governance models for energy transition in outermost territories, addressing structural challenges such as energy isolation, fossil dependency and limited system integration.

While these initiatives provide strong support in terms of policy development, technical feasibility and capacity building, they also highlight persistent structural limitations of outermost regions, including limited industrial anchoring, weak integration into European value chains and difficulties in attracting investment and industrial partners.

It is precisely the combination of the Azores and Alentejo regions one of H2EIR's enablers to move beyond the current state-of-the-art. By connecting an outermost region with strong renewable potential but limited industrial base (Azores) with a mainland region hosting large-scale hydrogen production infrastructure and industrial demand (Alentejo), the project creates the conditions for the development of **interregional hydrogen value chains linking peripheral and core territories**. This approach allows H2EIR not only to address local ecosystem gaps but also to validate a **replicable cooperation model between outermost and inland regions**, supporting knowledge transfer, industrial integration and investment pathways that would not be achievable within isolated regional initiatives.

H2EIR complements previous initiatives and stakeholder networks by shifting the focus from policy exchange to ecosystem activation, value-chain identification, business case development and investment readiness, while operationalising S3 priorities through structured methodologies, practical tools and targeted interregional cooperation. **H2EIR does not replicate these initiatives but builds on their results** and existing stakeholder ecosystems rather than starting from scratch. **By doing so, H2EIR avoids duplication of efforts, maximises complementarities and creates a mutually reinforcing dynamic between initiatives**, leveraging accumulated knowledge, industrial engagement and regional networks **to raise the level of ambition of the project**. While H2EIR capitalises on stakeholder networks, data and policy discussions already activated through other projects, the analytical outputs produced in H2EIR will also feed back into these initiatives, strengthening their strategic outputs and implementation capacity.

For example, the Regional Hydrogen Strategy currently being developed in Campania under the PRHyUS project (due by April 2028) will benefit from the ecosystem analysis, stakeholder inputs and value-chain insights generated through WP2 of H2EIR. The project therefore contributes to strengthening ongoing

regional strategy processes while simultaneously accelerating the identification of concrete hydrogen investment opportunities.

Overall, **H2EIR acts as a bridge between policy learning and implementation**, ensuring that regional ecosystems move beyond strategic alignment towards concrete investment-ready hydrogen initiatives. This will prepare regional actors to access future funding opportunities (I3 Strand 2a, Horizon Europe, the Clean Hydrogen Partnership, Innovation Fund) while strengthening their capacity to attract private investment.

This policy-to-investment pathway represents a replicable model that can be transferred to other European regions facing similar ecosystem development challenges.

A list of EU projects carried out by the organisations in the consortium and that have complementarities with the H2EIR proposal are reported in Table 3.

Tabel 3: List of projects carried out by H2EIR partners (last 5 years)

Project Name	Partner Involved	Description
PRHyUS: Promoting Renewable Hydrogen Utilization for a Sustainable and Greener Europe (Interreg Europe) 2025-2029	STRESS PNEC CENTRU VUB	PRHyUS focuses on optimising regional policies and removing regulatory barriers to accelerate industrial decarbonisation through renewable hydrogen technologies, with a focus on hard-to-abate industry and transport. As said, this work represents a strong base for the work carried out in H2EIR and allows H2EIR consortium to strongly elevate the level of ambition and impact. PRHyUS helps the project by leveraging its existing regional stakeholder networks. Furthermore, it provides inputs for the socio-territorial, policy gaps and good practices analyses across these regions. The combination with H2EIR maximises complementarities and creates a mutually reinforcing dynamic between the two initiatives.
HyMantoValley: Hydrogen Valley in the Province of Mantova (I3-2021-INV1) 2023-2027	STRESS FBK	HyMantoValley is an I3 flagship initiative supporting the deployment of a mature hydrogen valley ecosystem in Northern Italy. The project focuses on developing integrated hydrogen applications across industry, mobility and energy systems, while strengthening cooperation between industrial actors, research organisations and regional authorities. This experience provides H2EIR with practical insights on hydrogen ecosystem structuring, value-chain development and investment readiness.
APLEH2C Advancing Partnerships, Leadership, and Investments for Hydrogen in Catalonia (Horizon Europe) 2026-2031	STRESS	APLEH2C is aimed at deploying a fully integrated Hydrogen Valley in Catalonia, covering the full hydrogen value chain from renewable production to distribution and end uses in mobility, industry and energy systems. Within this project, STRESS is specifically responsible for the Project Development Assistance for Replication across the Mediterranean. This experience provides H2EIR with concrete methodological inputs on territorial replication, stakeholder engagement, policy alignment and the preparation of region-specific hydrogen development pathways.
Allon_I3: Alliance on Interregional Innovation Investments (I3 cap 2b) 2023-2025	ADRAL	Allon_I3 focuses on building innovation investment ecosystems and scaling up clean-tech projects between less and more developed regions. This directly contributes to ADRAL's leadership in H2EIR's WP2, particularly in structuring the regional ecosystem governance, facilitating interregional matchmaking, and identifying bankable investment projects.
H2tALENT: Alentejo Green H ₂ Valley (Horizon Europe) 2024-2029	ADRAL	This major Horizon Europe project establishes a Green Hydrogen Valley pilot in Alentejo, targeting 2.1 GW electrolysis capacity around the strategic Port of Sines. Thanks to this, ADRAL brings to H2EIR deep experience in regional H2 ecosystem integration, workforce development, and stakeholder alignment.

NESOI + H2AZORES (Life) 2025 - 2028	AZORES	In this project, the techno-economic feasibility of green H2 will be explored as an energy vector able to store the surplus from local renewable production, which presently is curtailed. Power-to-H2 solutions would help decarbonize the local transport sector and Power-to-H2-to-Power solutions, improving the RES share in the electricity system. Depending on the H2 potential on the island of São Miguel, the viability of two different H2 export routes will be investigated: 1) fellow island with low RES share in the energy mix (within the Azores archipelago: Santa Maria); 2) other geographical islands (for instance Madeira). The project addresses the current situation in Azores, where energy production is expensive, fossil-dependent and reliant on external supply. This project will strongly influence results on WP2 and WP3 and help AZORES in its replication activities effort in WP4.
REMOTE: Reshaping Energy Models for Outermost Territories (Interreg Europe) 2025 - 2029	AZORES	REMOTE supports policy learning and governance improvement for energy transition in outermost regions, with a focus on integrating renewable energy sources into isolated energy systems and addressing regulatory, technical and planning barriers. The project provides a structured framework for analysing regional energy policies, identifying bottlenecks in renewable integration and improving coordination between stakeholders in geographically isolated contexts. REMOTE contributes to strengthening WP2 activities by providing policy insights, governance models and evidence on regulatory and system-level barriers affecting hydrogen integration in outermost regions. These inputs support the development of more realistic and context-specific hydrogen roadmaps, while also informing WP4 replication activities by highlighting the structural constraints and enabling conditions for transferring hydrogen ecosystem models to island and peripheral territories.
OwnYourSECAP: Supporting municipalities in implementing climate action plans (Horizon 2020) 2022-2025	PNEC	This project focuses on strengthening the institutional capacity of local governments to develop and implement Sustainable Energy and Climate Action Plans (SECAPs). PNEC contributes a proven methodology for stakeholder engagement and the integration of strategic planning with practical implementation. These insights will support WP4 for municipal staff training and WP2 to design regional hydrogen governance structures, ensuring alignment between technical infrastructure and local climate objectives.
MULTIPLY: Integrated energy and transport planning at the local level (Horizon 2020) 2018-2021	PNEC	MULTIPLY utilised peer-to-peer learning to develop investment pipelines integrated with local energy and transport policies. This learning base is used in WP3 to support the development of techno-economic investment readiness pathways for hydrogen. Furthermore, the strategies for urban implementation developed in MULTIPLY will support WP4 to facilitate the replication of H2EIR's business models across other local government units, ensuring the project's outputs reach a wider municipal audience.
Ready4NetZero: Building regional capacity for energy transition and climate neutrality (EUKI) 2022-2025	PNEC	Ready4NetZero targets regional and local administrations to develop long-term energy transition strategies. The project provides H2EIR with critical expertise in institutional capacity building and international policy learning. These elements are directly aligned with WP2 and WP4, and will leverage established regional cooperation models to streamline decision-making processes for hydrogen economy deployment in Małopolskie, supporting the project's institutional governance goals.

2030CATALYSTS: Implementation of the SDGs in the regions – from monitoring to action 2025-2026	CENTRU	Developed by the JRC and the European Committee of the Regions, and supported by the European Parliament 2030CATALYSTS takes 20 different regions on board, to equip them with the necessary knowledge and tools to enhance their SDG policies. Through this participation, the Centru Region enhances its capacity to monitor SDG implementation and translate sustainability objectives into concrete regional policies and investment priorities.
Beyond EDP: Improve the RIS3 effectiveness through the management of the entrepreneurial discovery process (EDP) (Interreg Europe) 2016-2021	CENTRU	Beyond EDP was a project aiming to stimulate cross connections among regions according to the core of the European innovation strategy stimulating European businesses, knowledge institutes, and relevant partners to join forces to discover new ideas which could lead to innovation. Through this project, CENTRU brings to H2EIR additional capacity to form interregional alliances and activate policy and business collaborations.
AMETHYST: Alpine Mountain Energy Transition with Hydrogen in Small Territories (Interreg Alpine Space Programme) 2021 - 2027	FBK	AMETHYST supports Alpine regions in deploying local green-hydrogen ecosystems to accelerate decarbonisation in small mountain territories. The project strengthens public-authority capacity, develops practical support services, pilots territorial hydrogen solutions - especially in tourism areas - and integrates hydrogen into regional energy strategies. Its goal is to enable replicable, resilient, post-carbon models for Alpine communities. The project gives FBK experience on policy framework (WP2), transferable to the H2EIR consortium.
NAHV: North Adriatic hydrogen valley (Horizon Europe) 2023-2028	FBK	The North Adriatic Hydrogen Valley (NAHV) is a cross-border initiative linking Slovenia, Croatia, and Italy to build an integrated renewable-hydrogen ecosystem. It develops coordinated production, storage, distribution, and end-use projects, enabling interregional industrial decarbonisation, shared infrastructure planning, and scalable market frameworks that strengthen energy resilience and support EU-wide hydrogen-economy deployment. This project is particularly relevant for H2EIR, as it brings experience on practical interregional investment cases (WP3).
AMON: A novel system for the utilization and conversion of ammonia into electric power at high efficiency using a solid oxide fuel cell system (Horizon Europe) 2023-2027	FBK	The project integrates a comprehensive techno-economic analysis (TEA) to evaluate the feasibility and competitiveness of directly using green ammonia in SOFC systems. This includes system-level efficiency modelling, CAPEX/OPEX breakdowns, cost-reduction pathways, and benchmarking against alternative technologies. The business-case analysis maps investment models, financial risks, and market entry strategies to support AMON's go-to-market plan, identifying priority segments and commercial deployment pathways for ammonia-to-power solutions AMON brings to FBK and to H2EIR experience on H2 related techno-economic studies, useful for WP3.
HY-SPIRE: Hydrogen production by innovative solid oxide cell for flexible operation at intermediate temperature (Horizon Europe) 2024-2028	FBK	Within HY-SPIRE, the techno economic and business case analysis assesses the competitiveness of SOC based hydrogen production across different operating modes and market contexts. This includes detailed CAPEX/OPEX modelling, degradation linked cost impacts, and benchmarking against conventional electrolyzers. The business case work extends to revenue modelling from co products—such as high grade heat, oxygen, and flexibility services—and to country level market opportunity assessments that account for energy prices, industrial demand, regulatory incentives, and hydrogen deployment trajectories. These analyses support investment

		decisions and define realistic, scalable pathways for commercial uptake of SOC hydrogen systems. This project brings to FBK and to H2EIR experience on H2 related techno-economic studies, useful for WP3.
REFORMERS - Regional Ecosystems FOR Multiple-Energy Resilient Systems (Horizon Europe) 2023-2028	VUB	REFORMERS aims to provide a set of solutions enabling to analyse and manage Renewable Energy Valleys reaching the level of an independent energy supply for different highly integrated energy vectors. Most of the innovations we propose combine and integrate existing technologies (generation, storage, distribution) in novel combinations and more integrated architecture, driven by novel algorithms. The project contributes to VUB's experience brought in WP3 activities for Energy system design.
METAMORFS – AFRICA - Mapping the Energy Transition in Africa: Manufacturing Opportunities for Renewables and Future Supply Chains in Africa 2023-2024	CENER	To produce policy-oriented recommendations to strengthen Africa–Europe supply chain and manufacturing partnerships in renewable energy, including green hydrogen, by identifying investment opportunities, addressing key barriers, and supporting the objectives of the EU Global Gateway initiative. In order to carry out a comprehensive analysis, interviews were conducted with various stakeholders along the green hydrogen technology value chain, and the competitiveness of business cases was analysed in detail. The project contributes to CENER's experience brought in WP2 for value chain analysis.

Engagement with European innovation networks and alliances

H2EIR will ensure structured interaction with relevant European innovation ecosystems and policy platforms in order to align regional hydrogen ecosystem development with ongoing EU initiatives. In particular, the project will actively engage with the **S3 Community of Practice, including the Thematic Platform on Hydrogen**, by participating in thematic workshops, peer-learning activities and policy consultations related to Smart Specialisation implementation.

The project will also interact with the **Enterprise Europe Network (EEN)** and relevant Horizon Europe partnerships (e.g. **CleanH2 Partnership, European Clean Hydrogen Alliance**) through participation in sectoral events, innovation brokerage activities and thematic discussions related to hydrogen value chains and industrial decarbonisation. In addition, project partners will contribute to major European hydrogen ecosystem events such as **European Hydrogen Week** and activities of the **Hydrogen Valleys Platform** (e.g. H2 valley days), presenting project results and collecting feedback from industrial, policy and research stakeholders.

These exchanges will ensure that H2EIR builds existing knowledge and initiatives while feeding project insights back into European innovation communities. In this way, the project contributes to strengthening cooperation between regional innovation ecosystems and broader European hydrogen initiatives, avoiding duplication of efforts and reinforcing the strategic positioning of participating Less Developed Regions within European hydrogen value chains.

Innovative aspects of the project

H2EIR introduces an **implementation-oriented cooperation model** designed to bridge the persistent gap between hydrogen strategies and concrete investment initiatives in emerging regional ecosystems. Rather than producing additional analytical studies, the project combines ecosystem activation, value-chain analysis, business case preparation and investment pathway design within a single operational framework aligned with Smart Specialisation Strategies.

A key aspect lies in the **systematic involvement of Regional Stakeholder Groups throughout the project lifecycle**, ensuring that value-chain identification, business case development and policy recommendations are grounded in real industrial needs and investment opportunities. This co-creation approach strengthens the feasibility and ownership of project outcomes.

The project also **develops practical ecosystem tools** that support the transition from strategy to implementation. These include a **Permitting Compass**, designed to guide stakeholders through regulatory pathways for hydrogen projects, and a **Matchmaking Platform** facilitating collaboration among companies, technology providers and public actors across regional ecosystems. Together, these tools enable the identification of concrete cooperation opportunities and support the preparation of investment-ready initiatives.

Another innovative element is the creation of **two macro-regional hydrogen cooperation initiatives**: the **Atlantic Hydrogen Alliance (AH2A)** between Alentejo (PT), The Azores (PT) and Navarra (ES) regions, aimed at reinforcing hydrogen initiatives in Atlantic territories, and the **Central-European Hydrogen Innovation Alliance (CEHIA)** between Małopolskie (PL), Centru (RO) and Sachsen-Anhalt (DE), aimed at strengthening cooperation between emerging hydrogen ecosystems in Central and Eastern Europe. These initiatives will support collaboration in hydrogen innovation and energy transition while providing platforms for future interregional cooperation and project development.

The **Atlantic Hydrogen Alliance (AH2A)** will be formalised through a Memorandum of Understanding and will include concrete cooperation activities during the project. ADAL and the Government of the Azores will work together to establish a joint Regional Stakeholder Group, identify shared value-chain opportunities and develop common business cases and investment pathways. These activities will result in a **joint Hydrogen Roadmap**, providing a coordinated strategic framework for hydrogen ecosystem development in the two regions and creating the basis for future expansion of the alliance to other island and outermost territories.

For the **Central-European Hydrogen Innovation Alliance (CEHIA)**, activities will focus primarily on establishing the cooperation framework through the signing of an MoU between the regional authorities and defining a set of future cooperation actions. These will include coordination between the two regional hydrogen roadmaps developed in the project, knowledge exchange between the three regions and the progressive involvement of additional regions and stakeholders. The alliance will also support alignment with broader regional energy cooperation initiatives, including the **Three Seas Initiative** and emerging infrastructure planning efforts such as the **European Hydrogen Backbone**. Initially connecting the three participating regions, the alliance is conceived as an open platform that can progressively expand to other Central and Eastern European regions/provinces/municipalities interested in developing hydrogen innovation ecosystems and interregional investment initiatives, contributing to the **EU widening agenda**. As an examples, regions and municipalities participating in the PRHyUS project (from Serbia and Bosnia-Herzegovina) will be invited to join the alliance.

Innovation in H2EIR is therefore primarily **methodological, organisational and territorial**, rather than technological, in line with the objectives of the I3 Instrument. By combining ecosystem development, stakeholder mobilisation and investment preparation, the project provides a replicable model for supporting hydrogen innovation ecosystems in Less Developed Regions.

European dimension and added value

The European dimension of H2EIR lies in its capacity to **connect regional innovation ecosystems with different levels of maturity** and to **facilitate cooperation that would not emerge through isolated regional initiatives**. Hydrogen value chains, industrial decarbonisation strategies and investment pathways increasingly operate at European scale, requiring coordinated approaches across multiple territories. Through structured interregional cooperation, the project enables emerging ecosystems to benefit from the experience, methodologies and industrial networks developed in more advanced regions. This cooperation supports the identification of complementarities between regional ecosystems, facilitates knowledge transfer and strengthens the participation of regional actors in European hydrogen initiatives and innovation networks.

The project contributes to strengthening European territorial cohesion by **enabling Less Developed Regions to move from ecosystem activation to the preparation of concrete investment initiatives**. At the same time, more **mature ecosystems benefit from expanded collaboration opportunities**, new demonstration contexts and strengthened interregional value-chain connections.

Beyond the participating regions, the methodologies, tools and cooperation mechanisms developed in H2EIR are designed to be **transferable and replicable across Europe**. The project's results can support other regions facing similar challenges in developing hydrogen innovation ecosystems, improving policy frameworks and preparing interregional investment initiatives aligned with European climate and industrial strategies.

Particular attention will be given to the **replication of the cooperation model in island and outermost regions**, where hydrogen solutions can play a strategic role in improving energy resilience and reducing dependence on imported fossil fuels. In this context, the **Azores Government will lead dedicated replication activities (T4.4)** aimed at adapting the methodologies and cooperation mechanisms developed in H2EIR to island innovation ecosystems. The results will provide a **replicable model for other European island and outermost regions**, strengthening the European dimension and long-term impact of the project. The enabling conditions for this replication will be reinforced through targeted engagement with other outermost regions and island territories (e.g. Madeira, Canaries Islands), including the organisation of dedicated exchanges and the collection of expressions of interest from local governments and other stakeholders willing to explore the adoption and adaptation of H2EIR methodologies in their regional contexts.

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2. QUALITY

2.1 Concept and methodology

Concept and methodology

Outline the approach and methodology behind the project. Explain why they are the most suitable for achieving the project's objectives.

The project is built on an **interregional innovation methodology** that combines ecosystem building, macro-regional alliances, strategic S3 alignment and investment readiness to accelerate the development of hydrogen value chains in Less Developed Regions (LDRs). The approach is fully aligned with the objectives and intervention logic of the I3 Instrument, in particular with Strand 2b, which aims to strengthen interregional innovation ecosystems and enable regions to move from strategic alignment towards concrete investment initiatives.

Rather than developing abstract frameworks, the project adopts an **implementation-oriented methodology**, grounded in real regional contexts and structured around a progressive sequence of activities that move from ecosystem activation to business case development and investment pathways.

As previously mentioned, activities developed in H2EIR will not duplicate work carried out in previous projects. Instead, they will **complement and reinforce ongoing strategic processes by translating stakeholder engagement and policy learning into structured value-chain analysis and investment-oriented action plans**. In particular, H2EIR provides an operational layer that supports the transition from strategic alignment to project development.

Overall methodological approach

The methodology follows a **three-level logic** (three pillars), implemented through five tightly interconnected Work Packages:

- Ecosystem structuring and S3 alignment (WP2);
- Translation into investable business cases and investment readiness (WP3);
- Capacity building, networking and talent development (WP4).

These core technical WPs are supported throughout the project lifecycle by:

- WP1, ensuring robust coordination, quality control and risk management;
- WP5, ensuring communication, dissemination, exploitation and long-term policy uptake.

This structure ensures continuity between **strategic analysis, operational design and investment-oriented outcomes**, avoiding the common fragmentation between policy planning and implementation.

From ecosystem mapping to S3-aligned roadmaps (WP2)

The first methodological pillar operates as an **“Acceleration Funnel”**, moving from broad ecosystem activation to the identification of specific, viable business cases in the five Less Developed Regions (Campania, Alentejo, The Azores, Małopolskie and Centru).

The process begins with the **activation and structuring of regional ecosystems** through the formalisation of the three cooperation initiatives established in the project (one interregional S3 partnership and two macro-regional hydrogen alliances). Regional Stakeholder Groups created in previous initiatives will be reactivated and expanded, while additional regional and interregional stakeholder platforms will be established where necessary in order to ensure broad participation of ecosystem actors. The project then applies a **shared quantitative and qualitative methodology** (first methodological output - task 2.1) for mapping and designing regional and interregional hydrogen value chains. This approach evaluates both existing (traditional or emerging) and new value-chain configurations. The methodology integrates several analytical tools, including:

- **A multi-criteria assessment matrix** to evaluate industrial capacity, technology readiness and renewable energy infrastructure;
- **Gap analyses** focused on value-chain completeness, regulatory frameworks and institutional coordination;
- **A Social Territorial Analysis** to assess early social acceptance and long-term territorial viability.

A key methodological feature is the application of the **Entrepreneurial Discovery Process (EDP)** through structured “Discovery Workshops”. These sessions ensure the continuous involvement of Quadruple Helix actors (public authorities, SMEs, clusters, academia and civil society) in each participating territory. Regional stakeholder groups therefore act both as **data providers and co-design platforms**, validating analytical findings against real market conditions.

The results are consolidated into **S3-aligned Regional Hydrogen Roadmaps (Action Plans)**, complemented by actionable **Policy Mix Recommendations** addressing non-financial barriers such as permitting procedures, regulatory frameworks and hydrogen certification. As the final step of the funnel, this pillar identifies the **preliminary high-potential business cases** that will proceed to the techno-economic optimisation and investment readiness phase in WP3.

Within this framework, Alentejo and the Azores will be treated as a single Atlantic macro-region, allowing the project to build on existing hydrogen initiatives and strengthen emerging cooperation dynamics under the Atlantic Hydrogen Alliance. This approach will support the identification of shared value-chain and business opportunities, the preparation of joint strategic priorities and the involvement of outermost regions, **widening EU hydrogen cooperation towards Atlantic and island territories and strengthening the role of these regions within emerging European hydrogen value chains**.

By contrast, the Less Developed Regions participating in the **Central-European Hydrogen Innovation Alliance (Małopolskie and Centru)** will initially develop their value-chain analyses and roadmaps at regional level, reflecting the different maturity levels of their ecosystems. Nevertheless, synergies between the two territories and with Sachsen-Anhalt will be explored during the project, and future cooperation priorities will be outlined in the **MoU establishing the alliance**.

From strategic priorities to investable business cases (WP3)

The second pillar translates ecosystem and roadmap outputs into **concrete, investment-ready hydrogen business cases**. The project provides a common analytical backbone that allows regions at different maturity levels to design robust projects capable of attracting public and private capital. Drawing on advanced methodological expertise from research and technology organisations (FBK, VUB) and industrial clusters (STRESS, HYPOS), the project develops a **shared business case modelling framework** (second methodological output – task 3.1 and 3.2) applicable across different regional contexts and maturity levels. This framework covers:

- Technical and economic feasibility, including demand–supply matching, infrastructure needs, and cost trajectories.
- Regulatory and permitting requirements, with a focus on identifying bottlenecks and region-specific compliance pathways.
- Risk allocation and financing structures, supporting robust investment propositions with regional development agencies and municipal networks.

Each region (3 LDRs + 1 Atlantic macro-region including Alentejo and Azores) applies this framework to design and assess **region-specific business cases**, directly linked to identified gaps and opportunities emerging from WP2. The assessment emphasises:

- Alignment with S3 priorities,
- Scalability and replicability beyond the project duration,
- Identification of appropriate funding mixes (public and private),
- Preparation of follow-up investment actions and joint proposals to major EU funding instruments and structured engagement with regional development agencies and municipal networks.

In other words, utilising the modelling framework, we will determine the optimal sizing, configuration, and operation of regional hydrogen assets (e.g., electrolyzers, storage, and transport infrastructure). The analysis will simulate various scenarios to assess technical feasibility and economic viability, balancing capital expenditure (CAPEX) and operational costs (OPEX) against carbon reduction targets. The results of this task (task 3.2) will serve as the technical foundation for the Investment Guidelines and for the preparation of an investment projects pipeline (Strand2a initiated proposals) backed by rigorous, evidence-based system designs.

A distinctive methodological element is the development of a **Permitting Compass** and a structured **Stakeholder Matchmaking Tool**, reducing regulatory uncertainty and facilitating connections between regional project promoters, technology providers and off-takers.

The Permitting Compass, as further explained in the work plan section (task 4.4), is an online application which will help stakeholders to understand how to obtain permits for construction projects, related to hydrogen production, transport, or storage. The tool will reduce regulatory uncertainty and reservations

about constructing hydrogen facilities. It will be created in the English language, taking into account the specific permitting pathways for each involved less developed region and then it will be translated in the four languages of H2EIR LDRs. Finally, it will be uploaded to the H2EIR website.

The Matchmaking Tool will help to promote hydrogen projects and to find partners along the relevant value chain. This new feature shall act as an online platform on H2EIR website, on which users and stakeholders can present their hydrogen-related products, services, and or advertise requests for finding partners (e.g. a project consortium).

Capacity Building, Networks and Talent as Structural Enablers (WP4)

The third pillar provides the enabling framework necessary to ensure that the analytical and investment-oriented outputs of WP2 and WP3 can be effectively implemented, sustained over time and replicated elsewhere. While the earlier Work Packages focus on ecosystem structuring and business case development, **WP4 strengthens the institutional capacities, interregional cooperation channels and human capital foundations** required for long-term hydrogen ecosystem development in Less Developed Regions.

The methodological approach of WP4 is built on four interlinked axes:

- Structured interregional learning;
- European strategic positioning;
- Integrated talent development;
- Effective replication and transferability.

First, WP4 **establishes a continuous capacity-building dynamic embedded within the project lifecycle**. Knowledge transfer activities are directly linked to the needs emerging from ecosystem mapping and business case design. Rather than generic training interventions, learning activities are demand-driven and connected to concrete implementation objectives. They are primarily integrated into the five consortium meetings, complemented by virtual exchanges. This ensures that peer learning, technical discussions and policy exchanges directly inform roadmap refinement and business case maturation.

Second, WP4 **strengthens the strategic positioning of participating regions within European hydrogen and innovation ecosystems**. Through structured engagement with relevant EU-level platforms and networks (chapter 1.3), partners gain access to regulatory developments, industrial trends, funding opportunities and partnership initiatives. Crucially, this engagement is not conceived as a visibility exercise but as a knowledge feedback mechanism. Insights and cooperation opportunities identified at European level are systematically fed back into the Regional Hydrogen Roadmaps developed under WP2 and into the investment preparation activities under WP3. This dynamic alignment reinforces coherence between regional S3 priorities and evolving European hydrogen policies and value-chain developments.

Third, WP4 **integrates a structured approach to skills development, talent attraction and retention**. Recognising that hydrogen ecosystem transformation depends on qualified human capital, the project assesses regional skills gaps and future workforce needs linked to hydrogen value chains. The analysis builds on ecosystem findings from WP2 and on the technical and operational requirements identified in WP3 business cases. The resulting recommendations are formalised as dedicated annexes to the S3-aligned Regional Hydrogen Roadmaps, ensuring that talent strategies become integral components of regional Action Plans rather than isolated outputs. A distinctive feature of this approach is the organisation of **Talent Showcases** during the five consortium meetings. These sessions provide visibility to regional training initiatives, research actors, SMEs and emerging professionals active in hydrogen-related domains. They create direct connections between talent ecosystems and project development activities, foster interregional cooperation and strengthen the attractiveness of LDR hydrogen ecosystems.

Fourth, WP4 **ensures the replication and transferability** of the project's methodologies, cooperation mechanisms and ecosystem development tools beyond the participating regions. Building on the experience of the Atlantic Hydrogen Alliance and on the involvement of the Azores Government, dedicated replication activities will adapt the approaches developed in H2EIR to island and outermost regions, where hydrogen solutions can contribute to energy resilience and decarbonisation. These activities will focus on transferring the project's methodological framework to new territorial contexts. By testing the approach in Atlantic island territories and documenting the replication process, the project will generate practical guidelines and cooperation models that can be applied by other European regions interested in developing hydrogen innovation ecosystems. The enabling conditions for this replication will be reinforced through targeted engagement with other outermost regions and island territories (e.g. Madeira, Canaries Islands), including the organisation of dedicated exchanges and the collection of expressions of interest from local governments and other stakeholders willing to explore the adoption and adaptation of H2EIR methodologies in their regional contexts.

By embedding capacity building, European positioning, talent development and replication within the project architecture, **WP4 ensures that hydrogen ecosystem strengthening goes beyond analytical planning and financial structuring. It establishes the institutional and human capital conditions necessary for sustainable implementation, investment mobilisation and long-term territorial convergence.**

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2.2 Consortium set-up

Consortium cooperation and division of roles (if applicable)

Describe the participants (Beneficiaries, Affiliated Entities and Associated Partners, if any) and explain how they will work together to implement the project. How will they bring together the necessary expertise? How will they complement each other?

In what way does each of the participants contribute to the project? Show that each has a valid role and adequate resources to fulfil that role.

Note: When building your consortium you should think of organisations that can help you reach objectives and solve problems.

The consortium brings together **9 organisations from 7 EU Member States**, covering five Less Developed Regions (including one outermost region), plus one Transition and three More Developed Regions that provide advanced technical and methodological support. It combines **industry driven consortia, regional governments and S3 authorities, regional development agencies, municipal networks, hydrogen clusters, universities and research organisations**, ensuring strong representation of the **quadruple helix** and a balanced coverage of policy, industry and research perspectives. Partners are organised so that **LDR actors** (STRESS, ADRAL, AZORES, PNEC, CENTRU) lead on ecosystem activation, roadmaps and business cases in their territories, while **technical and methodological** partners (FBK, CENER, HYPOS, VUB) provide common frameworks, tools and cross-regional expertise.



Figure 1: Consortium distribution across Europe

This structure ensures that methodologies are not developed in the abstract, but co-designed with and tested in real regional contexts, with a clear path towards **S3 alignment, investment readiness and policy uptake**.

The cooperation model is built around 5 Work Packages led by 4 participants: **STRESS** (WP1, WP4), **ADRAL** (WP2), **FBK** (WP3) and **PNEC** (WP5).

Each partner's role is clearly defined and linked to their core competencies:

- STRESS (IT) – Innovation cluster / Coordinator, networking and capacity building lead (LDR)**
 Sviluppo di Tecnologie e Ricerca per l'Edilizia Sismicamente Sicura ed Eco-Sostenibile s.c.a.r.l. is a public-private industry driven technological district with extensive experience in renewable energy, hydrogen technologies, integrated energy systems and EU project management, with a particular focus on the built environment. Within H2EIR, STRESS acts as project coordinator and leads WP1 (Project Management & Coordination) and WP4 (Networking and Capacity Building), ensuring effective coordination among partners throughout all phases of project implementation. STRESS supports the structural strengthening of regional ecosystems by facilitating capacity-building actions aimed at improving stakeholder skills in the hydrogen sector, fostering talent attraction and retention mechanisms, and supporting partners in engaging with key European hydrogen networks. STRESS also plays a central role in WP2, particularly in T2.1 – Ecosystem Activation and Stakeholder Group Setup, and contributes to WP3, notably in T3.4 – Investment Pathways, as well as to the coordination of T5.3 – Exploitation Strategy in WP5. Through these activities, STRESS ensures methodological coherence across work packages and activates the regional stakeholder ecosystem in Campania, supporting the development of local hydrogen value chains and facilitating the connection between emerging business cases, real investment opportunities and relevant policy frameworks.

- **ADRAL (PT) – Regional development agency / Ecosystem and S3 alignment lead (LDR)**
 As Regional development agency for Alentejo, key LDR representative and active participant of the Atlantic Hydrogen Alliance, ADRAL leads WP2, coordinating stakeholder activation, benchmarking and S3-aligned roadmap development in the five LDRs. It brings experience from previous I3 projects and acts as a bridge between regional authorities, SMEs and EU-level initiatives. Apart from its leadership in WP2, ADRAL - in close collaboration with AZORES - will apply the project's methodologies for business cases and investment readiness in Alentejo (PT) and to the Atlantic macro-region. ADRAL also has an important role in WP4 and WP5. In WP4 (Capacity Building and Networking), ADRAL will host a key interregional consortium meeting in Alentejo, taking responsibility for organising a local green hydrogen study visit and co-facilitating capacity-building workshops alongside the coordinator. Furthermore, ADRAL - in collaboration with AZORES - will drive the local stakeholder engagement required to identify workforce needs and hydrogen skill gaps, feeding critical data into the project's talent attraction strategies. In WP5 (Communication, Dissemination & Exploitation), ADRAL will ensure the effective dissemination of project results within the Portuguese ecosystem. Leveraging its direct institutional link to the regional Managing Authority (CCDR Alentejo), ADRAL will guarantee the long-term policy uptake and exploitation of the S3 Hydrogen Roadmaps. Backed by its coordinating role in the ongoing *Allon_I3* project and its strategic involvement in the *H2tALENT* Green Hydrogen Valley, ADRAL possesses the adequate resources, network, and institutional weight to fully execute its pivotal role in the consortium.
- **AZORES (PT) – Regional government and S3 authority – replicability lead (outermost LDR)**
 The Azores partner, Regional Directorate for Science, Innovation and Development, is the regional governmental entity, dependent from the Vice-Presidency of the Regional Government of the Azores responsible for ensuring the political, legal and financial conditions to boost the Azores as a knowledge-based society, leveraged on the foundations of fundamental and applied research and innovation, and also acts as Intermediate Body of the RSO 1.1 (Developing and strengthening research and innovation capacities and the uptake of advanced technologies) of the Açores 2030 Operational Program, financed through ERDF, and as regional S3 authority.
 As a public authority responsible for science, innovation and Smart Specialisation in the Azores — an oceanic archipelago and one of the EU's Outermost Regions — RDSID plays a central role in supporting research, development and innovation activities, as well as in fostering technical know-how acquisition and transfer. Its areas of intervention include environmental protection, ecosystem restoration, energy sustainability, and the circular blue and green economy, all of which are key priorities of the regional Smart Specialisation Strategy (RIS3-Açores), for which RDSID is responsible in terms of coordination, implementation and monitoring. As a governmental entity, RDSID benefits from established institutional linkages and direct communication channels with key regional stakeholders, including the Regional Directorates for Energy, Environment and Climate Action, as well as research centres, energy operators and industrial actors.
 Within H2EIR, the Azores will actively contribute to all Work Packages, collaborating closely with ADRAL to support the identification of interregional value chains and business cases linking island and mainland territories. The region will also contribute to capacity-building and talent attraction activities at local level. The Azores will play a leading role in WP4, in particular through the coordination of Task 4.4, focusing on the replication and transferability of H2EIR methodologies in island and outermost regions.
- **PNEC (PL) – Municipal network / Communication and dissemination lead (LDR)**
 The Association of Municipalities Polish Network “Energie Cités” represents local authorities and actors in Małopolskie and other regions across Poland. It leads WP5 on communication and dissemination, leveraging its strong outreach capacity towards local authorities and citizens. Being one of the five LDRs, will apply the project's methodologies for ecosystem building, business case design and investment readiness in its own region, but will also contribute to the capacity-building programme, study visits, and organising workshops for local authorities, leveraging its expertise in stakeholder engagement. PNEC will also play a key role in ensuring the effective transfer and uptake of project results by local authorities, translating technical outputs into accessible formats and policy-relevant messages. In addition, it will facilitate connections with municipal networks and civil society at national and European level, supporting wider dissemination, public awareness and social acceptance of hydrogen technologies and of H2EIR approaches.
- **CENTRU (RO) – Regional development agency-Body governed by public Law (LDR)**
 The Regional Development Agency Centru is responsible for coordinating and implementing regional development policies in the Centru Region of Romania, which includes the counties of Alba, Braşov, Covasna, Harghita, Mureş, and Sibiu, with approximately 2.5 million inhabitants. Strategic decisions for the region are taken by the Regional Development Board Centru, the region's decision-making body composed of representatives from the local and county councils of the six counties. RDA Centru coordinates the Regional Innovation Consortium of

the Centru Region, an advisory structure supporting the regional decision-making body on innovation topics and endorsing the RIS3 strategy. The consortium brings together actors from innovation and technology transfer support infrastructures, public administration, research and education organisations, the business community, and civil society. RDA Centru is also a member of the National Committee for Strategic Coordination of Smart Specialization, alongside national organisations responsible for innovation, research, and development policies in Romania. The Centru Region was selected by the European Commission to receive the Regional Innovation Valleys (RIVs) label, an initiative under the New European Innovation Agenda aimed at strengthening innovation ecosystems and cooperation between more and less innovative regions. As an RIV-labelled region, Centru commits to strengthening its Research and Innovation ecosystem, aligning policies and investments with EU priorities, and promoting collaboration between regions with complementary smart specialisations. Within the project, RDA Centru represents the regional partner, ensuring alignment with regional S3 priorities, applying project methodologies in the Centru Region, and supporting policy uptake, business case development, and investment readiness. The proposed H2EIR project team is part of the Regional Policies and Programs Unit. This unit collaborates with the Support for Business Environment and Investment Promotion Office and the Smart Specialization Office to ensure synergies between RIS monitoring, RIS implementation actions, and activities that strengthen the regional innovation ecosystem. The project team will also cooperate with the Management Authority and Intermediate Body Units to create synergies with calls available under the Centru Region Programme.

- **HYPOS (DE) – Hydrogen industrial cluster and value-chain expert (TR)**

HYPOS is an association representing a major hydrogen cluster with strong ties to German industry, infrastructure operators and technology providers. HYPOS contributes to all WPs, supporting LDRs and especially WP3, by leading Task 3.4 and in sharing expertise on the implementation of an approval guide (Permitting Compass) and a Matchmaking Tool, ensuring that regional business cases are grounded in real industrial demand and that LDR partners benefit from state-of-the-art H2 know-how.

FBK (IT) – Research institute / Business cases & investment readiness lead (MDR)

A leading Italian research institute with strong expertise in sustainable energy systems and hydrogen. FBK's Sustainable Energy Centre drives applied research across the hydrogen value chain, developing advanced electrolysers, fuel-cell systems, and safe storage and distribution technologies. Its Hydrogen Technologies Unit designs components, prototypes, and pilot-scale platforms for heavy-duty mobility and industrial decarbonisation. Through EU programmes such as IPCEI Hy2Tech, FBK accelerates deployment of competitive renewable hydrogen, supporting Europe's transition to resilient, zero-carbon energy systems. FBK leads WP3, developing and validating the common business case methodology, supporting value-chain initiative design, and guiding LDR partners through feasibility assessments and investment readiness planning.

- **VUB (BE) – University / Innovation systems expert (MDR)**

Vrije Universiteit Brussel (VUB) participates through the EVERGi research unit, specialised in innovative energy solutions for the sustainable energy transition. EVERGi has strong expertise in multi-energy system modelling and simulation, life cycle and sustainability assessment, stakeholder engagement, and sustainable business model evaluation, enabling a holistic approach to energy system analysis. Hydrogen is addressed transversally across EVERGi's activities, covering its assessment, system integration, and implementation as a decarbonisation vector, as well as hydrogen value-chain and ecosystem analysis. EVERGi currently coordinates the REFORMERS project, the largest Renewable Energy Valley funded under Horizon Europe, and has been actively involved in hydrogen value-chain mapping in cooperation with Hydrogen Europe and the Japan Hydrogen Association. In the H2EIR project, VUB main role is to support methodology definition for WP2 and WP3, with a focus on Task 3.1 (business case selection and KPIs definition) and leading Task 3.2 (techno-economic optimisation of selected cases).

- **CENER (ES) – Research Centre / Hydrogen value chain expert (MDR)**

CENER, the Spain's National Renewable Energy Centre, is a leading research and technological institution specialised in the development and promotion of renewable energy technologies. CENER conducts cutting-edge R&D in areas such as wind energy, solar power (both photovoltaic and thermal), bioenergy, energy storage (both thermal and electric), grid integration and Hydrogen, providing not only R&D&I services, but quality testing, component certification, and technical assistance. Regarding H2EIR project, the involved department will be the Department of Grid Integration, Electric Storage and Hydrogen. This Department has a wide expertise in the entire green or renewable hydrogen value chain, including techno-economic studies, plant designs and control systems. Within H2EIR project CENER main role is to support WP2 leading Task 2.2 (Value Chain mapping and design) and WP3, focusing on identifying investment pathways (Task 3.3).

2.3 Project teams, staff and experts

Project teams and staff <i>Describe the project teams and how they will work together to implement the project. List the staff included in the project budget (budget category A) by function/profile (e.g. project manager, senior expert/advisor/researcher, junior expert/advisor/researcher, trainers/teachers, technical personnel, administrative personnel etc. — use the same profiles as in the detailed budget table, if any and describe briefly their tasks. Provide CVs of all key actors (if required).</i>		
Name and function	Organisation	Role/tasks/professional profile and expertise
Nicola Di Giulio Project Manager and coordinator	STRESS scarl	Nicola Di Giulio (M), Ph.D., is Hydrogen and Renewables Project Manager at STRESS s.c.a.r.l., with more than 15 years of experience in hydrogen technologies and in the coordination of national and international project proposals. He has played a central role in securing funding and structuring the hydrogen-related initiatives developed within STRESS, and currently acts as project manager for STRESS in several EU-funded hydrogen projects, including PRHyUS (Interreg Europe), HyMantoValley (I3 Strand 1) and APLEH2C (Clean Hydrogen Partnership). He has developed a strong understanding of the regional, national and European policy and regulatory frameworks for hydrogen, as well as of the key gaps, challenges and opportunities related to the deployment of the hydrogen economy. He has also coordinated the European Hydrogen Task Group within ECTP – the European Construction Technology Platform, contributing to the development of strategic discussions on hydrogen integration in the built environment and stationary energy systems. Within H2EIR, he will coordinate the project activities throughout the entire implementation period, ensuring strategic alignment between work packages, effective interregional cooperation and the overall consistency of the project's methodology and outputs.
Angelo Moreno Senior H2 expert	STRESS scarl	Angelo Moreno (M) is senior H2 expert at STRESS s.c.a.r.l. with more than 30 years of experience in hydrogen technologies and in the coordination of national and international projects. He has been member of several executive committees at European and international level such as FCH-JU, IEA implementing agreements respectively on hydrogen and fuel cells, IPHE, International Partnership of hydrogen economy. He has been the president of H2IT, the Italian Hydrogen Association for several years. Nowadays he is member of ExCo and of the Scientific committee of H2IT. He is involved in all STRESS hydrogen projects including PRHyUS (Interreg Europe), HyMantoValley (I3 Strand 1) and APLEH2C (Clean Hydrogen Partnership) related to the deployment of the hydrogen economy.
Carmine Pascale EU funding expert	STRESS scarl	Carmine Pascale (M) graduated in Civil Engineering at the University of Naples "Federico II" in 1995. He has been cooperating with the University of Naples and with CNR (Italian National Research Council) since 1997, working on both research activities and consultant services for public administrations. Since 2003 he has been involved in research projects focusing on risk and sustainability assessment. He currently coordinates the European Research activities at STRESS Scarl and is involved in various European research projects, including initiatives on hydrogen, renewable technologies and CO2 capture.
Alberto Zinno Senior expert and managing director	STRESS scarl	Alberto Zinno (M) graduated, with honours, in Civil Engineering at the University of Naples Federico II in 2007. He earned a PhD in Materials and Structures at the University of Naples Federico II in 2011. Since 2012 he has been working, as a senior expert, at STRESS in national and European research projects focusing on sustainable

		<p>constructions and systems. In 2024, he was appointed Managing Director of STRESS, coordinating the activities of the whole consortium. He directly participated in the establishment of a task force on permitting procedures in H2IT, the Italian Hydrogen Association, that involved discussion with nation Fire Brigades and finally led to the writing of a national hydrogen law for H2 production via electrolysis.</p>
Rossella Volpe Communication manager	STRESS scarl	<p>Rossella Volpe (F) graduated in Architecture at the University of Naples Federico II. Since the establishment of STRESS, she has been working as Senior Researcher, Project Manager and Communication Manager in national and European research and innovation projects focusing on risk, safety and sustainability assessments. She has over 20 years of experience in project proposal writing, project planning and management, and in the coordination of research, experimental and dissemination activities. She has also significant experience in technical-scientific communication, stakeholder engagement, and dissemination of project results at national and international levels.</p>
Adriana Pacifico Senior researcher	STRESS scarl	<p>Adriana Pacifico (F) graduated in Civil Engineering at the University of Naples Federico II in 2018. She earned a PhD in Seismic Risk at the University of Naples Federico II in 2022. Since 2022 she has been working, as a senior researcher, at STRESS in national and European research projects focusing on sustainable systems and constructions. She is project manager for STRESS in COREU, an EU funded project on sustainable CO2 value chains and participates in different EU initiatives related to hydrogen.</p>
Daniel Janeiro Project Manager	ADRAL	<p>Daniel Janeiro (M) is the Coordinator of ADRAL's External Relations and Foreign Investment Department, with over 13 years of experience managing regional, cross-border, and European projects (I3, Interreg, Horizon Europe). He coordinates the "Invest in Alentejo" initiative, serves as Vice-President of EURADA, and represents ADRAL in Brussels, ERRIN, and IURC. Crucially, Daniel played a central role in both the successful application phase and the current technical execution of the landmark Horizon Europe H2TALENT project (establishing a 2.1 GW Green Hydrogen Valley in Alentejo). In H2EIR, Daniel will be the Lead for Work Package 2 (WP2). Drawing on his direct, hands-on expertise in structuring complex hydrogen ecosystems, he will drive regional governance, orchestrate stakeholder engagement, and oversee the co-creation of the S3-aligned Regional Hydrogen Roadmaps.</p>
Maria Mendonça Senior Project Manager	ADRAL	<p>Maria Mendonça (F) brings over 20 years of robust experience in project management, training coordination, and capacity building. She has extensive experience managing large-scale innovation agendas (PRR/RRF) and European cooperation projects (Interreg, Compete 2020), as well as organising major engagement events via Europe Direct. In H2EIR, Maria will play a pivotal role in WP2 and WP4, facilitating the regional Discovery Workshops, guiding the value-chain mapping processes, and supporting the talent attraction and skills gap analysis activities.</p>
Sofia Cardoso Junior Project Expert	ADRAL	<p>Sofia Cardoso (F) holds a degree in Economics, a postgraduate degree in Project Management, and is completing a Master's in Management Control. She has hands-on experience in the technical and financial execution of regional projects and in organising citizen and stakeholder engagement events (Europe Direct). In H2EIR, Sofia will provide vital technical support for WP2 data collection (feeding the multi-criteria matrices) and assist in the logistical and operational organisation of the WP4 study visits and capacity-building workshops hosted in the Alentejo region.</p>

Luís Portalegre Financial and Administrative Manager	ADRAL	Luís Portalegre (M) holds a degree in Management and serves as the Administrative and Financial Coordinator at ADRAL. He has over 15 years of solid experience in the financial control, auditing, and accounting of complex EU-funded projects across multiple programmes (Horizon 2020/Europe, Interreg, PRR, Portugal 2020/2030). In H2EIR, Luís will be responsible for ADRAL's financial reporting, strict budget control, and overall administrative management, ensuring full compliance with the I3 instrument regulations.
Mónica de la Cerda Managing Director	AZORES	Mónica holds a degree in Journalism. Services Director since 2017, formerly Chief of Division, with more than 25 years of experience in public service, with a wide and solid knowledge in public affairs and policy, coordinated the development and implementation of several regional policy and strategical instruments and financial mechanisms related with science and technology, including communication strategies and dissemination and citizen science programs. Overall coordination of the Azores participation, involvement of regional government level stakeholders and support to the development of the project activities under Azores responsibility.
Francisco Pinto Project manager	AZORES	Francisco holds a degree in Biology/Geology and a Master degree in Island Ecology and Evolution. Senior technician with more than 25 years of experience in public service and involved as Financial Manager, Regional Representative, Steering Committee Member and Member of the Coordination Team of several international projects of various natures, as RD&I projects, ERA-Nets and Tenders, co-funded by different EU funding mechanisms, including the "Mystic Seas" award-winning project. Managing of the administrative, financial and technical aspects of the Azores participation in the project, involvement of industry and research stakeholders, and development of the project activities under Azores responsibility, especially the leadership of task 4.4.
Pedro Garcia Communication officer	AZORES	Pedro Garcia is a Communication Officer at the Regional Directorate of Science, Innovation and Development (Azores) and is currently a doctoral student in the field of Science Communication, at NOVA University Lisbon. He concluded his Master Programme in Scientific Culture and Outreach in Science in 2020, at the University of Lisbon, focusing on themes like science communication and disinformation, and public participation in science. With 14 years of experience as a Science Communicator, Pedro Garcia was responsible for Santana's Astronomical Observatory - Azores' communication strategy until 2024 and was a member of SciComPt's governing body from 2021 to 2023, joining the annual congress' organization and communication team, document production and communication and dissemination.
Anna Jaskuła Executive Director	PNEC	Anna Jaskuła (F) is Executive Director of PNEC with over 20 years of experience in managing international climate and energy projects. She specialises in local energy policies, energy efficiency, and coordinating cooperation between Polish municipalities and European networks.
Izabela Kuśnierz Project Manager	PNEC	Izabela Kuśnierz (F) is an Experienced Project Manager, responsible for the implementation of international initiatives. Her expertise includes stakeholder engagement, organisation of capacity-building workshops for local authorities, and managing communication and dissemination activities within European projects.
Ioan Levitchi Director of the Regional	CENTRU	Ioan Levitchi (M) is the Regional technical expert responsible for supporting the implementation of project work packages at regional level, providing specialised knowledge and technical guidance to strengthen regional innovation ecosystems and enhance stakeholder

Policies Department		capacity for interregional innovation investments. As director of the Regional Policies Department at RDA Centru (previous roles include Head of Smart Specialisation Unit and Head of Project Monitoring Unit) is in charge of: designing innovation and smart specialisation actions and guidelines within the 2021–2027 Regional Operational Programme for the Centru Region, designing grant schemes, financial instruments, and state-aid and non-aid measures supporting innovation, coordinating the elaboration of the Research and Innovation Strategies for Smart Specialisation (RIS3) for the Centru Region, coordinating the implementation and monitoring of RIS3, designing and coordinating the RIS3 governance framework in the region, organising and coordinating the 4-helix EDP and the RIS3 project pipeline development process.
Gabriela Tarau Head of Project Development and Interregional Cooperation Office	CENTRU	Gabriela Tarau (F) has experience in project management and interregional cooperation through her position as Head of the Project Development and Interregional Cooperation Office. In this role, she has been responsible for implementing projects and monitoring their progress and deliverables, contributing to project reporting and administrative coordination, and developing applications for EU-funded projects. She has also been actively involved in the implementation of interregional cooperation projects and other EU-funded initiatives, while monitoring and identifying relevant funding opportunities for regional stakeholders. In addition, she promotes EU funding programmes and supports partnership development among regional and European stakeholders. Gabriela also serves as a consultant within the Enterprise Europe Network (EEN) Office of RDA Centru. Within H2EIR project, Gabriela will be in charge of coordinating the project at the regional level.
Oana Rogoz Technical Expert	CENTRU	Oana Rogoz (F) is a Regional technical expert supporting the implementation of project work packages at regional level. Graduate of Biochemical Engineering at Babes-Bolyai University in Cluj-Napoca, with a MSc. Degree in Applied Biotechnologies from the University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca. She has been working in different fields including: IP Analysis, Primary market research, medical writing and coordination, funding. She is responsible for promotion of regional economic potential among European actors interested in developing entrepreneurial initiatives in the Centru Region; Consultant for internationalisation services and drafting of business profiles, facilitation of company missions and brokerage events, provision of advisory services for SMEs.
Mihai Iuga Engineer	CENTRU	Mihai Iuga (M) is an expert at the Regional Development Agency Centru (ADR Centru) with over 10 years of experience in energy efficiency projects, including hydrogen (H ₂) initiatives. He supports regional development and EU-funded programmes and has worked as an independent project evaluator. He has extensive experience in implementing H2 projects and preparing technical documentation. Within H2EIR project Mihai will be technical expert being responsible for supporting the implementation of project work packages at regional level, providing specialised knowledge and technical guidance to strengthen regional H2 innovation ecosystems and enhance stakeholder capacity for interregional cooperation and investments
Andreas Bauer Managing Director	HYPOS	Andreas Bauer (M), is a studied automotive engineer and has spent most of his career in the automotive industry until he decided to expand mobility transformation projects to other areas of the H ₂ applications. He has now extensive experience in advising and supporting the local economy on issues relating to hydrogen along the entire value chain and a broad network from business, science, and politics.

Steffen Ziemann Project and cluster manager	HYPOS	Steffen Ziemann (M) holds a PhD in Chemistry and works in project and cluster management at HYPOS e. V., where he is responsible for the development and implementation of hydrogen projects, particularly in the chemical industry and in the field of e-fuels. Prior to this, he gained relevant experience in research and project work in energy and process engineering. He has strong expertise in knowledge transfer, digitalization, and stakeholder networking within the hydrogen economy and contributes to the development of practical solutions for the energy transition. He supports the project as a coordinator and serves as the interface to the HYPOS network.
Janet Scholl Network Manager	HYPOS	Janet Scholl (F) works in association and network management at HYPOS e. V., where she supports the coordination and further development of the hydrogen network and its members. She brings extensive experience in communication, marketing, and organizational development, with previous roles including leadership positions in marketing and association management. With her strong background in stakeholder engagement and network coordination, she contributes to connecting industry, research, and other partners within the hydrogen ecosystem.
Matteo Testi Senior research and head of units (HyRES)	FBK	Dr. Matteo Testi (M) holds the PhD in Physics at the University of Trento (2017) on novel materials and methods for solid-state hydrogen storage technologies. He holds a master's degree in materials science from the Università Ca' Foscari of Venice (2012). He is involved in different European projects. For dedicated laboratories in FBK, he designs and develops (hardware and control software) specific instrumentation for characterizing microscale samples for hydrogen storage applications. He contributes and supports the definition of the scenario for hydrogen mobility. Currently, he is the head of the HYRES unit (Hydrogen Technologies and Resilient Energy Systems) and the technical referent for hydrogen and fuel cell activities in the SE centre of FBK, overseeing the types of equipment and the realisation of auxiliary infrastructure for experimental activities. He coordinated two European projects (AMON and SWITCH) and the activity of the Hy2Tech project in the IPCE framework.
Sookyung Kang Hydrogen researcher	FBK	Sookyung Kang (F) is an experienced energy analyst for over 5 years, currently focusing on hydrogen and its derivatives, with a strong background spanning technical, economic, financial, policy, regulatory, and environmental analysis. These work centres on connecting diverse perspectives across the energy value chain to support market creation and business development, including EU-funded projects (Horizon Europe, Innovation Fund, and IPCEI). In H2EIR, she will play an instrumental role in WP3, contributing to the definition and development of the business model for LDRs, as well as strategic investment pathways, and will also support WP2 through regional ecosystem mapping and assessment.
Yasaman Nosrat Tajoddin Hydrogen researcher	FBK	Yasaman Nosrat Tajoddin (F) is a researcher at FBK since August 2024. She is involved in several EU-funded initiatives, including two large hydrogen valley projects: the North Adriatic Hydrogen Valley (NAHV) and the Hydrogen Industrial Inland Valley, as well as the NHyRA project. Her research focuses on the life cycle sustainability assessment of hydrogen technologies, and the development of greenhouse gas (GHG) emissions models for hydrogen value chain. She holds a master's degree in Energy Engineering from the University of Padova and a bachelor's degree in Mechanical Engineering. Her expertise includes energy system modelling and optimization, sustainability assessment, and hydrogen value chains. She also contributes to technical consultancies, and eco-design

		initiatives supporting the development of sustainable hydrogen technologies.
Michele Urbani Hydrogen researcher	FBK	Michele Urbani (M), Ph.D., is a Researcher within the Hydrogen Technologies and Resilient Energy (HyRES) Unit at Fondazione Bruno Kessler (FBK). With a background in Materials Engineering and a PhD in Operations Research, Dr. Urbani specialises in the intersection of numerical optimisation and machine learning. He is the lead developer of ONNX2FMU, a specialized tool for encapsulating machine learning models into Functional Mock-up Units (FMUs) for co-simulation, and he took part to several commercial projects in optimization of logistics, maintenance planning, and workforce routing. In the H2EIR project, he will leverage this expertise to lead the technical integration in WP2, serving as the primary link between data gathering workflows and the numerical optimisation of scenarios. His role ensures the seamless translation of empirical data into robust, optimised energy models.
Ander Martinez Alonso Senior researcher	VUB	Ander Martinez Alonso (M), Ph.D., is a post-doctoral researcher on energy systems modelling and analysis. He holds a joint PhD in Engineering Sciences from the Vrije Universiteit Brussel (VUB) in Belgium and Kobe University (KU) in Japan. His research focuses on the application of optimisation techniques to the analysis and modelling of Multi-Energy Systems (MES). His interests span a wide range of topics, including design optimisation and assessment, dispatching and operation of complex energy systems, renewable energy generation and load forecasting, life cycle optimisation, and the promotion and development of local renewable energy systems. He actively collaborates with Flemish-Belgian organisations and has contributed to multiple European and international projects, including Renaissance, Mamuet, Remote, H2ulst, Reformers, Efro, and dHystric (H2020, Interreg, FCH-JU, Horizon Europe), as well as projects in Japan such as Awaji Island (NEDO, Organisation for Advanced and Integrated Research) and Minerva (EU–Japan Industrial Cooperation Centre).
Alex Felice Senior researcher	VUB	Alex Felice (M), Ph.D., is a post-doctoral researcher on energy system modelling and planning. He holds a PhD in Engineering Sciences from the Vrije Universiteit Brussel (VUB). His research and expertise focus on the optimisation of energy systems across different scales and sectors and with a focus on bridging technical and policy aspects of the energy transition. He actively collaborates with Flemish-Belgian organisations and has contributed to multiple European and international projects, including Renaissance, Mamuet, ROLECs, Reformers and Batmachine.
Gabriel García Senior researcher	CENER	Gabriel García (M) is an Industrial Engineer and researcher specialising in energy storage systems, with proven expertise in hydrogen technologies, battery systems, and demand-side management strategies including electric vehicles and refrigeration. He actively leads R&D activities aimed at accelerating the integration of distributed energy storage into smart grid architectures, with a focus on Energy Management Systems (EMS) capable of delivering services at both consumer and grid level.
Xabier Sevillano Innovation manager	CENER	Xabier Sevillano (M), is PhD on Chemistry with more than 15 years' experience in R&D project management. Currently working as Innovation Manager in the Hydrogen Area of CENER. Xabier has worked in projects dealing with value chain analysis such as INNEON (<i>Network for Eco-Innovation Investment</i>) or ECO.PRO (<i>Professional promotion of eco-innovative research results through a new media integrated platform for SMEs, research and the public</i>), as well as specific works for Public Administrations dealing with eco-innovation.

Outside resources (subcontracting, seconded staff, etc)

If you do not have all skills/resources in-house, describe how you intend to get them (contributions of members, partner organisations, subcontracting, etc).

If there is subcontracting, please also complete the table in section 4.

Subcontracting is expected to be limited to assistance in breaking down the principles of the WordPress logic behind the existing HYPOS-Kompass web tool application, in order to develop new tool functionality from it in T3.4. The consortium as a whole has sufficient in-house capacity to implement the core project activities, in line with I3 rules and best value-for-money principles.

2.4 Consortium management and decision-making**Consortium management and decision-making (if applicable)**

Explain the management structures and decision-making mechanisms within the consortium. Describe how decisions will be taken and how regular and effective communication will be ensured. Describe methods to ensure planning and control.

Note: The concept (including organisational structure and decision-making mechanisms) must be adapted to the complexity and scale of the project.

The project adopts a **robust, transparent and proportionate governance structure**, tailored to the complexity and interregional dimension of the H2EIR consortium. The management model is designed to ensure efficient coordination among partners, clear allocation of responsibilities and effective decision-making throughout the project implementation.

Given the interregional nature of the project and the involvement of partners from different innovation ecosystems, the governance system ensures continuous coordination between consortium members, while also facilitating interaction with regional authorities and key stakeholders involved in the hydrogen ecosystem.

The governance structure is organised around four main components: the **Project Coordinator**, the **Steering Committee**, the **Work Package Leaders**, and the **Regional Stakeholder Groups**. Together, these bodies ensure strategic supervision, operational coordination and continuous alignment between project activities and regional innovation priorities.

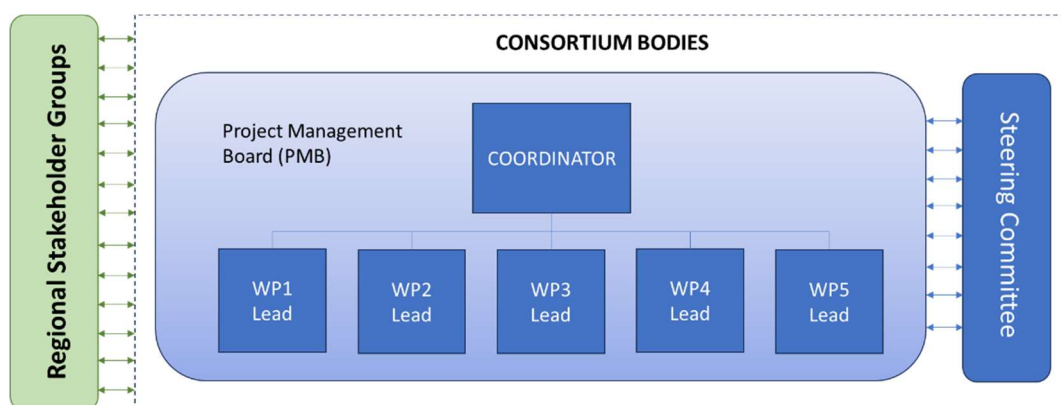


Figure 2: Project governance and decision-making structure

Project Coordinator

STRESS acts as **Project Coordinator** and is responsible for the overall coordination of the project. The Coordinator ensures the smooth implementation of the project activities and maintains coherence between the different work packages and partners involved.

The Coordinator also acts as the main interface with the European Commission and the Project Officer, ensuring that the consortium fulfils all contractual obligations and maintains effective internal coordination. In addition, the Coordinator facilitates communication among partners and supports the resolution of any operational issues that may arise during the implementation of the project.

Steering Committee

The **Steering Committee (SC)** represents the main strategic decision-making body of the consortium. It is composed of one representative from each partner organisation and is chaired by the Project Coordinator. The Steering Committee provides strategic guidance for the project and supervises the overall implementation of the work plan. It validates key strategic decisions, supports the resolution of potential coordination challenges and ensures that the project remains aligned with its objectives and expected results. The Steering Committee meets at least twice per year, either online or in person (normally during consortium meetings), and may also convene additional meetings when necessary to address specific strategic or organisational matters.

Work Package Leaders

Each Work Package is coordinated by a **Work Package Leader**, responsible for the operational coordination of the activities under the respective work package. Work Package Leaders ensure that the tasks within their work packages are implemented according to the agreed work plan and timelines. They coordinate the partners involved in the activities, facilitate day-to-day collaboration and maintain regular communication with the Project Coordinator to ensure alignment with the overall project strategy.

Regional Stakeholder Groups

Although not part of the Consortium Bodies, the Regional Stakeholder Groups (RSG) will act a consultative body, giving advice or making non-binding proposals about a particular problem or subject. Regional Stakeholder Groups (RSGs) are established within WP2 and represent an important interface between the project consortium and regional innovation ecosystems. Each RSG involves representatives from public authorities, SMEs, clusters, research organisations and other relevant actors operating within the regional hydrogen ecosystem. Through their participation, these stakeholders provide valuable feedback on regional needs, opportunities and priorities, ensuring that project activities remain closely connected to regional development strategies and investment opportunities.

Decision-making process

Decision-making within the consortium follows a **consensus-based approach** whenever possible. Strategic decisions are taken within the Steering Committee. In cases where consensus cannot be reached, decisions are taken by simple majority of the partners represented in the Steering Committee. Operational decisions related to the implementation of specific activities are managed by the Work Package Leaders in close coordination with the Project Coordinator.

Communication and coordination

Regular and effective communication will be ensured through a structured coordination framework involving periodic consortium meetings (every six months), regular exchanges among Work Package leaders and thematic discussions when required.

The kick-off meeting will be hosted by the Project Coordinator and held in Naples, Italy. The following consortium meetings will be hosted in rotation by the partners located in the participating Less Developed Regions (LDRs). This approach allows each hosting partner to organise local activities linked to WP4, including capacity building workshops, site visits and talent showcase events, while actively involving local stakeholders and strengthening the visibility of project activities within the regional innovation ecosystems. This rotating meeting structure will also strengthen interregional learning and facilitate the exchange of practices between the participating hydrogen ecosystems.

A shared digital collaboration environment will support document exchange, internal communication and coordination among partners. These tools will ensure transparency, facilitate information sharing and support the timely coordination of project activities across the consortium.

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2.5 Project management, quality assurance and monitoring and evaluation strategy

Project management, quality assurance and monitoring and evaluation strategy

Describe the measures planned to ensure that the project implementation is of high quality and completed in time.

Describe the methods to ensure good quality, monitoring, planning and control.

Describe the evaluation methods and indicators (quantitative and qualitative) to monitor and verify the outreach and coverage of the activities and results (including unit of measurement, baseline and target values). The indicators proposed to measure progress should be relevant, realistic and measurable.

The project management framework of H2EIR is designed to ensure high-quality, timely and cost-effective implementation of project activities while maintaining the flexibility required by the interregional nature of the initiative. Given the participation of Less Developed, Transition and More Developed Regions, the management approach places particular emphasis on coordination, operational efficiency and continuous monitoring of implementation progress.

Project management activities are implemented through **WP1**, coordinated by STRESS. As Project Coordinator, STRESS ensures overall administrative, contractual and financial management of the project, maintains communication with the European Commission and supervises the correct implementation of project activities across all Work Packages. The Coordinator also ensures alignment between operational activities and the strategic objectives of the project.

At the beginning of the project, the consortium will establish a **Project Handbook and Implementation Framework (D1.1)**. This internal document will define the operational procedures guiding the implementation of the project, including governance rules, reporting procedures, monitoring mechanisms, financial management practices and communication flows. The Handbook will serve as the main operational reference for partners throughout the project lifecycle and will ensure a shared understanding of responsibilities, timelines and coordination mechanisms.

Operational coordination is ensured through the Work Package structure. Work Package Leaders are responsible for the day-to-day coordination of tasks within their respective work packages, ensuring that activities are implemented according to the agreed work plan, timeline and available resources. They supervise the preparation of deliverables, coordinate the partners involved in the tasks and provide regular progress updates to the Project Coordinator.

Quality assurance is embedded throughout the project lifecycle and is implemented under Task T1.2. The Project Handbook will define a light but structured **internal quality management framework**, including procedures for internal peer review of deliverables prior to submission, cross-Work Package consistency checks and validation of key outputs. Particular attention will be given to region-specific outputs such as roadmaps, investment pathways and business cases, which will be validated through interaction with Regional Stakeholder Groups to ensure their relevance for regional innovation ecosystems and Smart Specialisation priorities.

Monitoring of project implementation is ensured through a **light but structured monitoring system**, coordinated under Task T1.3. Progress is tracked against the planned milestones, deliverables and timelines defined in the work plan. Biannual progress reviews, aligned with consortium meetings, allow the consortium to assess the implementation status of activities and verify the achievement of planned outputs. Internal tracking tools are used to monitor deliverables, milestones and person-months, enabling early identification of potential deviations and the adoption of corrective measures when necessary.

Monitoring and evaluation activities combine both quantitative and qualitative indicators to assess the outreach and coverage of project activities. Indicators will be used to track ecosystem activation, stakeholder participation, development of investment-ready business cases and progress towards strengthening regional hydrogen innovation ecosystems. The monitoring framework will use a limited set of measurable indicators, defined at the beginning of the project and regularly reviewed during biannual consortium meetings. While project objective KPIs are indicated in chapter 1.2 of this document, implementation monitors indicators are in Table 5 below.

Table 5: Implementation monitoring indicators

Indicator	Unit of measurement	Baseline	Target	Source of verification
Project Handbook and Implementation Framework established	Documents approved	0	1	Deliverable D1.1
Data Management Plan implemented	Documents approved	0	1	Deliverable D1.2
Milestones achieved according to work plan	Percentage of total milestones	0	100%	Internal monitoring system
Deliverables submitted on schedule	Percentage of deliverables	0	≥90%	Deliverable tracking
Consortium meetings organised	Number of meetings	0	5	Meeting minutes

Overall, the project management, quality assurance and monitoring framework ensures that H2EIR is implemented in a **structured, transparent and results-oriented manner**, capable of delivering robust and policy-relevant outcomes while ensuring efficient coordination across the consortium.

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2.6 Risk management

Critical risks and risk management strategy			
<p>Describe critical risks, uncertainties or difficulties related to the implementation of your project, and your measures/strategy for addressing them.</p> <p>Indicate for each risk (in the description) the impact and the likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures.</p> <p>Note: Uncertainties and unexpected events occur in all organisations, even if very well-run. The risk analysis will help you to predict issues that could delay or hinder project activities. A good risk management strategy is essential for good project management.</p>			
Risk No	Description	Work package No	Proposed risk-mitigation measures
1	Delays or inefficiencies in interregional coordination due to different administrative procedures, decision-making timelines or institutional contexts across LDRs, TRs and MDRs. (low)	WP1	Clear governance structure with Steering Committee and WP Leaders; regular coordination meetings; clearly defined roles and responsibilities; early identification of bottlenecks and corrective actions by the Coordinator.
2	Limited engagement or availability of regional stakeholders (SMEs, industry, clusters, public authorities), affecting ecosystem activation and data collection. (low)	WP2, WP3	Activation of existing regional stakeholder groups and networks from previous projects; involvement of trusted regional intermediaries; alignment of activities with concrete benefits (investment readiness, funding opportunities, matchmaking); continuous stakeholder communication.
3	Heterogeneous data availability and maturity levels across regions may affect comparability of ecosystem benchmarking, value-chain analysis and business case development. (medium)	WP2, WP3	Use of a common methodological framework; validation by MDR/TR partners; flexible application adapted to regional contexts; cross-regional peer review of results. Identification of the most critical gaps affecting the establishment of viable value chains.
4	Misalignment between project outputs and regional S3 priorities due to evolving policy frameworks or political changes. (medium)	WP2, WP5	Continuous involvement of regional authorities; iterative roadmap development; validation workshops with S3 managing authorities; integration of feedback loops during roadmap preparation.
5	Insufficient capacity in LDRs to translate analytical results into robust and investable hydrogen business cases. (medium)	WP2, WP3	Activation of existing RSG and networks from previous projects; Strong methodological leadership by FBK; hands-on training and mentoring; step-by-step business case development; technical support from VUB, HYPOS and CENER.
6	Difficulties in identifying realistic investment pathways and follow-up funding opportunities beyond the project duration. (low)	WP3, WP5	Early identification of relevant EU, national and regional funding instruments (e.g. I3 Strand 2, Horizon Europe); engagement with investors and financial intermediaries during the project; preparation of concrete investment pathways and scalable project concepts; support for joint follow-up proposals and alignment with regional funding programmes.
7	Capacity-building activities may not translate into practical implementation at	WP4	Each activity will define clear implementation-oriented outputs. Decision-makers will be involved alongside technical staff where

	regional level due to limited institutional absorption capacity, staff turnover, or lack of decision-making mandate among participants. (medium)		possible. Follow-up checks will assess how knowledge is applied in practice. Lessons learned will be integrated into regional roadmaps (WP2) and business case development processes (WP3).
8	Fragmentation or duplication of hydrogen ecosystem initiatives at regional or European level may reduce the added value and visibility of the project results. (low)	WP2, WP3, WP4	Mapping of existing hydrogen initiatives and projects at regional and EU level; coordination with ongoing initiatives (e.g. Hydrogen Valleys, Interreg and Horizon projects); involvement of regional authorities and clusters; alignment of project activities with existing strategies and platforms to ensure complementarity and avoid duplication.

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3. COST EFFECTIVENESS

3.1 Cost effectiveness and financial management

Cost effectiveness and financial management

Describe the measures adopted to ensure that the proposed results and objectives will be achieved in the most cost-effective way.

Indicate the arrangements adopted for the financial management of the project and, in particular, how the financial resources will be allocated and managed within the consortium.

 Do NOT compare and justify the costs of each work package, but summarize briefly why your budget is cost effective.

The project is designed to achieve its objectives in a highly cost-effective manner by combining a focused work plan, a clear division of roles, and the strategic use of existing capacities, tools and experiences already available within the consortium. **Rather than duplicating efforts or developing unnecessary new instruments, the project builds on proven methodologies, previous interregional cooperation experiences and operational frameworks developed in earlier or parallel EU-funded initiatives, including I3 and Interreg projects. This approach significantly reduces start-up costs, implementation risks and inefficiencies, while maximising the impact of each euro invested.**

Cost effectiveness is further ensured through a strong concentration on Less Developed Regions, where project resources are directly used to activate ecosystems, engage stakeholders, develop S3-aligned roadmaps and design concrete business cases with clear investment perspectives. Technical and methodological partners from Transition and More Developed Regions provide targeted expertise, common frameworks and peer-learning support, avoiding fragmented or parallel developments at regional level. This division of labour ensures that resources are allocated where they generate the highest added value, while maintaining coherence and comparability across regions.

The financial allocation within the consortium reflects this approach. **Approximately 65% of the project budget (1.490.378,39€) is allocated to partners located in Less Developed Regions**, where ecosystem activation, stakeholder engagement and capacity-building activities are implemented. When including partners from Transition Regions, **around 71% of the overall budget supports regions with lower innovation maturity**, ensuring that project resources are concentrated where they can generate the highest territorial impact while benefiting from methodological support provided by partners from more mature ecosystems.

Financial management of the project will be centrally coordinated by the project coordinator, ensuring transparent allocation of resources, compliance with I3 and ERDF rules, and continuous monitoring of expenditure against planned activities. Each partner is responsible for the sound management of its own budget, in line with the agreed work plan and internal procedures, while the coordinator oversees overall budget coherence, cash-flow planning and reporting to the European Commission. Regular financial monitoring, combined with progress reviews at Work Package and consortium level, will allow early identification of deviations and timely corrective actions if needed.

The budget structure reflects the nature of the action, with the majority of resources allocated to core technical and capacity-building activities, stakeholder engagement, and the development of transferable methodologies and tools. Cross-cutting costs related to coordination, communication and quality

assurance are kept proportionate to the size and complexity of the project, ensuring efficient use of funds without compromising governance, visibility or impact.

Overall, the proposed budget is proportionate, realistic and aligned with the project's objectives, duration and expected results. By leveraging interregional complementarities, existing knowledge assets and strong coordination mechanisms, the project ensures that its results are delivered efficiently, sustainably and with clear potential for replication and scale-up beyond the project lifetime. **In this context, EU funding acts as a catalyst for mobilising additional public and private investments, enabling the development of concrete investment-ready hydrogen initiatives in the participating regions.**

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4. IMPACT

4.1 Impact and ambition

Impact and ambition — Progress beyond the state-of-the-art

Define the short, medium and long-term effects of the project.

Who are the target groups? How will the target groups benefit concretely from the project and what would change for them?

Does the project aim to trigger change/innovation? If so, describe them and the degree of ambition (progress beyond the status quo/state-of-the-art).

H2EIR aims to **generate structural impacts on regional innovation ecosystems by strengthening the capacity of Less Developed Regions to design and implement hydrogen-related investment initiatives**. The project addresses the critical gap between strategic policy ambitions and concrete investment-ready initiatives, enabling participating regions to move from ecosystem activation and value-chain mapping to the preparation of concrete hydrogen business cases and investment pathways.

By the end of the project, participating regions will have improved their capacity to design hydrogen value chains, identify investment opportunities and mobilise stakeholders, thereby contributing to the development of competitive regional ecosystems capable of participating in **interregional innovation investments under the I3 Instrument and other EU funding frameworks**.

The project outputs are fully aligned with the objectives of the I3 Strand 2b call and aim to strengthen the innovation capacity of Less Developed Regions while enabling their participation in interregional hydrogen value chains.

In particular, H2EIR will deliver:

- **One S3 interregional partnership arrangement and two hydrogen cooperation alliances**, formalised through collaboration frameworks (MoU), including the Atlantic Hydrogen Alliance and the Central-European Hydrogen Innovation Alliance;
- **Two operational methodologies transferred to Less Developed Regions**, supporting ecosystem activation and opportunity identification:
 - a methodology for identifying interregional hydrogen value-chain collaboration opportunities (presented in Task 2.1);
 - a methodology for identifying demand-driven hydrogen business opportunities (presented in Task 3.1 and 3.2);
- **A policy recommendation report** supporting regional authorities in addressing regulatory and administrative barriers affecting hydrogen value-chain development, with recommendations linked to **seven regional policy instruments** (five RIS3 and two additional policy instruments for Campania and Centru);
- **Four hydrogen roadmaps (action plans)** — three regional roadmaps (Campania, Malopolskie, Centru) and one interregional roadmap for the Atlantic macro-region (Alentejo and Azores) — aligned with regional Smart Specialisation Strategies and existing EU, national and regional hydrogen initiatives;
- **At least four new hydrogen value chains** identified across the participating Less Developed Regions, including **one interregional value chain** identified within the Atlantic Hydrogen Alliance;
- **At least four concrete hydrogen business cases**, including one business case developed jointly within the Atlantic Alliance;

- **Four investment pathways** supporting the financial structuring of the selected business cases and enabling applications to future EU funding instruments and private investment opportunities.
- **A pipeline of four I3 interregional investment projects** (initiated proposals), forming the basis for the preparation of follow-up **I3 Strand 2a proposals**;
- **Two operational ecosystem tools** — the *Permitting Compass* and the *Matchmaking Platform* — made available through the project website in multiple languages to facilitate regulatory navigation and value-chain partnership development;
- **A capacity-building framework applied across five Less Developed Regions**, including one outermost region, designed to be replicable in other European ecosystems;
- **A talent attraction and skills development strategy**, integrated as an annex to the regional hydrogen roadmaps and supporting workforce development in LDRs;
- **A replication framework for island and outermost regions**, building on the experience of the Azores and providing guidance for hydrogen ecosystem development in geographically peripheral territories (including EOI from other outermost regions);
- **A communication and dissemination framework** ensuring visibility of project activities and effective transfer of knowledge across regional ecosystems;
- **An exploitation and sustainability strategy** supporting investment readiness, replication, scale-up and policy uptake of project results beyond the project duration.

Together, these outputs create the operational conditions required to strengthen innovation ecosystems, enable participation in interregional value chains and prepare follow-up investment initiatives.

These results contribute directly to the expected outcomes of **I3 Strand 2b**, namely increasing the innovation capacity of Less Developed Regions and strengthening their ability to participate in **interregional innovation investments and globally competitive European value chains**.

A complete list of project KPIs linked to specific objectives is presented in Chapter 1.2.

Short and medium term effects

In the short and medium term, H2EIR will **reinforce the cooperation capacity of regional hydrogen innovation ecosystems by activating structured collaboration between public authorities, research organisations, industry and innovation intermediaries** (e.g. National H2 associations). Through the establishment and operation of Regional Stakeholder Groups and interregional cooperation frameworks, the project will **strengthen the functioning of quadruple-helix ecosystems and improve coordination among regional innovation actors**.

The project will **increase the capacity of regional ecosystems to identify and structure hydrogen value chains aligned with Smart Specialisation priorities**. Through value-chain mapping, ecosystem benchmarking and stakeholder engagement, participating regions **will gain a clearer understanding of their strategic positioning within emerging European hydrogen value chains and of the opportunities for interregional collaboration**.

H2EIR will also **strengthen the capacity of participating ecosystems to engage with local SMEs and industrial actors**, facilitating their participation in hydrogen innovation initiatives and improving connections among stakeholders within and across regional ecosystems. The activation of structured matchmaking mechanisms and cooperation frameworks will **enable stronger interregional linkages** and lay the groundwork for future joint investment initiatives.

At interregional level, the establishment of the Atlantic Hydrogen Alliance and the Central-European Hydrogen Innovation Alliance, together with the S3 interregional partnership arrangement, will **strengthen cooperation between participating ecosystems and support the development of shared innovation priorities, joint value-chain initiatives and coordinated investment preparation**.

These developments will **increase the readiness of the participating ecosystems to cooperate within European hydrogen value chains and prepare the conditions for the development of interregional investment projects under the I3 Instrument**.

Long term effects

In the longer term, the project will contribute to strengthening regional innovation ecosystems and enabling participating regions to engage more actively in European hydrogen value chains and interregional innovation investments.

Expected long-term impacts include:

- **The formation of five industry-driven hydrogen innovation hubs in the participating Less Developed Regions**, bringing together quadruple-helix actors, through strengthen collaboration between public authorities, industry, research organisations and innovation intermediaries to support the development of hydrogen value chains and investment initiatives aligned with regional Smart Specialisation priorities;
- **The development of additional hydrogen project pipelines in the H2EIR Less Developed Regions**, involving cooperation with Transition and More Developed Regions and enabling the preparation of follow-up interregional investment initiatives;
- **Improved support measures for innovation diffusion and value-chain participation**, through the adoption of the methodologies, ecosystem tools and policy recommendations developed by the project to facilitate hydrogen investment identification, value-chain structuring and interregional collaboration;
- **Enhanced cooperation between H2EIR Less Developed Regions and other European ecosystems**, namely through cooperation frameworks such as the **Atlantic Hydrogen Alliance** and the **Central-European Hydrogen Innovation Alliance**, supporting knowledge exchange, ecosystem coordination and joint investment preparation across Europe;
- **Improved business climate for competitive hydrogen ecosystems**, namely through strengthened support for SME participation in hydrogen value chains, improved access to innovation support services, and the development of targeted skills and talent development measures supporting workforce upskilling and reskilling;
- **Replication of H2EIR methodologies and cooperation frameworks in other EU regions**, including island and outermost territories, supporting the transfer of ecosystem development approaches and hydrogen innovation practices beyond the project consortium.

By enabling Less Developed Regions to move from ecosystem activation to investment-ready project development, H2EIR contributes to strengthening Europe's hydrogen economy while supporting territorial cohesion, innovation competitiveness and the integration of emerging ecosystems into globally competitive EU value chains. Through the development of coordinated value chains, structured investment pathways and interregional cooperation mechanisms, the project will also contribute to **reducing investment risks and improving the bankability of hydrogen initiatives in participating regions**.

Target groups and benefits

H2EIR targets three main groups of beneficiaries within regional hydrogen innovation ecosystems. Each group will benefit from the project through different but complementary mechanisms that strengthen both regional policy frameworks and industrial value-chain development.

SMEs and Local Businesses

SMEs and local businesses operating within regional hydrogen value chains will benefit from improved access to knowledge, cooperation networks and investment preparation tools. Through their participation in Regional Stakeholder Groups, ecosystem workshops and matchmaking activities, companies will gain direct visibility of emerging hydrogen market opportunities and potential industrial partnerships.

The project will support SMEs in identifying new roles within hydrogen value chains, including hydrogen production, infrastructure development, technology integration and end-use applications in industry, mobility and energy systems. Through the business case development process and investment readiness activities, companies will gain access to structured methodologies for project design, techno-economic assessment and financing pathways. This support will strengthen the capacity of SMEs to develop viable hydrogen-related business initiatives, participate in interregional value chains and engage with investors and funding opportunities, ultimately improving their competitiveness within the European hydrogen economy.

Public Authorities, Academia, Industry and Innovation Intermediaries

Other regional stakeholders, including public authorities, universities, research organisations, industry, clusters and innovation intermediaries (e.g. National H2 associations), will benefit from strengthened cooperation frameworks and improved access to interregional hydrogen innovation networks.

Public authorities will gain practical tools and analytical insights to integrate hydrogen priorities into Smart Specialisation Strategies and regional development policies.

Academic institutions and research organisations will benefit from strengthened collaboration with industry and regional ecosystems, enabling the development of applied research activities, knowledge transfer and capacity-building initiatives aligned with hydrogen innovation needs.

Industry, clusters and innovation intermediaries will gain access to structured ecosystem development methodologies and interregional cooperation platforms, strengthening collaboration between companies,

research actors and public institutions while facilitating the emergence of hydrogen innovation ecosystems.

Local Communities and Society

Although the project primarily focuses on innovation ecosystems and industrial value chains, its long-term benefits will also extend to local communities and society. By supporting hydrogen ecosystem development and industrial decarbonisation pathways, the project contributes to the broader objectives of the European Green Deal and the energy transition. In the longer term, the deployment of hydrogen technologies can contribute to reducing greenhouse gas emissions in energy-intensive sectors and transport systems, improving environmental sustainability at regional level. Local communities may also benefit from new economic opportunities associated with hydrogen ecosystem development, including the creation of skilled jobs, the development of new industrial activities and the strengthening of regional innovation capacities.

In addition, H2EIR contributes to increasing public awareness and social acceptance of hydrogen technologies by involving local associations in Regional Stakeholder Groups, dissemination events and capacity-building activities. Through these mechanisms, the project facilitates a better understanding of hydrogen applications, safety aspects and local economic opportunities, while enabling dialogue between citizens, public authorities and industry.

Stakeholder engagement

The project already benefits from the active involvement of a wide range of industrial actors, public authorities, research organisations and innovation intermediaries participating in the Regional Stakeholder Groups and ecosystem activities of previous and parallel initiatives. The table below presents a non-exhaustive list of stakeholders already involved in regional and interregional hydrogen ecosystem activities that will contribute to the development of value chains, business cases and investment pathways.

Table 7: Stakeholders already involved in regional and interregional activities (non-exhaustive)

Region	Stakeholder	Type	Role in H2 ecosystem
Campania	GRADED spa	Large Enterprise	Design & Engineering of H2 systems
	Ambiente Spa	SME	Production and End user – H2 truck fleet
	SOFINVEST srl	SME	Investments – Business Intermediary
	JCOLPASTIC Spa	SME	H2 production and end user – Industrial plastic processes
	NHP	SME	Design & Engineering of H2 systems
	ENEA	Public RTO	R&D – Technology transfer - Coordination
	ATENA	Public-Private Cluster	R&D – Intermediary - Maritime transport and logistics
	Università del Sannio	University	R&D – Techno economic modelling
Alentejo	CCDR Alentejo	Public authority	Regional policy making, ERDF funding management and S3 implementation
	APS (Port of Sines)	Public authority	Port infrastructure management, multi-modal logistics hub for H2 import/export
	Universidade de Évora	University	R&D, techno-economic modelling, scientific validation and capacity building
	Município de Sines	Public authority	Local administration, territorial planning and licensing for the industrial H2 hub
	HyLab (Collaborative Laboratory for Green Hydrogen)	Public-Private Cluster / RTO	R&D, technology transfer, innovation intermediary and technical support to SMEs
	GALP (Petrogal SA)	Large Enterprise	H2 producer, Sines refinery decarbonisation and anchor industrial off-taker

	WinPower, S.A.	Large Enterprise	Development and operation of large-scale electrolysis and methanation facilities
	Keme Energy	SME	Green hydrogen production for local mobility, industry, and electricity generation
Azores	Regional Directorate for Energy	Public Administration	Regional energy authority, policy maker, support to regional ecosystem
	Regional Directorate for environment and climate action	Public Administration	Regional environment authority, policy maker, support to regional ecosystem
	University of Azores	University	R&D Activities
	TERINOV – Technology park	Knowledge transfer and start-up support	Knowledge transfer to industry and start-ups (Terceira Island)
	NONAGON – Technology park	Knowledge transfer and start-up support	Knowledge transfer to industry and start-ups (São Miguel Island)
	EDA – Eletricidade dos Açores	Large Enterprise	Energy production and distribution
	SGC – Energia – CID Açores	SME	R&D in Hydrogen technologies and modelling
Malopolskie	Silesian University of Technology	University	R&D, training future staff, cooperation with business and local authorities
	City of Wałbrzych	Local authority	Regional policy making, implementation of hydrogen buses
	City of Rybnik	Local authority	Regional policy making, implementation of hydrogen buses
	City of Konin	Local authority	Regional policy making, implementation of hydrogen buses
	Mazovia Energy Agency (MAE)	Energy agency	Implementing H2 projects, support for local authorities, intermediary support
	Silesia-Małopolska Hydrogen Valley	Sectoral association	Intermediary – networking and supporting innovation, H2 technologies implementation
	AGH University of Technology	University	R&D, training future staff, cooperation with business and local authorities
	Marshal's Office of the Wielkopolskie Region	Regional authority	Supporting regional H2 ecosystem development; facilitates quadruple-helix cooperation; stakeholder engagement
	Orlen Południe	Large Enterprise	Production of biofuels and bio-components, production of hydrogen fuel for public transport, supportive member of Silesia-Małopolska Hydrogen Valley
	Polska Spółka Gazownictwa	Large Enterprise	Gas distribution system operator
Centru	AZOMURES	Large Enterprise	H2 producer – ammonia producer
	DELGAZ	Large Enterprise	H2 producer
	Transilvania University	University	R&D - Technical support in implementing the project, enhances collaboration, develop competencies and research efficiency and optimizes resources

	UMFST	University	R&D , Provides technical support in implementing the project, enhances collaboration
	ASIMCOV	NGO	Intermediary - Regional cluster of SMEs
	TIRGU MURES MUNICIPALITY	Public authority	Facilitate the project implementation, part of a hydrogen valley
	Alba Iulia Municipality	Public authority	Facilitate the project implementation, part of a hydrogen valley
	H2 Romania association	NGO	Intermediary and technical support

Ambition and progress beyond the state-of-the-art

Current hydrogen ecosystem initiatives in Europe are often characterised by fragmented approaches: strategic roadmaps that remain disconnected from investment preparation, pilot projects developed without strong integration into regional innovation ecosystems, and limited coordination between industrial actors, policy instruments and interregional value chains. This gap is particularly evident in Less Developed Regions, where hydrogen strategies frequently remain at a planning stage due to limited ecosystem coordination capacity, insufficient experience in structuring investment-ready initiatives and weak integration with European innovation networks.

H2EIR moves beyond this state-of-the-art by introducing an **implementation-oriented ecosystem development model** that connects strategy, industrial cooperation and investment preparation within a single interregional framework. Rather than producing additional strategic analyses, the project focuses on operationalising Smart Specialisation priorities by translating regional hydrogen ambitions into concrete value-chain initiatives and an investment-ready projects pipeline.

The ambition of the project lies in the creation of a **structured innovation pathway** linking ecosystem activation, value-chain identification, business case preparation and investment readiness. This pathway is supported by a combination of practical tools, policy coordination mechanisms and structured stakeholder engagement, enabling regions to move from strategic alignment to concrete project development.

In this context, H2EIR advances the current state-of-the-art through several key innovations:

- the combination of regional and interregional hydrogen roadmaps with policy recommendations and talent attraction strategies, redacted involving quadruple-helix ecosystems through structured Regional Stakeholder Groups;
- the integration of value-chain analysis with business case development and investment pathway design, bridging the gap between innovation ecosystems and financial structuring;
- the development of operational ecosystem tools — such as the Permitting Compass and the Matchmaking Platform — that support both regulatory navigation and the formation of interregional industrial partnerships;
- the establishment of interregional cooperation frameworks, including an S3 interregional partnership Atlantic Hydrogen Alliance and the Central-European Hydrogen Innovation Alliance, enabling coordinated ecosystem development and joint investment preparation.

Through this integrated approach, H2EIR transforms hydrogen from a strategic objective into a concrete driver of regional innovation and industrial cooperation. The project therefore contributes to reducing innovation disparities between European regions and strengthening the participation of Less Developed Regions in emerging hydrogen value chains.

Importantly, the methodological framework developed by H2EIR is designed to be **replicable beyond the project consortium**. The replication activities carried out with the Azores will demonstrate how hydrogen ecosystem development approaches can be adapted to island and outermost regions, which often face structural barriers such as geographical isolation, smaller market size and limited infrastructure connectivity. The enabling conditions for this replication will be reinforced through targeted engagement with other outermost regions and island territories (e.g. Madeira, Canaries Islands), including the organisation of dedicated exchanges and the collection of expressions of interest from local governments and other stakeholders willing to explore the adoption and adaptation of H2EIR methodologies in their regional contexts.

By providing a transferable ecosystem development model and structured interregional cooperation mechanisms, H2EIR contributes not only to the development of hydrogen innovation ecosystems in participating regions but also to the broader objective of **strengthening territorial cohesion and accelerating the integration of emerging regions into Europe's hydrogen economy**.

Environmental, territorial and social impact

Explain the main social, territorial and environmental impacts of the project (if relevant).

Describe the measures proposed to reduce the environmental footprint of your project, for example through the use of green procurement, environmental management systems, etc.

The project is expected to generate significant benefits in term of environmental, territorial and social impacts by strengthening hydrogen innovation ecosystems in Less Developed Regions and supporting their alignment with EU climate and industrial transition objectives.

From an **environmental perspective**, the project contributes to the EU Green Deal and climate neutrality goals by enabling the development of clean hydrogen value chains, with a strong focus on renewable hydrogen while ensuring alignment with regional transition pathways in regions that currently face structural barriers to decarbonisation. By supporting the design of investment-ready business cases and S3-aligned roadmaps, the project facilitates the deployment of clean hydrogen solutions in different sectors, **with a particular focus on hard-to-abate industry and transport**, contributing to long-term reductions in greenhouse gas emissions and increased integration of renewable energy sources.

At **territorial level**, the project addresses regional disparities by reinforcing innovation capacity, governance and investment readiness in five Less Developed Regions. These territories often suffer from fragmented ecosystems, limited access to finance and weaker connections to European innovation networks. Through ecosystem activation, interregional cooperation and policy alignment, the project strengthens territorial cohesion, supports balanced regional development and enables LDRs to better position themselves within European hydrogen value chains while retaining economic value locally.

The project also delivers **social impact** by supporting the creation of qualified employment opportunities and fostering skills development in emerging hydrogen-related sectors. Capacity-building actions, staff exchanges and talent attraction initiatives contribute to reducing skills gaps, mitigating brain drain and supporting inclusive participation in the energy transition. The involvement of public authorities, SMEs, research organisations and clusters ensures a quadruple-helix approach that enhances social cohesion and stakeholder ownership of the transition process.

In terms of **environmental footprint of project implementation**, the consortium commits to minimising negative impacts through sustainable management practices. These include prioritising virtual meetings whenever feasible, optimising travel for physical meetings and study visits, and applying green procurement principles when purchasing goods and services. Digital tools will be used extensively for communication, dissemination and collaboration in order to reduce the use of printed materials and overall resource consumption. Together, these measures ensure that the project's operational approach is fully consistent with its environmental objectives and with EU sustainability principles.

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4.2 Communication, dissemination and visibility

Communication, dissemination and visibility of funding

Describe the communication and dissemination activities which are planned in order to promote the activities/results and maximise the impact (to whom, which format, how many, etc.). Clarify how you will reach the target groups, relevant stakeholders, policymakers and the general public and explain the choice of the dissemination channels.

Describe how the visibility of EU funding will be ensured.

The communication, dissemination and visibility activities of H2EIR start in Month 1 and will be implemented throughout the entire duration of the initiative. They are designed to ensure that the project's vision, activities, and results are widely recognised, accessible, and usable by regional, national and EU-level stakeholders. The approach combines targeted communication, structured dissemination, and dedicated actions that promote uptake and replication of the project's investment-readiness tools, S3-aligned roadmaps, business case methodologies and capacity-building outputs.

A Communication Strategy and Dissemination Framework (D5.1) will be produced by Month 3 and updated at M12 and M20, with ad-hoc adjustments where necessary. These documents will detail the rationale for communication ("why"), the content to disseminate ("what"), target audiences ("to whom"), channels and formats ("how"), and timing ("when"). They will also define quantitative and qualitative indicators to monitor outreach, engagement and impact. A final Communication and Dissemination Report

will be delivered at the end of the project summarising outcomes, visibility performance and lessons learned.

H2EIR communication and dissemination activities address a broad range of target groups involved in hydrogen ecosystem development, regional innovation, Smart Specialisation Strategy implementation and investment preparation. These include regional and local authorities responsible for energy, innovation and S3 policies; national ministries and agencies shaping regulatory and financial frameworks; EU-level policymakers and bodies; SMEs and industrial actors active or interested in hydrogen value chains; clusters and hydrogen valleys; research and academic institutions; financial and business support organisations; civil society actors and the wider public. European networks and complementary initiatives, such as the S3 Community of Practice and Hydrogen Valleys Platform, also represent key audiences for dissemination.

The communication strategy relies on a balanced **mix of digital, printed and event-based tools** to ensure broad visibility and sustained stakeholder engagement. A common visual identity and branding package will be developed in the early months of the project, including templates for presentations, documents and promotional materials, as well as ready-to-use content for social media. A dedicated project website will be launched and regularly updated, serving as the main repository for public information and project outputs. Social media channels, in particular LinkedIn and YouTube, will be used to disseminate news, results and multimedia content, supported by newsletters, mailing lists and coordinated partner communication at regional level.

Dissemination activities focus on enabling the **practical use and replication** of H2EIR results. The project will produce a set of targeted publications, including:

- Policy briefs addressed to S3 authorities and ERDF managing bodies;
- Factsheets covering key methodologies and tools;
- Simplified summaries of regional hydrogen roadmaps for wider audiences;
- Newsletters.

Results will be presented through regional dissemination events in the five Less Developed Regions, EU-level webinars addressing thematic topics such as hydrogen value chains, permitting and financing, and active participation in major external events. A final conference will be organised to present the main outcomes, replicable models and investment-oriented recommendations to EU-level institutions, networks and regional policymakers.

The visibility of EU funding will be ensured in full compliance with applicable requirements. All communication and dissemination materials, events and digital channels will systematically acknowledge the support of the European Union and the ERDF/I3 Instrument with the EU emblem and appropriate funding references. Through this integrated approach, H2EIR communication, dissemination and visibility activities will not only raise awareness of the project, but also support long-term uptake, replication and impact beyond the project lifetime.

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4.3 Sustainability and continuation

Sustainability, long-term impact and continuation

Describe the follow-up of the project after the EU funding ends. How will the project impact be ensured and sustained? What will need to be done? Which parts of the project should be continued or maintained? How will this be achieved? Which resources will be necessary to continue the project? How will the results be used? Are there any possible synergies/complementarities with other (EU funded) activities that can build on the project results?

The sustainability of the project is ensured through the strong integration of its results into regional governance frameworks, Smart Specialisation Strategies and future investment pipelines in the participating Less Developed Regions. Rather than delivering stand-alone outputs, the project is designed to embed methodologies, tools and cooperation mechanisms directly into regional policy-making, ecosystem governance and investment planning processes.

After the end of EU funding, the **S3-aligned regional roadmaps, policy recommendations and talent attraction recommendations** developed during the project will continue to be used by regional authorities, development agencies and ecosystem actors as reference instruments for decision-making, project prioritisation and investment attraction. Regional stakeholder groups strengthen within the project

will be maintained as permanent or semi-permanent coordination platforms, supporting continuous dialogue between public authorities, industry, research organisations and civil society.

A key element of continuation lies in the **investment readiness and project pipeline approach** developed under WP3. The business cases and value-chain initiatives identified during the project are conceived as the first step of a longer investment journey. Building on these results, the consortium intends to actively pursue follow-up funding opportunities, in particular through future **I3 Strand 2a**, with a specific focus on supporting Less Developed Regions. These applications will aim to move from preparatory and pre-piloting activities to concrete interregional investment projects, leveraging the maturity achieved during H2EIR and the other complementary actions (e.g. PRHyUS).

To sustain and scale up results, limited but targeted resources will be required after the project, mainly linked to coordination, updating of roadmaps and continued engagement with investors and EU networks. These efforts will be supported through a combination of regional funds, technical assistance schemes and future EU funding opportunities. Partners will be invited to further specify relevant national and regional funding schemes that can complement EU instruments and support long-term exploitation.

The project is also designed to create strong **synergies with other EU-funded initiatives**, Horizon Europe actions, Hydrogen Valleys initiatives and activities of the S3 Community of Practice. Through engagement with EU-level networks and alliances, project results will remain visible, accessible and reusable by other regions, enabling replication and transfer beyond the consortium.

Dissemination activities and the exploitation plan will ensure that the knowledge, methodologies and tools developed during the project remain accessible and usable beyond the project duration. The Permitting Compass and the Matchmaking Platform, which will be made available on the project website as version 1.0, will be progressively refined and potentially integrated into the digital platforms of project partners or regional institutions. This will allow the tools to continue supporting hydrogen ecosystem development, stakeholder collaboration and project identification after the end of the project.

Overall, H2EIR establishes a durable framework for interregional cooperation on hydrogen, ensuring that its impacts extend well beyond the project lifetime and contribute to long-term territorial transformation, investment mobilisation and EU decarbonisation objectives.

Campania

In the **Campania region (IT)**, the sustainability of H2EIR results will be ensured through a strong integration with the ongoing Interreg Europe project PRHyUS. The analytical outputs generated under WP2 of H2EIR — including the Regional Hydrogen Roadmap and the policy recommendations — will be developed in close alignment with the policy learning process carried out in PRHyUS, creating a mutually reinforcing dynamic between the two initiatives. In particular, H2EIR will contribute to the improvement of the regional policy instrument addressed in PRHyUS: the Programme “**Investments for Employment and Growth and Energy Sustainability of Enterprises**”, **Priority SO 2.1.1 – Ecological Efficiency of Production Processes, under the RP Campania ERDF 2021–2027**. The timeline of PRHyUS — which foresees the improvement of this policy instrument by April 2028 — aligns closely with the expected delivery of the WP2 outputs in H2EIR.

In parallel, the strategic indications emerging from H2EIR will also feed into the implementation and future updates of the **RIS3 Campania**, strengthening the positioning of hydrogen and integrated energy systems within the regional innovation ecosystem and supporting the alignment between industrial policy, research priorities and energy transition objectives.

An additional element ensuring long-term continuation is provided by PRHyUS itself, which foresees the development of **additional regional calls and financial instruments aimed at stimulating the hydrogen economy in Campania**. These instruments will support the transition from ecosystem activation and project preparation to concrete industrial investments, creating favourable conditions for the deployment of hydrogen value chains in the region.

Through the alignment between H2EIR, PRHyUS and the RIS3 Campania framework, the project establishes a coherent policy-to-investment pathway, ensuring that the analytical and strategic outputs developed during H2EIR can be translated into concrete regional policies, funding instruments and investment opportunities beyond the project duration.

Alentejo

For the Alentejo region (PT), the H2EIR outputs—namely the S3-aligned H2 Roadmap and the mature business cases—will directly feed into the **RIS3 policy** instruments and be channelled into the strategic pipeline of the Alentejo 2030 Regional Operational Programme (ERDF). This ensures that the identified ecosystem gaps are addressed through targeted regional calls. Furthermore, the bankable business cases developed in WP3 will be strategically positioned to leverage robust national mechanisms, such as the Portuguese Recovery and Resilience Plan (RRP) and the Just Transition Fund (JTF) allocated to the Alentejo territory. These funds are specifically geared towards industrial decarbonisation, renewable energy communities, and the green hydrogen scale-up (e.g., around the Sines industrial hub). This alignment guarantees a seamless transition from the H2EIR capacity-building and pre-investment phase

to large-scale CAPEX deployment, anchoring the project's long-term sustainability in secured national and regional financial instruments.

The Azores

For **the Azores region (PT)**, the sustainability of H2EIR results will be ensured through a strong involvement of the Regional Government promoting its integration in regional energetic and environmental policies. The S3 roadmap and policy recommendation generated under H2EIR will strengthen the implementation of the regional **RIS3 strategy**, where green hydrogen production and usage are already included as a strategical action line, and feed into the preparation and opening of regional H2 targeted calls, financially supported by the Regional Operational Program Açores 2030, co-financed by ERDF 2021-2027, directed to research and development as well as to entrepreneurship and innovation. Furthermore, the development of an official regional strategy for H2 will be considered, using interregional learning from H2EIR. Involvement of intermediaries like the two regional Technology parks will also be of great importance for the future sustainability of H2EIR, since they will play an important role in knowledge-transfer and investment capture, and will be able to promote and help the creation of new start-ups, or the growth of existing ones, more deeply involved as active stakeholders in the regional future H2 ecosystem. Also, the creation of the Atlantic alliance will be a further guarantee for the sustainability of H2EIR, since it will open a collaborative contact channel with, firstly, mainland Portugal and Spain, and eventually, in the future, with other Atlantic/European regions, that will strengthen H2 value-chains and open the access of Azores to potential European H2 based markets.

Malopolskie

In the **Malopolskie region (PL)**, H2EIR results will be embedded within the **RIS3** and the ERDF 2021–2027 framework, ensuring continuity beyond EU funding. The S3-aligned Hydrogen Roadmap and mature business cases developed under the project will support the region's industrial decarbonisation agenda and air-quality objectives, particularly in energy-intensive sectors and clean mobility. Through the involvement of regional authorities and PNEC's strong municipal network, identified investment priorities will be channelled into future regional calls and national funding schemes, including programmes supporting clean energy transition and industrial modernisation. The structured business cases developed in WP3 will enhance the region's capacity to access future I3 Strand 2, Horizon Europe and other EU instruments, ensuring a clear transition from ecosystem strengthening to concrete investment deployment.

Centru

For **Centru region (RO)** the H2EIR results will be integrated into the **RIS3 Centru strategy** and, together with the PRHyUS project, will support the strengthening of the regional H2 innovation ecosystem. This will enhance the region's capacity to design S3-aligned hydrogen roadmaps, develop investment-ready business cases, and attract both public and private funding for sustainable energy initiatives. Furthermore, the project supports the internationalisation and competitiveness of the Centru Region's emerging hydrogen value chains, fostering interregional collaboration and positioning the region within the developing European hydrogen ecosystem, in line with EU decarbonisation strategies. This way the project's results will help better address regional gaps related to hydrogen and energy use, while enabling the creation of synergies with existing and upcoming funding calls for SMEs, academia, and public authorities launched by RDA Centru, as MA for the Centru Regional Programme and IB for the Just Transition Programme. This will ensure that these funding instruments respond more effectively to the identified regional needs. This project will continue PRHyUS efforts to support better implementation of Just Transition Programme in Centru Region Romania, by integrating the experience gained in these 2 projects into the guidelines elaborated under **Priority 6 – Mitigation of the socio-economic impact of the transition to climate neutrality in Mureş County**, a priority aiming to supports the gradual transition to the use of green and clean hydrogen in the industries that already use hydrogen, through consumption funding schemes and the introduction of schemes to stimulate the use of hydrogen in new industrial applications.

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5. WORKPLAN, WORK PACKAGES, ACTIVITIES, RESOURCES AND TIMING

5.1 Work plan

Work plan

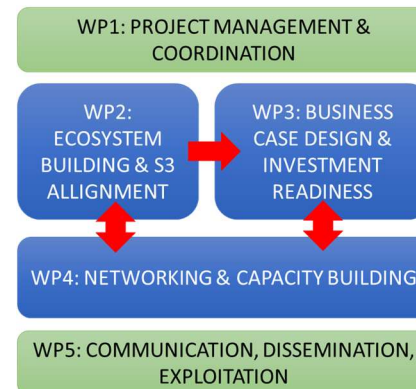
Provide a brief description of the overall structure of the work plan (list of work packages or graphical presentation (Pert chart or similar)).

The H2EIR work plan is structured into five interconnected Work Packages designed to support a progressive transition from ecosystem activation to the preparation of investment-ready hydrogen initiatives in Less Developed Regions.

The overall structure follows a clear implementation logic. Initial activities focus on activating and strengthening regional innovation ecosystems, mapping hydrogen value chains and aligning strategic priorities with Smart Specialisation Strategies (WP2). These analytical results are then translated into concrete business cases and investment pathways through techno-economic assessments and financing analysis (WP3). In parallel, interregional capacity-building, networking, talent development and replication activities (WP4) strengthen institutional capacities and support knowledge transfer across regions.

These technical activities are supported throughout the project lifecycle by robust coordination and monitoring mechanisms (WP1), as well as by communication, dissemination and exploitation actions ensuring visibility, policy uptake and long-term sustainability of results (WP5).

A graphical overview of the work plan, including the sequence of activities and interactions between Work Packages, is presented in the project Gantt chart and PERT diagram.



5.2 Work packages, activities, resources and timing

WORK PACKAGES

Work packages

This section concerns a detailed description of the project activities.

Group your activities into work packages. **A work package means a major sub-division of the project.** For each work package, enter an objective (expected outcome) and list the activities, milestones and deliverables that belong to it. The grouping should be logical and guided by identifiable outputs.

Projects should normally have a minimum of 2 work packages. WP1 should cover the management and coordination activities (meetings, coordination, project monitoring and evaluation, financial management, progress reports, etc) and all the activities which are cross-cutting and therefore difficult to assign to another specific work package (do not try splitting these activities across different work packages). WP2 and further WPs should be used for the other project activities. You can create as many work packages as needed by copying WP1.

Work packages covering financial support to third parties (⚠ only allowed if authorised in the Call document) must describe the conditions for implementing the support (for grants: max amounts

per third party; criteria for calculating the exact amounts, types of activity that qualify (closed list), persons/categories of persons to be supported and criteria and procedures for giving support; for prizes: eligibility and award criteria, amount of the prize and payment arrangements).

⚠ Enter each activity/milestone/output/outcome/deliverable only once (under one work package).

⚠ Ensure consistence with the detailed budget table (if applicable).

Objectives

List the specific objectives to which the work package is linked.

Activities and division of work (WP description)

Provide a concise overview of the work (planned tasks). Be specific and give a short name and number for each task.

Show who is participating in each task: Coordinator (COO), Beneficiaries (BEN), Affiliated Entities (AE), Associated Partners (AP), indicating **in bold** the task leader.

Add information on other participants' involvement in the project e.g. subcontractors, in-kind contributions.

Note:

In-kind contributions: In-kind contributions for free are cost-neutral, i.e. cannot be declared as cost. Please indicate the in-kind contributions that are provided in the context of the work package.

The Coordinator remains fully responsible for the coordination tasks, even if they are delegated to someone else. Coordinator tasks cannot be subcontracted.

If there is subcontracting, please also complete the table below.

Milestones and deliverables (outputs/outcomes)

Milestones are control points in the project that help to chart progress (e.g. completion of a key deliverable allowing the next phase of the work to begin). Use them only for major outputs in complex projects, otherwise leave the section empty. Please limit the number of milestones by work package.

Means of verification are how you intend to prove that a milestone has been reached. If appropriate, you can also refer to indicators.

Deliverables are project outputs which are submitted to show project progress (any format). Refer only to major outputs. Do not include minor sub-items, internal working papers, meeting minutes, etc. Limit the number of deliverables to max 10-15 for the entire project. You may be asked to further reduce the number during grant preparation.

For deliverables such as meetings, events, seminars, trainings, workshops, webinars, conferences, etc., enter each deliverable separately and provide the following in the 'Description' field: invitation, agenda, signed presence list, target group, number of estimated participants, duration of the event, report of the event, training material package, presentations, evaluation report, feedback questionnaire.

For deliverables such as manuals, toolkits, guides, reports, leaflets, brochures, training materials etc., add in the 'Description' field: format (electronic or printed), language(s), approximate number of pages and estimated number of copies of publications (if any).

For each deliverable you will have to indicate a due month by when you commit to upload it in the Portal. The due month of the deliverable cannot be outside the duration of the work package and must be in line with the timeline provided below. Month 1 marks the start of the project and all deadlines should be related to this starting date.

The labels used mean:

Public — fully open (⚠ automatically posted online on the Project Results platforms)

Sensitive — limited under the conditions of the Grant Agreement

EU classified — RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision [2015/444](#). For items classified under other rules (e.g. national or international organisation), please select the equivalent EU classification level.

Work Package 1

Work Package 1: Project Management & Coordination					
Duration:	M1 – M24	Lead Beneficiary:	1 - STRESS		
Objectives					
<p>WP1 ensures the effective coordination, management, and governance of the entire project, guaranteeing high-quality implementation, compliance with EU rules, and timely delivery of all outputs. It establishes the operational framework needed to manage a complex interregional consortium involving Less Developed Regions, Transition Regions and More Developed Regions. Ensure effective coordination, reporting, and communication across the consortium.</p> <p>Specific objectives:</p> <ul style="list-style-type: none"> • Ensure effective overall coordination and governance of the project, establishing the procedures, structures and tools needed for smooth collaboration among all partners and regional authorities. • Guarantee sound administrative, contractual and financial management, ensuring compliance with I3 rules, transparent budget monitoring and timely reporting to the European Commission. • Monitor project implementation and quality, ensuring that activities, deliverables and milestones are achieved on time and at the required standard through appropriate quality assurance and internal review mechanisms. • Oversee risk management and mitigation, identifying potential risks, monitoring their evolution and implementing corrective measures to safeguard project performance. • Facilitate efficient communication and knowledge flow within the consortium and with external stakeholders, ensuring well-structured meetings, documentation, and interaction with the EC Project Officer. 					
Activities and division of work (WP description)					
Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T1.1	Governance, Administrative and	This task covers overall project governance, administrative and contractual coordination, and financial management. STRESS, as coordinator, ensures	STRESS All	COO BEN	No

	Financial Management	compliance with I3 rules, oversees budget monitoring, consolidates financial reporting and maintains formal communication with the European Commission.					
T1.2	Quality Assurance, Risk and Data Management	This task ensures quality control of outputs, structured risk management and responsible data governance throughout the project lifecycle. A living Risk Register will be maintained and reviewed regularly, with mitigation measures activated when necessary. In addition, T1.2 establishes a light but structured Data Management framework, including data types collected, storage and access rules, confidentiality levels and responsibilities for data handling. Data collection and processing will comply with EU data protection rules, ensuring confidentiality where required.			STRESS All	COO BEN	No
T1.3	Operational Coordination and Monitoring	This task ensures day-to-day coordination of activities and alignment between Work Packages. It includes monitoring of deliverables and milestones, timeline tracking, support to WP Leaders, and preparation of periodic reports. A light but structured monitoring system will be applied, including: <ul style="list-style-type: none">• Biannual progress reviews aligned with consortium meetings;• Internal tracking tools for deliverables and person-months;• Early identification of deviations and corrective actions. T1.3 also includes the organisation of five consortium meetings (Kick-off, three intermediate meetings hosted in LDR partner regions, and Final Meeting), serving governance and alignment purposes.			STRESS All	COO BEN	No
Milestones and deliverables (outputs/outcomes)							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification	
MS1	Kick-off Meeting successfully completed	1	STRESS	Project starts with a plenary meeting of kick-off	1	Agenda, minute of the kick-off meeting and attendance list	
MS6	Mid-term review and implementation check	1	STRESS	Partners meet for the third consortium meeting, with review and validation of progress by the Steering Committee	12	Progress report (D1.3) and Steering Committee validation	

Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Disseminatio n Level	Due Date (month number)	Description (including format and language)
D1.1	Project Handbook and Governance Framework	1	STRESS	R — Document, report	PU — Public	2	Internal document defining the project governance structure, decision-making rules, operational procedures and quality management framework guiding the implementation of H2EIR. (PDF, English)
D1.2	Data Management Plan	1	STRESS	DMP — Data Management Plan	PU — Public	4	Document describing data types, collection procedures, storage, access rules, confidentiality levels and responsibilities for data handling in accordance with EU data protection requirements. (PDF, English)
D1.3	Progress report	1	STRESS	R — Document, report	SEN — Sensitive	12	Progress report not linked to payments, mandatory for the I3-2026-CAP2b call (PDF, English)
D1.4	Annual expenditure report	1	STRESS	R — Document, report	SEN — Sensitive	12	Report on annual cumulative expenditure, mandatory for the I3-2026-CAP2b call (PDF or Excel, English)
D1.5	Final report	1	STRESS	R — Document, report	SEN — Sensitive	24	Consolidated technical and financial report including internal reforms implemented during the project. (PDF, English)

Estimated budget — Resources

See detailed budget table (annex 1 to Part B).

Work Package 2

Work Package 2: Ecosystem Building & S3 Alignment					
Duration:	M1 – M18	Lead Beneficiary:	2 – ADRAL		
Objectives					
<p>This Work Package strengthens regional hydrogen innovation ecosystems in the five Less Developed Regions (Campania, Alentejo, Azores, Centru, Małopolskie) by activating local stakeholders, benchmarking innovation performance, and aligning regional strategies with shared Smart Specialisation priorities. It provides the foundations for interregional cooperation, structured knowledge transfer, and the development of policy mixes that enable SMEs and regional actors to participate in European hydrogen value chains. The proposed structure for WP2 moves beyond isolated studies to function as an operational funnel. The workflow is designed to organise the regional actors and comprehensively map the regional Value Chains. Instead of focusing initially on isolated projects, it starts by analysing the broader ecosystem capabilities—including industry, technology, training centres, policy frameworks, and infrastructure/logistics. By identifying the gaps within these value chains, specific opportunities emerge. WP2 then filter these opportunities down to specific investment cases. This ensures that the output of WP2 feeds directly into the technical investment readiness work of WP3.</p> <p>Specific objectives:</p> <ul style="list-style-type: none"> • Consolidate Regional and Interregional H2 ecosystems by activating the Quadruple Helix actors and formally establishing H2EIR Interregional Partnership and Alliances. • Deploy a Social & Industrial "Scouting Mechanism" by capitalising on other Eu initiatives project methodology (Stakeholder Groups & Social Analysis) to ensure project viability. • Co-design S3-based Hydrogen Roadmaps using an "Acceleration Funnel" approach (based on I3 CAP2b best practices), identifying investment gaps and selecting at least 2 high-potential Business Cases per LDR for WP3 support. • Define a supportive Policy Mix and select accessible assessment tools to ensure long-term replicability. 					
Activities and division of work (WP description)					
Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T2.1	Design of the Ecosystem Governance &	<p>This task establishes the methodological framework before operational work begins.</p> <p>Alliance Governance: We will define Memorandum of Understanding (MoU) to clarify the governance structure for the formation of one interregional S3 partnership and two macro-regional</p>	ADRAL CENER	BEN BEN	No

	Value Chain Methodology	<p>alliances (Atlantic, Central-European). This framework will facilitate the collaboration of Quadruple Helix actors, starting with key identified partners and remaining open to new actors identified during the mapping phase.</p> <p>Engagement Framework (Synergy with other EU initiatives): To maximise efficiency and boost impact, we will capitalise on the active stakeholders groups from other EU projects (PRHyUS, HMY, Allon I3, H2tALENT). We will extend the Social Territorial Analysis methodology used in PRHyUS to measure social acceptance early on, ensuring that the value chains we develop are socially viable. We will also consult Good Practices already identified through these initiatives to use them as guidelines in the different context.</p> <p>Ecosystem Mapping & Gap Assessment Methodology: This defines the criteria for the "top of the funnel". We rely on the technical partners (CENER and FBK) to define the objective parameters to map the regional ecosystem (e.g., industry capabilities, infrastructure, logistics, training needs, and policy framework). This methodology will allow LDRs to identify Value Chain Gaps. From these gaps, specific opportunities (projects) will be identified as a "step-down" result to feed WP3.</p>	STRESS PNEC VUB FBK	COO BEN BEN BEN	
T2.2	Value Chain Mapping & Design	<p>This task moves from theory to practice, applying a quantitative methodology to map and design the regional hydrogen ecosystems. Led by CENER, this task focuses exclusively on value chain analysis. The scope comprehensively covers both the mapping of existing value chains (those already present in the territory) and the design of new, non-existing value chains (those potentially built in the future). For both existing and new configurations, the analysis will address traditional sectors (such as steelmaking, chemical industries, and refineries) as well as innovative applications (such as transport and other emerging uses).</p> <p>To execute this, CENER will design a comprehensive multi-criteria assessment matrix that evaluates all critical ecosystem dimensions, including industrial capacity, technology readiness, training capabilities, policy frameworks, and renewable energy infrastructure. The methodology relies on a quantitative rating system that assigns specific numerical values, weights, and priorities to each criterion. Acting as the local operational arms, the Less Developed Region (LDR) partners will collect the specific regional data required to feed this matrix. Questionnaires and meetings with regional stakeholders will allow for smooth integration of their inputs. Finally, CENER will analyse these consolidated results to identify the high-potential value chains in each region and pinpoint the existing ecosystem gaps, providing the technical foundation for the subsequent regional roadmaps.</p>	CENER ADRAL STRESS AZORES PNEC CENTRU VUB FBK	BEN BEN COO BEN BEN BEN BEN BEN	No
T2.3	Regulatory Framework & Policy Mix Recommendations	<p>This task ensures the ecosystem has the necessary enabling environment and accessible tools to support hydrogen deployment, focusing exclusively on the non-financial support framework (as financial engineering is addressed in WP3). Led by ADRAL, the activity centres on identifying the current regulatory frameworks operating within each Less Developed Region (LDR). The consortium, drawing upon regional insights and thematic expertise from HYPOS, will pinpoint specific regulatory bottlenecks, permitting complexities, and hydrogen certification requirements that currently hinder the development of the local H2 value chains. The primary output of this</p>	ADRAL STRESS AZORES PNEC	BEN COO BEN BEN	No

		task is the production of concrete, actionable policy mix recommendations designed to overcome these regulatory barriers. Ultimately, this analysis and the resulting policy recommendations will directly feed into and be fully integrated within the final Regional S3 H2 Roadmaps developed in Task 2.4.	CENTRU HYPOS FBK	BEN BEN		
T2.4	Strategic Roadmap Co-creation	<p>This task consolidates the analytical results generated in previous WP2 tasks and integrates inputs from WP4 activities on engagement with EU networks and alliances (T4.2) and talent attraction (T4.3). With the support of all LDR partners, four Regional Strategic Hydrogen Roadmaps (Action plans) aligned with Smart Specialisation Strategies will be developed.</p> <p>Discovery Workshops (EDP): Regional sessions will be organised with local stakeholders through the Entrepreneurial Discovery Process (EDP) to validate the findings from T2.2 and T2.3. These workshops ensure that identified value chain gaps, ecosystem opportunities and regulatory barriers are confirmed and refined through local stakeholder feedback.</p> <p>Strategic Roadmaps (Action plans): LDRs will draft their own S3-aligned Regional Hydrogen Roadmaps defining strategic pathways and action plans enabling the regions to position themselves within specific segments of the European hydrogen value chain. Recommendations emerging from WP4 on skills gaps and talent attraction will be integrated into the roadmaps.</p> <p>Selection of Preliminary Business Cases: As a practical step of the roadmap implementation, at least two mature preliminary business cases per region (or macro-region) will be identified and will proceed to the investment readiness phase in WP3. These cases will emerge both from the analytical work carried out in WP2 and from existing collaborations within Regional Stakeholder Groups and previous initiatives, ensuring that selected opportunities reflect realistic regional ecosystem dynamics.</p>	ADRAL CENER STRESS AZORES PNEC CENTRU FBK	BEN BEN COO BEN BEN BEN BEN	No	
Milestones and deliverables (outputs/outcomes)						
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification
MS3	Value chain methodology and ecosystem mapping completed	2	ADRAL	Finalisation of the methodology for value chain identification and completion of the initial social territorial analysis across the participating Less Developed Regions.	6	Internal methodology document (D2.1) validated by the consortium and stakeholder engagement initiated.
MS5	Preliminary business cases identified (WP3 Trigger)	2	ADRAL	Successful identification of the preliminary hydrogen business cases and completion of the value chain mapping. This milestone	10	List of preliminary business cases (at least 8) approved by the consortium and officially handed over to WP3 leaders.

				acts as the critical gate to trigger the start of the techno-economic analysis in WP3.			
MS8	Regional Hydrogen Roadmaps finalized	2	ADRAL	Completion of the strategic hydrogen roadmaps for the Less Developed Regions, integrating local stakeholder feedback, S3 alignment, and inputs from WP4 capacity building.		18	Final roadmaps (D3.3) presented and formally validated by the respective Regional Stakeholder Groups.
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D2.1	Report on value chain methodology, mapping and design	2	CENER	R — Document, report	PU — Public	10	A comprehensive joint report detailing the methodology for value chain identification, alongside the mapping of existing value chains and the design of new ones across the 4 Less Developed Regions. (PDF, English)
D2.1	Policy mix recommendation report	2	ADRAL	R — Document, report	PU — Public	10	A report providing actionable policy mix recommendations to address regulatory bottlenecks and permitting barriers in the green hydrogen sector for the participating regions. (PDF, English)
D2.3	Report with the four H2 Roadmaps (actions plans)	2	ADRAL	R — Document, report	PU — Public	18	The final mandatory action plan containing the 4 S3-aligned Hydrogen Roadmaps, defining the strategic pathways and preliminary business cases ready for investment preparation. (PDF, English)
Estimated budget — Resources							
See detailed budget table (annex 1 to Part B).							

Work Package 3

Work Package 3: Business Case Design & Investment Readiness					
Duration:	M7 – M24	Lead Beneficiary:	1 – FBK		
Objectives					
<p>This Work Package strengthens the capacity of Less Developed Regions to design investable hydrogen business cases and to engage in new value-chain initiatives. It provides a common methodology for business modelling, assesses technical-economic feasibility, identifies regulatory and permitting requirements, and supports industry-driven matchmaking to accelerate investment-ready project concepts.</p> <p>Specific objectives:</p> <ul style="list-style-type: none"> • Develop a shared methodology for hydrogen business modelling tailored to the needs and maturity levels of the five LDRs. • Identify and design new value-chain initiatives based on regional assets, gaps, and industrial demand. • Support LDR partners in the development and feasibility assessment of regional/interregional business cases, ensuring alignment with S3 priorities. • Clarify the permitting and regulatory landscape, producing a practical “permitting compass” and enabling structured matchmaking with technology providers and off-takers. • Strengthen investment readiness by identifying funding opportunities, private investors, and financial mechanisms relevant to each LDR. 					
Activities and division of work (WP description)					
Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T3.1	Decision-oriented assessment based on KPI framework	T3.1 defines the criteria and data needed to evaluate the business cases selected in T2.4 and identify those suitable for detailed modelling in T3.2. Each case is assessed against a structured KPI framework covering economic viability, financial performance, and regulatory alignment. Environmental considerations focus on carbon mitigation performance, ensuring that each configuration can demonstrate the emissions savings required for renewable fuel eligibility. The task delivers a transparent comparison of all candidate cases, highlighting cost drivers, investment performance, and emission related risks. The outcome is a ranked	FBK VUB	BEN BEN	No

		shortlist of the most robust and scalable 4 business cases (minimum), supported by clear evidence and ready for full techno-economic optimisation in T3.2.			
T3.2	Integrated Energy System Design and Techno-Economic Optimisation	This task applies the VUB-developed "Energy System Design and Techno-Economic Optimisation" workflow to the specific hydrogen business cases identified in the five Less Developed Regions (LDRs). Utilising a modelling framework based on multi-energy system optimisation, the task will determine the optimal sizing, configuration, and operation of regional hydrogen assets (e.g., electrolyzers, storage, and transport infrastructure). The analysis will simulate various scenarios to assess technical feasibility and economic viability, balancing capital expenditure (CAPEX) and operational costs (OPEX) against carbon reduction targets. Key outputs include data-driven optimal configurations, emission reduction pathways, and scalability assessments for each LDR ecosystem. The results of this task serve as the technical foundation for the Investment Guidelines (T3.3) and provide the core analytical content for the Permitting Compass tool (T3.4), ensuring that regional investment pipelines are backed by rigorous, evidence-based system designs. Questionnaires and meetings with regional stakeholders will allow for smooth integration of their inputs.	VUB FBK STRESS ADRAL AZORES PNEC CENTRU	BEN BEN COO BEN BEN BEN BEN	No
T3.3	Investment Readiness and deployment Pathways	T3.3 focuses on preparing the shortlisted business cases for real deployment by identifying how each region can combine public and private financing to move projects forward. The work is carried out with regional LDRs and includes a structured review of national and international funding instruments (e.g. HORIZON EUROPE, INNOVATION FUND, etc.), supported by a dedicated public funding analysis led by CENER. The task identifies concrete financing routes for each business case (grants, loans, guarantees, blended finance schemes) and outlines the conditions, timelines, and documentation required to access them. Alongside immediate funding options, the task also supports regions in shaping future proposals under I3 Strand2a to secure continuity of investment and scale up promising initiatives. The outcome is a clear region specific pathway showing how projects can mobilise resources, reduce risk, and advance toward deployment. These results will also feed into the Exploitation and Sustainability Strategy developed under T5.3, supporting the long-term implementation of the project pipeline. Questionnaires and meetings with regional stakeholders will allow for smooth integration of their inputs.	FBK STRESS CENER VUB ADRAL AZORES PNEC CENTRU	BEN COO BEN BEN BEN BEN BEN BEN	No
T3.4	Permitting Compass and Matchmaking evolution: decision-oriented tool for LDRs	Task 3.4 aims to develop a new Permitting Compass tool, which will be based on an existing tool called 'HYPOS-Kompass': It is an online application displayed on the HYPOS Website, which helps to understand how to obtain permits for construction projects in Saxony, Germany, related to hydrogen production, transport, or storage. The new Permitting Compass tool shall be made accessible to a broader European audience to act as a low-threshold offering to approach the topic of hydrogen-related energy transition. It will reduce regulatory uncertainty and reservations about constructing hydrogen facilities. In T3.4 an	HYPOS FBK VUB STRESS ADRAL	BEN BEN BEN COO BEN	Yes

		<p>upgraded version of the original tool (HYPOS-Kompass) will be created in the English language, taking into account the specific permitting pathways for each involved less developed regions (LDRs). HYPOS will therefore support LDR representatives in determining which legal texts need to be consulted and interpreted in order to create content to be implemented in the Permitting Compass tool. This content will be passed to T5.1, which will lead its actual implementation in a new tool with a new environment / interface, made available in the H2EIR website in WP5.</p> <p>Additionally, T3.4 aims to add a ‘Matchmaking tool’, which will help to promote hydrogen projects in order to find partners along the relevant value chain. This new feature shall act as an online platform, on which users and stakeholders from LDR can present their hydrogen-related products, services, and or advertise requests for finding e.g. a project consortium. Since HYPOS already displays such tool on its website, HYPOS will update the tool and assist PNEC, which will insert it into the website environment. Both tools will be translated in the four LDR’s languages.</p>	AZORES PNEC CENTRU	BEN BEN BEN			
Milestones and deliverables (outputs/outcomes)							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification	
MS7	Permitting Compass and matchmaking tool input data interface ready	3	HYPOS	The inputs required form LDRs for the new permitting compass and matchmaking tool are available and tools can pass to the implementation phase	M14	Data set tables	
MS9	Preliminary Energy systems design ready	3	VUB	Preliminary Energy system design and techno-economic optimisation finalised on the selected business cases to proceed with investment readiness pathways	M18	Technical report and review at fourth consortium meeting (meeting minute)	
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D3.1	Input dataset, assumptions and KPI framework for	3	FBK	R — Document, report	PU — Public	14	D3.1 contains data and KPIs for T3.2 and to identify the four most feasible hydrogen

	energy system business cases						business cases in the Less Developed Regions. D3.1 will not include sensitive data, if any. (PDF, English)
D3.2	Energy System Design and Techno-Economic Optimisation	3	VUB	R — Document, report	SEN — Sensitive	24	D3.2 contains the final techno-economic system design obtained by optimising system sizing, configuration, and operation through a multi-energy modelling framework. (PDF, English)
D3.3	Report on investment pathways	3	FBK	R — Document, report	SEN — Sensitive	24	D3.3 contains the viable financing pathways and the initiated I3 strand2a proposal for each shortlisted business case. (PDF, English)
D3.4	Permitting Compass and Matchmaking and Tools	3	HYPOS	DEM — Demonstrator	PU — Public	24	Accessible tools on H2EIR website (HTML, English, Italian, Portuguese, Polish and Rumanian versions)
Estimated budget — Resources							
See detailed budget table (annex 1 to Part B).							

Work Package 4

Work Package 4: Networking and Capacity Building					
Duration:	M1 – M24	Lead Beneficiary:	1 – STRESS		
Objectives					
<p>WP4 strengthens interregional collaboration by activating structured capacity building programmes, facilitating participation in key EU networks and alliances, supporting talent attraction and retention mechanisms tailored to the needs of the Less Developed Regions, and promoting the replication of project methodologies in geographically peripheral territories. The Work Package ensures long-term capacity building, supports the creation of resilient hydrogen innovation ecosystems aligned with EU priorities, and facilitates the transferability of project results beyond the participating regions.</p> <p>Specific objectives:</p> <ul style="list-style-type: none"> • Enhance interregional collaboration and peer learning through workshops, study visits, and joint training sessions among LDRs, TRs and MDRs. • Increase engagement of regional actors with EU-level networks (e.g., Clean Hydrogen Partnership, Hydrogen Valleys Platform, S3 Community of Practice). • Enable structured knowledge transfer on hydrogen technologies, investment planning, permitting, safety, and innovation ecosystems development. • Support talent attraction and retention in LDRs by identifying workforce gaps, future skills needs, and developing targeted talent development actions aligned with S3 priorities. • Promote the replication and transferability of project methodologies and ecosystem development models to island and outermost regions, building on the experience of the Atlantic Hydrogen Alliance. 					
Activities and division of work (WP description)					
Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T4.1	Capacity-Building Workshops & Interregional Study Visits Programme	T4.1 establishes a structured interregional capacity-building & interregional study visits programme aimed at strengthening technical, managerial and policy-related competences among partners, with a specific focus on empowering actors from Less Developed Regions. The programme, implemented during the two years of the project, will facilitate direct knowledge transfer through exchange of information	PNEC STRESS ADRAL	BEN COO BEN	No

		among technical experts across consortium organisations. The program will be designed to support hands-on learning on topics such as hydrogen ecosystem governance, business case development, investment planning, permitting procedures, stakeholder engagement and S3 implementation. Exchanges will take place both physically (mainly during consortium meetings) and virtually , depending on the nature of the activity and the specific learning objectives. The programme will follow a demand-driven approach , where LDR partners identify priority knowledge gaps and capacity needs. Based on these needs, tailored exchange plans will be developed, including learning objectives and expected outcomes. Each exchange will produce short implementation reports summarising lessons learned and good practices. The task will contribute to building long-term interregional cooperation channels and strengthening institutional capacity across the consortium.	AZORES CENTRU HYPOS FBK VUB CENER	BEN BEN BEN BEN BEN BEN	
T4.2	Strategic Engagement with EU Hydrogen and Innovation Networks	T4.2 ensures structured collaboration between the project and relevant European innovation and policy networks in order to align regional hydrogen ecosystem development with ongoing European initiatives. The task will facilitate active engagement of the project with platforms such as the Enterprise Europe Network (EEN) , the S3 Community of Practice (including the Thematic Platform on Hydrogen) , relevant Horizon Europe partnerships (e.g. CleanH2 Partnership, European Clean Hydrogen Alliance) , and other European hydrogen innovation initiatives. Rather than creating parallel activities, the project will capitalise on knowledge, methodologies and cooperation opportunities already developed within these ecosystems. In particular, STRESS will participate in relevant thematic workshops, working groups, policy consultations and major hydrogen ecosystem events (e.g. Hydrogen Valley Days and European Hydrogen Week). Through this participation, the project will exchange experiences with European ecosystem actors and collect strategic feedback relevant to regional hydrogen ecosystem development. Insights gathered through these exchanges will be periodically shared with the consortium through dedicated sessions during project meetings and internal knowledge-sharing activities . The knowledge collected will also be systematically integrated into the regional hydrogen roadmaps (WP2) and the investment pathways and business cases developed in WP3 , ensuring alignment between regional strategies and evolving European hydrogen innovation and investment priorities.	STRESS All	COO BEN	No
T4.3	Talent Attraction, Skills Development & Retention Strategy	T4.3 focuses on addressing workforce gaps and strengthening human capital development in hydrogen-related sectors across the participating Less Developed Regions . The task will support the design and implementation of regional talent attraction, skills development and retention strategies aligned with S3 priorities and regional labour market needs. The activity will start with a structured assessment of regional skills gaps, future workforce needs and training opportunities linked to hydrogen value chains, considering technical, managerial and regulatory competences. Based on	STRESS All	COO BEN	No

		<p>this assessment, realised through questionnaires in the different LDRs, partners will support STRESS in designing targeted talent attraction actions, including training modules, collaboration with universities and vocational training centres, and pilot initiatives supporting career pathways in hydrogen technologies and innovation management. The task will also explore mechanisms to attract external expertise and foster knowledge circulation, including cooperation with EU education and research networks, mobility schemes and industry–academia partnerships. By identifying pathways for strengthening local skills ecosystems, T4.3 will contribute to increasing regional competitiveness, supporting SME growth and ensuring the long-term sustainability of hydrogen innovation ecosystems. The final Talent Attraction and Skills Development Strategy (D4.3) will feed into T2.4 as an annex to the LDR roadmaps. During consortium meetings, Talent Showcase sessions will give partners the floor to present existing training initiatives, research programmes and emerging professional profiles in hydrogen-related sectors, facilitating exchanges between education providers, industry and regional innovation actors.</p>			
T4.4	Replication and transferability in island and outermost regions	<p>This task explores the applicability and transferability of the project's methodologies and results to island and outermost regions, using the Azores and the Atlantic Alliance developed in H2EIR as a reference case. Building on the ecosystem analysis, value-chain mapping and business case development carried out in WP2 and WP3, the task will identify the specific challenges and opportunities that characterise hydrogen deployment in geographically isolated territories, such as limited infrastructure connectivity, smaller market size and strong dependence on renewable resources.</p> <p>Based on these findings, the task will develop a Replication Report for island and outermost regions, outlining key lessons learned, methodological adaptations and strategic recommendations for applying the H2EIR approach in similar territorial contexts across Europe. Particular attention will be given to the integration of hydrogen within island energy systems and to opportunities for strengthening regional innovation ecosystems through interregional cooperation, especially with inland territories.</p> <p>The outcomes of this task will contribute to positioning H2EIR as a replicable model for strengthening hydrogen innovation ecosystems in Less Developed and geographically peripheral regions, supporting knowledge transfer and policy learning beyond the project consortium. The long-term sustainability and further dissemination of this replication model will be ensured through the exploitation strategy defined in T5.3, which will identify mechanisms for maintaining and scaling up project results after the end of the project. Replication will also be supported through the engagement of other outermost regions (e.g. Madeira, Canary Islands), including the organisation of dedicated exchanges and the collection of expressions of interest from local governments and other stakeholders willing to explore the adoption and adaptation of H2EIR methodologies in their regional contexts.</p>	AZORES ADRAL STRESS	BEN BEN COO	No

Milestones and deliverables (outputs/outcomes)							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description		Due Date (month number)	Means of Verification
MS4	Approved internal framework and first workshop sessions completed	4	PNEC	Approved internal framework, first info session (kick-off) and first two workshop session completed (one online and one in person)		6	Minute of first two consortium meetings and internal framework document
MS10	Talent Strategy integrated into Regional Roadmaps	4	STRESS	Talent retention and skill development strategy ready		18	Validation by Steering Committee and formal inclusion as annex to S3-aligned Roadmaps
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D4.1	Interregional capacity building programme report	4	PNEC	R — Document, report	PU — Public	24	Consolidated report summarising workshops and study visits organised during the five consortium meetings and online. The report will include agendas, participant profiles, key lessons learned and evidence of knowledge transfer from and feeding back into WP2 and WP3 activities. (PDF, English)
D4.2	EU Positioning and Network Engagement Brief	4	STRESS	R — Document, report	PU — Public	24	Brief analytical note summarising engagement with EU networks, strategic alliances and matchmaking initiatives, highlighting cooperation opportunities identified and

							feedback integrated into regional roadmaps and business case development. (PDF, English)
D4.3	Talent Attraction and Skills Development Strategy (Annex to Regional Roadmaps)	4	STRESS	R – Document, report	PU - Public	18	Structured assessment of regional skills gaps and workforce needs in hydrogen-related sectors, including targeted recommendations for talent attraction, retention and training measures. The document will be formally annexed to the S3-aligned Regional Hydrogen Roadmaps developed under WP2, ensuring integration into regional Action Plans. (PDF, English)
T4.4	Replication and transferability report	4	AZORES	R – Document, report	PU - Public	24	Consolidated report on applicability and transferability of the project's methodologies and results to island and outermost regions, using the Azores and the Atlantic Alliance developed in H2EIR as a reference case. (PDF, English)
Estimated budget — Resources							
See detailed budget table (annex 1 to Part B).							

Work Package 5

Work Package 5: Communication, Dissemination & Exploitation					
Duration:	M1 – M24	Lead Beneficiary:	1 – PNEC		
Objectives					
<p>WP5 ensures that project results are communicated effectively, disseminated to relevant audiences, and exploited to guarantee long-term policy uptake in the participating Less Developed Regions. This Work Package supports visibility, stakeholder engagement, and integration of the project's methodologies and outputs into regional S3 governance, future investment planning, and EU-level initiatives.</p> <p>Specific objectives:</p> <ul style="list-style-type: none"> • Ensure clear and coherent project communication through a unified visual identity, a communication plan aligned with EU guidelines, and continuous engagement of stakeholders. • Maximise dissemination of methodologies, S3 roadmaps, business cases, and talent development tools to regional, national, and EU audiences. • Enable exploitation and policy uptake by preparing targeted guidance for S3 authorities, integrating project results into regional strategies, and supporting alignment with ERDF/I3 future funding schemes. • Strengthen long-term sustainability through stakeholder engagement, replication support, and promotion of follow-up investment actions and interregional cooperation opportunities. 					
Activities and division of work (WP description)					
Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T5.1	Communication Strategy & Visual Identity	Development of the communication approach for the project, including: (1) a detailed strategy document with KPIs, a regular communication plan and mapped communication channels; (2) design of the project visual identity (logo, colour palette, fonts); (3) creation of templates (PPT, Word, social media graphics); (4) launch of the project website with basic structure and initial content; (5) preparation of a social media starter kit with ready-to-use posts, banners presenting the project aims, consortium composition and a hydrogen-related glossary; (6) setting up a project newsletter ecosystem.	PNEC STRESS ADRAL CENTRU	BEN COO BEN BEN	No

		<p>Additionally, WP5 will ensure that selected practical outputs developed under T3.4 — the Matchmaking Tool and the Permitting Compass — are integrated into the project website and made accessible to external users, while their methodological design and technical development will be carried out within T3.4.</p> <p>The S3 Hydrogen Roadmaps (developed in T2.4) will also be made available through the project website to facilitate access by regional stakeholders, policymakers and innovation actors. PNEC will also coordinate the setup of a monitoring system for communication KPIs.</p>	FBK	BEN	
T5.2	Dissemination of S3 Roadmaps, Business Cases & Tools	<p>T5.2 focuses on disseminating the main methodologies, analytical outputs and practical tools developed during the project to regional, national and European stakeholders. Dissemination activities will include: (1) preparation of thematic factsheets presenting key project outputs, including S3 hydrogen roadmaps, value-chain analysis methodologies, business case development approaches and ecosystem tools; (2) development of policy briefs targeted at regional S3 authorities, innovation agencies and EU policymakers; (3) organisation of regional and interregional dissemination events (webinars, workshops and conference sessions) to present project results and lessons learned; (4) development of digital dissemination materials such as presentations, infographics and short explainer videos aimed at increasing accessibility of the project's methodologies.</p> <p>Dissemination activities will complement the strategic EU networking activities carried out under T4.2, ensuring that project outputs are presented and discussed within relevant European hydrogen and innovation ecosystems while avoiding duplication of networking efforts. Particular attention will be given to engaging regional S3 managing authorities and innovation agencies, ensuring that project results can directly inform updates of Smart Specialisation Strategies and the design of future ERDF and I3 investment initiatives. Through these actions, T5.2 will ensure that the tools and methodologies developed in the project can be understood, adopted and reused by regional innovation ecosystems beyond the project consortium.</p>	PNEC All	COO BEN	No
T5.3	Exploitation and Sustainability Strategy	<p>This task defines the strategy for ensuring the long-term use and replication of the project results beyond the project duration. The exploitation strategy will identify how key outputs — including regional hydrogen roadmaps, value-chain analyses, business case methodologies and ecosystem tools — can continue to be used by regional authorities, development agencies and innovation stakeholders.</p> <p>The strategy will support the continuation of interregional cooperation and the preparation of follow-up initiatives, building on the investment pathways and funding analysis developed in T3.3. While T3.3 identifies potential funding sources and investment mechanisms, the exploitation strategy will focus on how regional ecosystems and partners can cooperate in practice to advance these initiatives, maintain stakeholder engagement and support the implementation of the I3 Strand 2a and other projects pipelines.</p>	STRESS All	COO BEN	No

		The exploitation strategy will also take into account the replication activities developed under WP4 , identifying how the project’s methodological approach can be adapted and transferred to other territories — including island and outermost regions — and how cooperation frameworks established during the project can be maintained after its completion. Through this approach, T5.3 will ensure that H2EIR results remain operational beyond the project lifetime and continue supporting hydrogen ecosystem development, interregional cooperation and investment preparation in participating regions and beyond.						
Milestones and deliverables (outputs/outcomes)								
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification		
MS2	Project visibility package ready to use	5	PNEC	MS2 marks the completion and validation of all core communication components required to launch the project’s external visibility. The milestone confirms that the project’s visual identity, website, and communication templates are finalised and operational, enabling immediate use by all partners.	M3	Visual identity manual, templates and <i>active website</i> Specifically, the milestone includes the internal delivery of: <ul style="list-style-type: none">• a complete visual identity manual (logo, typography, colour palette),• branded templates for PowerPoint, Word documents, factsheets and social media posts,• the project website activated with initial content,• a social media starter kit for all partners,• internal guidelines on the use of communication KPIs.		
MS11	Preliminary exploitation framework defined	5	STRESS	A preliminary exploitation framework is agreed by the consortium following the completion of the Regional Hydrogen Roadmaps (MS8) and the preliminary energy systems design (MS9). The milestone confirms that key exploitable results, potential users, and priority hydrogen investment initiatives have been identified, providing the basis for the preparation of follow-up interregional investment proposals under I3 Strand 2a and other EU funding instruments.	M19	Steering Committee validation during project meeting and internal report summarising preliminary identified exploitable results, preliminary investment pathways and potential follow-up initiatives		

Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D5.1	Communication Strategy and Dissemination Framework	5	PNEC	R — Document, report	PU — Public	M3	D5.1 outlines the strategy for communicating and disseminating the project's activities and results. It distinguishes between communication aimed at raising general awareness and dissemination targeted at stakeholders who can use the results. The plan defines key audiences, tools and channels, as well as expected outcomes and KPIs, ensuring EU visibility compliance and maximising project impact. (PDF, English)
D5.2	Exploitation and Sustainability Strategy	5	STRESS	R — Document, report	PU — Public	M24	D5.2 describes how project results will be used and valorised beyond the project lifetime for commercial, societal and policy purposes. It defines pathways for market uptake, policy integration and future investments, addresses potential remaining bottlenecks, and ensures long-term sustainability and impact of the identified value chains and innovative solutions. It includes insights on how to maintain stakeholder engagement and support the implementation of the I3 Strand 2a and other projects pipelines. Confidential information related to individual business cases will not be included in the public version of the exploitation strategy (PDF, English)
Estimated budget — Resources							
See detailed budget table (annex 1 to Part B).							

Staff effort

Staff effort per work package						
<i>Fill in the summary on work package information and effort per work package.</i>						
Work Package No	Work Package Title	Lead Participant No	Lead Participant Short Name	Start Month	End Month	Person-Months
1	Project Management & Coordination	01	STRES	1	24	25,1
2	Ecosystem Building & S3 Alignment	02	ADRAL	1	18	46,3
3	Business Case Design & Investment Readiness	07	FBK	7	24	75,8
4	Networking and Capacity Building	01	STRESS	1	24	53,4
5	Communication, Dissemination & Exploitation	04	PNEC	1	24	28,55
					Total Person-Months	229,15

Staff effort per participant <i>(n/a for OG)</i>						
<i>Fill in the effort per work package and Beneficiary/Affiliated Entity.</i>						
<i>Please indicate the number of person/months over the whole duration of the planned work.</i>						
<i>Identify the work-package leader for each work package by showing the relevant person/month figure in bold.</i>						
Participant	WP1	WP2	WP3	WP4	WP5	Total Person-Months
STRESS	9	6	6	13	7	41
ADRAL	10	12	7	10	10	49

AZORES	0,5	3	3	8	0,75	15,25
PNEC	2	5,5	2,5	3	8	21
CENTRU	0,5	7,2	13,2	13,2	0,6	34,7
HYPOS	1,6	0,4	3,1	1,2	0,2	6,5
FBK	0,5	0,5	31	2	1	35
VUB	0,5	1	8	1	0,5	11
CENER	0,5	10,7	2	2	0,5	15,7
Total Person-Months	25,1	46,3	75,8	53,4	28,55	229,15

Subcontracting

Subcontracting

Give details on subcontracted project tasks (if any) and explain the reasons why (as opposed to direct implementation by the Beneficiaries/Affiliated Entities).

Subcontracting — Subcontracting means the implementation of 'action tasks', i.e. specific tasks which are part of the EU grant and are described in Annex 1 of the Grant Agreement.

Note: Subcontracting concerns the outsourcing of a part of the project to a party outside the consortium. It is not simply about purchasing goods or services. We normally expect that the participants have sufficient operational capacity to implement the project activities themselves. Subcontracting should therefore be exceptional.

Include only subcontracts that comply with the rules (i.e. best value for money and no conflict of interest; no subcontracting of coordinator tasks).

Work Package No	Subcontract No (continuous numbering linked to WP)	Subcontract Name (subcontracted action tasks)	Description (including task number and BEN/AE to which it is linked)	Estimated Costs (EUR)	Justification (why is subcontracting necessary?)	Best-Value-for-Money (how do you intend to ensure it?)
WP3	S3.1	WordPress breakdown	T3.4 HYPOS - Assistance in breaking down the WordPress logic behind the existing HYPOS-Kompass application in order to develop new tool functionality from it	2560	Not available in-house	Multiple offers

Other issues: <i>If subcontracting for the project goes beyond 30% of the total eligible costs, give specific reasons.</i>	Insert text
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Timetable

Timetable (projects up to 2 years)																								
Fill in cells in beige to show the duration of activities. Repeat lines/columns as necessary. Note: Use the project month numbers instead of calendar months. Month 1 marks always the start of the project. In the timeline you should indicate the timing of each activity per WP.																								
ACTIVITY	MONTHS																							
	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13	M 14	M 15	M 16	M 17	M 18	M 19	M 20	M 21	M 22	M 23	M 24
Task 1.1: Governance, Administrative and Financial Management																								
Task 1.2: Quality Assurance, Risk and Data Management																								
Task 1.3: Operational Coordination and Monitoring																								
Task 2.1: Design of the Ecosystem Gov. & Value Chain Methodology																								
Task 2.2: Value Chain Mapping & Design																								
Task 2.3: Regulatory Framework & Policy Mix Recommendations																								
Task 2.4: Strategic Roadmap Co-creation																								

[illegible]

#§WRK-PLA-WP§#

#@ETH-ICS-EI@#

6. OTHER**6.1 Ethics**

Ethics
Not applicable.


#§ETH-ICS-EI\$# #@SEC-URI-SU@#

6.2 Security

Security
Not applicable.

#§SEC-URI-SU\$# #@DEC-LAR-DL@#

7. DECLARATIONS

Double funding	
Information concerning other EU grants for this project  Please note that there is a strict prohibition of double funding from the EU budget (except under EU Synergies actions).	YES/NO
We confirm that to our best knowledge neither the project as a whole nor any parts of it have benefitted from any other EU grant (including EU funding managed by authorities in EU Member States or other funding bodies, e.g. EU Regional Funds, EU Agricultural Funds, etc). If NO, explain and provide details.	YES
We confirm that to our best knowledge neither the project as a whole nor any parts of it are (nor will be) submitted for any other EU grant (including EU funding managed by authorities in EU Member States or other funding bodies, e.g. EU Regional Funds, EU Agricultural Funds, etc). If NO, explain and provide details.	YES

Financial support to third parties (if applicable) <i>If in your project the maximum amount per third party will be more than the threshold amount set in the Call document, justify and explain why the higher amount is necessary in order to fulfil your project's objectives.</i>
Not applicable

#§DEC-LAR-DL\$#

ANNEXES

LIST OF ANNEXES

Standard

Detailed budget table (annex 1 to Part B)

Special

Other annexes (annex 2 to Part B): Letters of Endorsement

LIST OF PREVIOUS PROJECTS

List of previous projects					
<i>Please provide a list of your previous projects for the last 4 years.</i>					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
[name]					
[name]					

HISTORY OF CHANGES		
VERSION	PUBLICATION DATE	CHANGE
1.0	15.11.2021	Initial version (new MFF).
2.0	01.06.2022	Consolidation, formatting and layout changes. Tags added.

LETTER OF SUPPORT (MS/REGION S3 ENDORSEMENT)

(To be filled in and signed by the competent authority for each country/region, assembled by the coordinator and uploaded in a single file in the Portal Submission System as part of the application)

This letter is compulsory for the coordinator; it must be signed by the competent authority of the country/region where they are established. Support letters for other participants (from their competent authorities) are optional.)

COMPETENT NATIONAL/REGIONAL AUTHORITY RESPONSIBLE FOR THE S3 MANAGEMENT	
Competent authority:	Ufficio Speciale Autorità di Gestione Fondo Europeo di Sviluppo Regionale
Department:	UOS Strumenti a supporto della programmazione e della gestione dei Programmi di competenza. Valutazione. PRigA. Ufficio RIS3
Contact person:	Dott.ssa Roberta Esposito
Legal address:	Centro Direzionale - Isola A6 80143 Napoli Italia ris3@regione.campania.it
CONFIRMATION OF SUPPORT	
Name of the project we support:	H2EIR – Hydrogen Ecosystems for Interregional Investment Readiness
Coordinator:	STRESS S.c.a.r.l.
We hereby confirm that:	
1) we support the application	Yes
2) it is consistent and addresses the national/regional S3 policies, strategies and priorities as identified by this authority	Yes
Additional information (optional)	
<i>Add additional information on the project's contribution to the S3 priorities.</i>	
<p>The H2EIR project proposal aims to strengthen regional innovation ecosystems in the field of hydrogen technologies and to enhance the investment readiness of hydrogen-related innovation initiatives through interregional cooperation. The project addresses challenges such as limited investment capacity, fragmentation of regional innovation ecosystems, and the need to support less developed regions in developing competitive and scalable hydrogen value chains. Through activities such as ecosystem mapping, capacity-building actions, investment-oriented support mechanisms and structured interregional collaboration, the project seeks to facilitate the transformation of innovative hydrogen solutions into investment-ready projects and to promote stronger cooperation among European regions in the emerging hydrogen economy.</p> <p>Within this framework, the project contributes to the development of sustainable energy systems and supports the transition toward low-carbon and climate-neutral economies. By fostering cooperation among regional ecosystems and by strengthening the capacity of regional actors to develop hydrogen-related innovation projects, the initiative contributes to the broader European objectives related to energy transition, decarbonisation and industrial competitiveness.</p> <p>Therefore, it has been found that the H2EIR project is potentially aligned with the RIS3 Campania, specifically with the domain “Energy, Environment and Sustainable Construction”, in relation to the technological area “Energy efficiency and Smart Energy”, including technological trajectories related to the development of clean and green hydrogen technologies, such as production, storage, transport and integration into resilient energy infrastructures.</p> <p>Considering the specific objectives, expected impacts and the information provided on the interregional cooperation pathway and planned activities, the project shows potential coherence with the above-mentioned domains and</p>	

technological areas of the Campania RIS3, and such coherence constitutes the basis for delivering the endorsement for the project proposal, within the limits and for the purposes of this letter.

Scope and neutrality disclaimer:

This endorsement is issued exclusively in our institutional capacity as competent authority for S3 governance and confirms the strategic coherence of the proposal with the regional S3 priorities. It does not constitute: (i) a commitment of funding, co-financing, or allocation of regional/national resources; (ii) a guarantee of project approval or results; (iii) an assessment of the applicant's operational/financial capacity, which remains under the responsibility of the consortium and the evaluation procedures of the Call. The Campania Region is not part of the consortium unless explicitly indicated in the Grant Application, and it assumes no operational role nor liability for project implementation, procurement, contracting, or deliverables. Any potential synergies with ERDF mainstream instruments, if relevant, will be assessed separately and implemented only through regular, transparent and competitive procedures in compliance with applicable rules.

SIGNATURE OF THE AUTHORISED PERSON

Name and function:

Ing. Sergio Negro – Direttore U.S. Autorità di Gestione Fondo Europeo di Sviluppo Regionale

Date of signature:

Signature and stamp:

HISTORY OF CHANGES		
VERSION	PUBLICATION DATE	CHANGE
1.0	15.11.2021	Initial version (new MFF)
2.0	15.05.2023	Additional information on recognition as Regional Innovation Valley.
3.0	01.03.2024	Information on recognition as Regional Innovation Valley deleted.



SERGIO NEGRO
REGIONE CAMPANIA
DIRIGENTE
17.03.2026 11:44:31
GMT+01:00

LETTER OF SUPPORT (MS/REGION S3 ENDORSEMENT)

COMPETENT NATIONAL/REGIONAL AUTHORITY RESPONSIBLE FOR THE S3 MANAGEMENT	
Competent authority:	Comissão de Coordenação e Desenvolvimento Regional do Alentejo (CCDR Alentejo, I.P.)
Department:	Presidente
Contact person:	António José Ceia da Silva
Legal address:	Av. Eng. Arantes e Oliveira 193, Évora Portugal presidente@ccdr-a.gov.pt
CONFIRMATION OF SUPPORT	
Name of the project we support:	Hydrogen Ecosystems for Interregional Investment Readiness — H2EIR
Coordinator:	Nicola Di Giulio, Project Manager - STRESS scarl
We hereby confirm that:	
1) we support the application	Yes
2) it is consistent and addresses the national/regional S3 policies, strategies and priorities as identified by this authority	Yes
Additional information (optional)	
<i>Add additional information on the project's contribution to the S3 priorities.</i>	
<p>The H2EIR project directly supports the implementation of the Smart Specialisation Strategy (EREI Alentejo 2030), in particular under the priority domain of Renewable Energies and Circular Economy, which promotes the development of integrated renewable energy systems, decarbonisation technologies, and innovative solutions for a sustainable energy transition.</p> <p>Hydrogen technologies represent a strategic enabling vector within this priority domain, contributing to the deployment of renewable energy integration, sector coupling, energy storage, and the decarbonisation of hard-to-abate sectors. Through structured interregional cooperation and capacity-building activities, H2EIR will strengthen the regional hydrogen innovation ecosystem in Alentejo, enhancing coordination among public authorities, research organisations, innovation intermediaries, and SMEs.</p> <p>The project contributes to EREI Alentejo 2030 objectives by improving the region's ability to design S3-aligned hydrogen roadmaps, develop investment-ready business cases, and attract public and private funding for sustainable energy projects. H2EIR also reinforces the internationalisation and competitiveness of Alentejo's hydrogen value chains, fostering interregional collaboration and positioning the region within emerging European hydrogen ecosystems aligned with EU decarbonisation strategies.</p>	
SIGNATURE OF THE AUTHORISED PERSON	
Name and function:	António José Ceia da Silva Presidente
Date of signature:	19 Fevereiro 2026

Signature and stamp:

António
Ceia da Silva

Assinado de forma digital por António Ceia da
Silva
DN: c=PT, title=Presidente, o=Comissão de
Coordenação e Desenvolvimento Regional do
Alentejo, sn=Ceia da Silva, givenName=António,
cn=António Ceia da Silva
Dados: 2026.02.19 14:32:51 Z

LETTER OF SUPPORT (MS/REGION S3 ENDORSEMENT)

COMPETENT NATIONAL/REGIONAL AUTHORITY RESPONSIBLE FOR THE S3 MANAGEMENT	
Competent authority:	Regional Government of the Azores
Department:	Regional Directorate of Science, Innovation and Development
Contact person:	Rute Dias Gregório – Regional Director
Legal address:	Rua do Mercado, 21 9500-326 Ponta Delgada Açores Portugal Info.drcid@azores.gov.pt
CONFIRMATION OF SUPPORT	
Name of the project we support:	Hydrogen Ecosystems for Interregional Investment Readiness — H2EIR
Coordinator:	Nicola Di Giulio, Project Manager - STRESS scarl nicola.digiulio@stress-scarl.it
We hereby confirm that:	
1) we support the application	Yes
2) it is consistent and addresses the national/regional S3 policies, strategies and priorities as identified by this authority	Yes
Additional information	
<i>Add additional information on the project's contribution to the S3 priorities.</i>	
<p>I, the undersigned, as the legal representative of the Regional Directorate of Science, Innovation and Development the authority in charge of the definition and implementation of the Smart Specialization Strategy (RIS3) of Azores, confirm the support to the application of the project H2EIR.</p> <p>The H2EIR project – Hydrogen Ecosystems for Interregional Investment Readiness has the general objective of empowering the outermost and least developed regions of Europe to carry out future investments in the context of the use of Hydrogen. Within the scope of the project, 4 WPs are taking place, namely WP1 - Management, coordination and consortium meetings; WP2 - Ecosystem Building & Alignment S3; WP3 - Business Cases and Investment Readiness; and WP4 - Networking and Training (communication and dissemination).</p> <p>Through structured interregional cooperation and capacity-building activities, H2EIR will enhance development in the Azores of a regional hydrogen innovation ecosystem, enhancing collaboration and coordination among public authorities, research organizations, knowledge transfer entities, innovators and SMEs. The project contributes to the region's ability to design S3-aligned hydrogen roadmaps, develop hydrogen value chains and investment-ready business cases and attract public and private funding for sustainable energy projects, fostering interregional collaboration and positioning the region within emerging European hydrogen ecosystems aligned with EU decarbonization strategies.</p> <p>The training adjacent to the project will contribute, and enhance, in the RAA, intelligent specialization in the field of hydrogen application and future investments that could contribute to the decarbonization of several regional economic sectors, particularly those related to sectors of great relevance within the sea, agriculture and tourism areas.</p> <p>In addition to the development and innovation potential contributed by the region's integration into ecosystems, inter-regional cooperation, regional and Atlantic hydrogen routes and potential investment partnerships in the application of hydrogen, it is also considered that the training of the ORs for the use of hydrogen, transversally enhances, in alignment with the transversal area "Environment and Climate Action", the region's intelligent specialization, in interconnection with priority areas such as "Sea and Growth Azul", "Agriculture and agroindustry" and "Tourism and Heritage", through specific transformative activities such as "Decarbonization of the agro-industrial sector", "Decarbonization of maritime activity" and "Decarbonization of the tourism sector".</p> <p>Considering the project's focus, it falls within the RIS3 priority areas, therefore corresponding to the regional S3</p>	

priorities.	
SIGNATURE OF THE AUTHORISED PERSON	
Name and function:	Rute Dias Gregório, Regional Director
Date of signature:	
Signature and stamp:	Assinado por: RUTE ISABEL RODRIGUES DIAS GREGÓRIO Num. de Identificação: 09408610 Data: 2026.03.13 17:03:40-01'00' Certificado por: Governo Regional dos Açores Atributos certificados: Diretora Regional da Ciência, Inovação e Desenvolvimento

LETTER OF SUPPORT (MS/REGION S3 ENDORSEMENT)

(To be filled in and signed by the competent authority for each country/region, assembled by the coordinator and uploaded in a single file in the Portal Submission System as part of the application)

This letter is compulsory for the coordinator; it must be signed by the competent authority of the country/region where they are established. Support letters for other participants (from their competent authorities) are optional.)

COMPETENT NATIONAL/REGIONAL AUTHORITY RESPONSIBLE FOR THE S3 MANAGEMENT	
Competent authority:	Marshal Office of the Małopolska Region
Department:	Department of Environment
Contact person:	Justyna Mazurkiewicz, Head of the Climate Team
Legal address:	Urząd Marszałkowski Województwa Małopolskiego Ul. Racławicka 56 30-017 Kraków Polska urząd@umwm.malopolska.pl
CONFIRMATION OF SUPPORT	
Name of the project we support:	Hydrogen Ecosystems for Interregional Investment Readiness — H2EIR
Coordinator:	Izabela Kuśnierz, Polish Network Energie-Cités
We hereby confirm that:	
1) we support the application	Yes
2) it is consistent and addresses the national/regional S3 policies, strategies and priorities as identified by this authority	Yes
Additional information (optional)	
<i>Add additional information on the project's contribution to the S3 priorities.</i>	
<p>The H2EIR project is fully aligned with the Regional Innovation Strategy of the Małopolskie Voivodeship 2030 (RIS Małopolska 2030), directly supporting the regional Smart Specialisation (S3) priority domain: "Sustainable Energy".</p> <p>The project directly addresses several key priorities defined in the "Detailed Description of S3 Areas" for Małopolska, including:</p> <ul style="list-style-type: none"> Innovative methods of energy storage using various carriers (2.1.6), where hydrogen acts as a critical chemical energy carrier. Energy from waste and chemical energy carriers (2.4), supporting the development of sustainable energy alternatives. Systems for conversion, storage, and utilization of renewable and waste energy (6.3.2), aimed at increasing regional energy efficiency. <p>By focusing on hydrogen-related technologies and the clean energy transition, H2EIR addresses the core objectives of the Małopolska S3 by strengthening regional capacities and fostering a coordinated innovation ecosystem. The project enhances cooperation between public authorities, innovation intermediaries, research organisations, and SMEs, which is crucial for the development of innovative energy solutions in the region.</p> <p>Through interregional cooperation and targeted capacity-building activities, H2EIR will significantly improve the ability of regional stakeholders to identify and prepare investment-ready project ideas. This alignment ensures that the</p>	

project not only supports the regional development priorities but also contributes to the long-term economic competitiveness and innovation uptake within the Małopolskie Voivodeship.

SIGNATURE OF THE AUTHORISED PERSON

Name and function: Tomasz Pietrusiak, Deputy Director, Department of Environment

Date of signature: 03.03.2026

Signature and stamp:

Zastępca Dyrektora
Departamentu Środowiska
Tomasz Pietrusiak

HISTORY OF CHANGES

VERSION	PUBLICATION DATE	CHANGE
1.0	15.11.2021	Initial version (new MFF)
2.0	15.05.2023	Additional information on recognition as Regional Innovation Valley.
3.0	01.03.2024	Information on recognition as Regional Innovation Valley deleted.



ADR CENTRU

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(+ 40) 258 - 815622
Fax: (+ 40) 258 - 818613
Internet: www.adrcentru.ro
e-mail: office@adrcentru.ro

EU Grants: Letter of support (MS S3 endorsement): V3.0 – 01.03.2024

LETTER OF SUPPORT (MS/REGION S3 ENDORSEMENT)

(To be filled in and signed by the competent authority for each country/region, assembled by the coordinator and uploaded in a single file in the Portal Submission System as part of the application)

This letter is compulsory for the coordinator; it must be signed by the competent authority of the country/region where they are established. Support letters for other participants (from their competent authorities) are optional.)

COMPETENT NATIONAL/REGIONAL AUTHORITY RESPONSIBLE FOR THE S3 MANAGEMENT	
Competent authority:	Regional Innovation Committee represented by Regional Development Agency Centru
Department:	
Contact person:	Simion Cretu President
Legal address:	Decebal str., no. 11 510093, Alba Iulia Romania fax: (+40) 258-818613 / email address: office@adrcentru.ro
CONFIRMATION OF SUPPORT	
Name of the project we support:	Hydrogen Ecosystems for Interregional Investment Readiness — H2EIR
Coordinator:	Nicola Di Giulio, Project Manager - STRESS scarl nicola.digiulio@stress-scarl.it
We hereby confirm that:	
1) we support the application	Yes
2) it is consistent and addresses the national/regional S3 policies, strategies and priorities as identified by this authority	Yes
Additional information (optional)	
Add additional information on the project's contribution to the S3 priorities.	
<p>The Regional Development Agency Centru (RDA Centru), as a project partner within the H2EIR project, is the sole institution mandated by the Regional Innovation Committee to design and manage the Regional Smart Specialisation Strategy in the Centru Region (RIS3 Centru). In its mandate, given by the Regional Innovation Committee to elaborate and coordinate the implementation of RIS3 Centru, RDA Centru endorses the H2EIR project, as its objectives and proposed activities are closely aligned with the strategic development priorities of the region in the areas of innovation, sustainability, and the transition to green and clean energy sources.</p> <p>Under RIS3 Centru, hydrogen-based technologies are considered a promising solution for reducing carbon emissions and improving energy efficiency. RIS3 Centru represents the region's main strategic framework, defining its long-term vision, objectives, and priority investment areas for each programming period.</p> <p>The Smart Specialisation Strategy for the 2021–2027 programming period sets out the long-term development vision of the Centru Region and supports the development of a regional innovation-driven economic culture by identifying</p>	



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Alba Iulia, Romania
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Internet: www.adrcentru.ro
e-mail: office@adrcentru.ro

EU Grants: Letter of support (MS S3 endorsement): V3.0 – 01.03.2024

key areas of excellence for smart growth. RIS3 Centru 2021–2027 was endorsed by the Centru Regional Innovation Consortium through Decision No. 2/20.01.2021 and subsequently approved by the Centru Regional Development Council through Decision No. 4/10.03.2021.

The strategy emphasizes the development of the energy sector through alternative sources and innovative technologies, with hydrogen recognized as an important component of the transition to clean energy.

In this context, the H2EIR project contributes to the objectives of RIS3 Centru by strengthening the region's capacity to design S3-aligned hydrogen roadmaps, develop investment-ready business cases, and attract both public and private funding for sustainable energy initiatives. Furthermore, the project supports the internationalisation and competitiveness of the Centru Region's emerging hydrogen value chains, fostering interregional collaboration and positioning the region within the developing European hydrogen ecosystem aligned with EU decarbonisation strategies.

SIGNATURE OF THE AUTHORISED PERSON

Name and function:

Simion CRETU, general director RDA Centru
President of Regional Innovation Consortia

Date of signature:

9th of March 2026

Signature and stamp:

HISTORY OF CHANGES

VERSION	PUBLICATION DATE	CHANGE
1.0	15.11.2021	Initial version (new MFF)
2.0	15.05.2023	Additional information on recognition as Regional Innovation Valley.
3.0	01.03.2024	Information on recognition as Regional Innovation Valley deleted .

LETTER OF SUPPORT (MS/REGION S3 ENDORSEMENT)

COMPETENT NATIONAL/REGIONAL AUTHORITY RESPONSIBLE FOR THE S3 MANAGEMENT	
Competent authority:	Ministerium für Wirtschaft, Tourismus, Landwirtschaft und Forsten des Landes Sachsen-Anhalt
Department:	Referat Regionale Innovationsstrategie, Innovations- und Transferpolitik und Innovationsförderung, Digitale Wirtschaft, Clusterthemen
Contact person:	Tina Meyer, Assistant Desk Officer
Legal address:	Hasselbachstraße 4 39104 Magdeburg Germany Tina.Meyer@mw.sachsen-anhalt.de
CONFIRMATION OF SUPPORT	
Name of the project we support:	Hydrogen Ecosystems for Interregional Investment Readiness — H2EIR
Coordinator:	Nicola Di Giulio, Project Manager - STRESS scarl nicola.digiulio@stress-scarl.it
We hereby confirm that:	
1) we support the application	Yes
2) it is consistent and addresses the national/regional S3 policies, strategies and priorities as identified by this authority	Yes
Additional information	
<i>Add additional information on the project's contribution to the S3 priorities.</i>	
<p>The H2EIR project supports the implementation of the Smart Specialisation Strategy (Regionale Innovationsstrategie [RIS], Sachsen-Anhalt 2021–2027), particularly in the priority areas “Querschnittsbereiche Grüner Wasserstoff”, “Netzwerke verstetigen sowie weiterentwickeln und dadurch Zukunftsthemen angehen” and “Durch Internationalisierung Wissen und Märkte erschließen”. The contribution of HYPOS, which is deeply rooted in Saxony-Anhalt's industry and economy, will enrich the participating regions by promoting knowledge and technology transfer from central Germany. This concerns topics such as the development of integrated renewable energy systems, decarbonization technologies and innovative solutions for sustainable energy transition. Hydrogen technologies herein represent a strategic enabler within the above-mentioned priority areas and contribute to sector coupling, energy storage, and defossilization of sectors that are difficult to electrify.</p> <p>In turn, SMEs, industrial companies, project planners or research organizations from Saxony-Anhalt will benefit from the experiences and projects of the participating states, since HYPOS will also focus to establish economic contacts where appropriate. The project further contributes to the RIS Saxony Anhalt objectives by developing and internationalize the region's cluster activities and therefore open new markets.</p> <p>In light of the above considerations, we confirm our support for the project H2EIR.</p>	
SIGNATURE OF THE AUTHORISED PERSON	

Name and function:	Andreas Höfflin, Director-General
Date of signature:	02.03.2026
Signature and stamp:	 <p>Ministerium für Wirtschaft, Tourismus, Landwirtschaft und Forsten des Landes Sachsen-Anhalt Hasselbachstraße 4 39104 Magdeburg Tel.: 0391 / 5 67- 01 Fax: 0391 / 61 50-72</p>

LETTER OF SUPPORT (MS/REGION S3 ENDORSEMENT)

competent National/REGIONAL AUTHORITY responsible for THE S3 management	
Competent authority:	Autonomous Province of Trento
Department:	Department for economic development, research and labour
Contact person:	Valentina PERROTTA, Director, Office for Research and Innovation Policies
Legal address:	Via Guardini, 75 38121, Trento Italy valentina.perrotta@provincia.tn.it
Confirmation of support	
Name of the project we support:	Hydrogen Ecosystems for Interregional Investment Readiness — H2EIR
Coordinator:	Nicola Di Giulio, Project Manager - STRESS scarl nicola.digiulio@stress-scarl.it
We hereby confirm that:	
1) we support the application	Yes
2) it is consistent and addresses the national/regional S3 policies, strategies and priorities as identified by this authority	Yes
Additional information	
<p>The H2EIR project directly supports the implementation of the Smart Specialisation Strategy 2021–2027 of the Autonomous Province of Trento, in particular under the area “Sustainability, mountain and energy resources”. This priority domain promotes the development and optimisation of renewable energy sources, including hydrogen.</p> <p>Hydrogen technologies represent a strategic enabling vector within this framework, contributing to the integration of renewable energies, sector coupling, long-term energy storage, and the decarbonisation of hard-to-abate sectors. In alpine and mountainous contexts, where energy autonomy, resilience and environmental compatibility are essential, hydrogen offers a complementary solution to other renewable systems.</p> <p>Through structured interregional cooperation and capacity-building activities, H2EIR will strengthen the provincial hydrogen innovation ecosystem, enhancing coordination among public authorities, research organisations, innovation intermediaries and SMEs. In particular, the project will activate and structure regional stakeholder groups to consolidate a shared strategic vision, align hydrogen roadmaps with S3 priorities, and support the development of investment-ready hydrogen business cases.</p> <p>H2EIR will also contribute to clarifying regulatory and permitting pathways, reducing administrative uncertainty and facilitating the implementation of pilot and demonstration initiatives. By enabling access to public and private funding mechanisms and reinforcing interregional value chain integration, the project will help position Trentino within</p>	

emerging European hydrogen ecosystems.	
Signature of the authorised person	
Name and function:	Laura PEDRON, Director General, Department for economic development, research and labour
Date of signature:	20/02/2026
Signature and stamp:	

LA DIRIGENTE GENERALE
- dott.ssa Laura Pedron -

Questa nota, se trasmessa in forma cartacea, costituisce copia dell'originale informatico firmato digitalmente predisposto e conservato presso questa Amministrazione in conformità alle regole tecniche (artt. 3 bis e 71 D.Lgs. 82/05). La firma autografa è sostituita dall'indicazione a stampa del nominativo del responsabile (art. 3 D. Lgs. 39/1993).

LETTER OF SUPPORT (MS/REGION S3 ENDORSEMENT)

COMPETENT NATIONAL/REGIONAL AUTHORITY RESPONSIBLE FOR THE S3 MANAGEMENT	
Competent authority:	Government of Flanders
Department:	Department Work, Economy, Science, Innovation and Social Economy
Contact person:	VERMEULEN Hilde, policy advisor
Legal address:	<p>Visiting address</p> <p>Vlaamse Overheid Departement Werk, Economie, Wetenschap, Innovatie en Sociale Economie Marie-Elisabeth Belpairegebouw Simon Bolivarlaan 17 1000 Brussels</p> <p>Post address:</p> <p>Departement Werk, Economie, Wetenschap, Innovatie en Sociale Economie Koning Albert II-laan 15 box 380 1210 BRUSSELS BELGIUM</p> <p>mail: info.wewis@vlaanderen.be</p>
CONFIRMATION OF SUPPORT	
Name of the project we support:	Hydrogen Ecosystems for Interregional Investment Readiness - H2EIR
Coordinator:	Nicola Di Giulio, Project Manager – STRESS scarl Nicola.digiulio@stress-scarl.it
We hereby confirm that:	
1) we support the application	Yes
2) it is consistent and addresses the national/regional S3 policies, strategies and priorities as identified by this authority	Yes
Additional information (optional) <i>Add additional information on the project's contribution to the S3 priorities.</i>	
<p>This action is aligned with the Smart Specialisation Strategy of Flanders. Flanders is involved in the hydrogen valley S3 partnership and it aligns with the Flemish hydrogen strategy 2025-2030.</p> <p>The project contributes to strengthen resilience and competitiveness, to build capacities connecting with regions across Europe and to develop a framework to facilitate the innovative investments in the hydrogen value chains towards climate neutrality, industrial decarbonisation and energy system integration.</p> <p>Flanders' actors are active in the Horizon EU hydrogen partnership: eg in Flanders' cluster Waterstofnet has built a smart ecosystem towards a variety of industrial sectors for the clean energy transition.</p> <p>The project will help Flanders to promote value-chain integration and investment readiness.</p>	

SIGNATURE OF THE AUTHORISED PERSON	
Name and function:	Johan Hanssens, department of Work, Economy, Science, Innovation and Social Economy
Date of signature:	7/03/2026
Signature and stamp:	

Johan
Hanssens
(Signatur
e)

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ondertekend door
Johan Hanssens
(Signature)
Datum:
2026.03.07
17:26:54 +01'00'

HISTORY OF CHANGES		
VERSION	PUBLICATION DATE	CHANGE
1.0	15.11.2021	Initial version (new MFF)
2.0	15.05.2023	Additional information on recognition as Regional Innovation Valley.
3.0	01.03.2024	Information on recognition as Regional Innovation Valley deleted.

LETTER OF SUPPORT (MS/REGION S3 ENDORSEMENT)

COMPETENT NATIONAL/REGIONAL AUTHORITY RESPONSIBLE FOR THE S3 MANAGEMENT	
Competent authority:	SODENA – Sociedad de Desarrollo de Navarra
Department:	Area for Regional Development Strategy
Contact person:	GARCÍA SORIANO, Juan Cristóbal – Director of the Area for Regional Development Strategy
Legal address:	Avenida Carlos III, 36 1º Dcha. 31003 Pamplona España Tel.: +34 848 421942
CONFIRMATION OF SUPPORT	
Name of the project we support:	Hydrogen Ecosystems for Interregional Investment Readiness — H2EIR
Coordinator:	Nicola Di Giulio, Project Manager - STRESS scarl nicola.digiulio@stress-scarl.it
We hereby confirm that:	
1) we support the application	Yes
2) it is consistent and addresses the national/regional S3 policies, strategies and priorities as identified by this authority	Yes
Additional information	
<p>The H2EIR project directly supports the implementation of the Smart Specialisation Strategy (S4 Navarra 2021–2027), in particular under the priority domain “Green Energy Industry”, which promotes and reinforces the development of the value chains of the clean energy industry (wind turbines, power electronics, energy storage, hydrogen, solar, etc). Green Energy Industry is the second main industrial sector in the region, and Navarra counts with a complete ecosystem in Hydrogen generation technologies (electrolyser manufacturer, power electronics industry, the Spanish National Renewable Energy Center (CENER), public university, etc).</p> <p>Hydrogen technologies represent a strategic enabling vector within this priority domain, contributing to the deployment of renewable energy integration, sector coupling, energy storage and the decarbonisation of hard-to-abate sectors. Through structured interregional cooperation and capacity-building activities, H2EIR will strengthen the regional hydrogen innovation ecosystem in Navarra, enhancing coordination among public authorities, research organisations, innovation intermediaries and SMEs.</p> <p>The project contributes to S4 Navarra objectives by improving the region's ability to design S4-aligned hydrogen roadmaps, develop investment-ready business cases and attract public and private funding for sustainable energy projects. H2EIR also reinforces the internationalisation and competitiveness of Navarra's hydrogen value chains, fostering interregional collaboration and positioning the region within emerging European hydrogen ecosystems aligned with EU decarbonisation strategies.</p>	
SIGNATURE OF THE AUTHORISED PERSON	
Name and function:	GARCÍA SORIANO, Juan Cristóbal – Director of Area for Regional Development Strategy
Date of signature:	19/02/2026
Signature and stamp:	<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>GARCIA SORIANO JUAN CRISTOBAL - 38120568T</p> </div> <div style="flex: 1; font-size: small;"> <p>Firmado digitalmente por GARCIA SORIANO JUAN CRISTOBAL - 38120568T Fecha: 2026.02.19 10:33:40 +01'00'</p> </div> </div>

Proposal ID	Call for Proposal	Topic	Type of Action
SEP-211263548	I3-2026-CAP2B	I3-2026-CAP2B	I3-PJG

KPIs (Key Performance Indicators)

Please fill in the data for your project. At submission and grant preparation stage, the data will be on your planned indicators ; at reporting stage it should be the real indicators achieved (since the project start). The KPI tool should be updated with the latest available data for each periodic report (the KPIs are mandatory part of the project reporting). Please do not forget to tick the acknowledgement checkbox before submission.

I3 Strand 2b

Location

Country and region

Country

Italy

NUTS1

Sud

NUTS2 (less developed/more developed/transition/outmost region)

Campania

Country and region

Country

Portugal

NUTS1

Continente

NUTS2 (less developed/more developed/transition/outmost region)

Alentejo

Country and region

Country

Portugal

NUTS1

Região Autónoma dos Açores

NUTS2 (less developed/more developed/transition/outmost region)

Região Autónoma dos Açores

Country and region

Country

Poland

NUTS1

Makroregion południowy

NUTS2 (less developed/more developed/transition/outmost region)

Małopolskie

Country and region

Country

Romania

NUTS1

Macroregiunea Unu

NUTS2 (less developed/more developed/transition/outmost region)

Centru

Country and region

Country

NUTS1

NUTS2 (less developed/more

Germany	Sachsen-Anhalt	developed/transition/outermost region) Sachsen-Anhalt
Country and region		
Country	NUTS1	NUTS2 (less developed/more developed/transition/outermost region)
Italy	Nord-Est	Provincia Autonoma di Trento
Country and region		
Country	NUTS1	NUTS2 (less developed/more developed/transition/outermost region)
Belgium	Vlaams Gewest	Prov. Vlaams-Brabant
Country and region		
Country	NUTS1	NUTS2 (less developed/more developed/transition/outermost region)
Spain	Noreste	Comunidad Foral de Navarra

Type of project participants

Type of organisations:

Public authorities:

1

Universities, research and technology organisations:

3

Industry and large companies:

SMEs and start-ups:

Intermediaries (regional development agencies, innovation agencies, cluster organisations, business associations, etc):

4

Civil society and end users:

Associations and interest groups:

1

Other:

Output, result and impact indicators

Policy impact

Number of S3 based roadmaps developed contributing to European Strategic Innovation agendas:

4

Number of S3 Partnerships (or other relevant interregional working groups in networks and platforms) in which regions are actively participating at the end of the project:

Number of policy measures conceived to engage the ecosystems externally:

7

Socio-economic benefits**Number of value chain analyses based on mapping and benchmarking activities:**

8

Number of business cases identified in the framework of the given value chain developed:

8

Number of companies involved in the business cases:

22

Number of intermediaries engaged in interregional activities:

14

Number of interregional alliances established or in preparation:

2

Persons reached**Number of persons involved in the project:****Male**

110

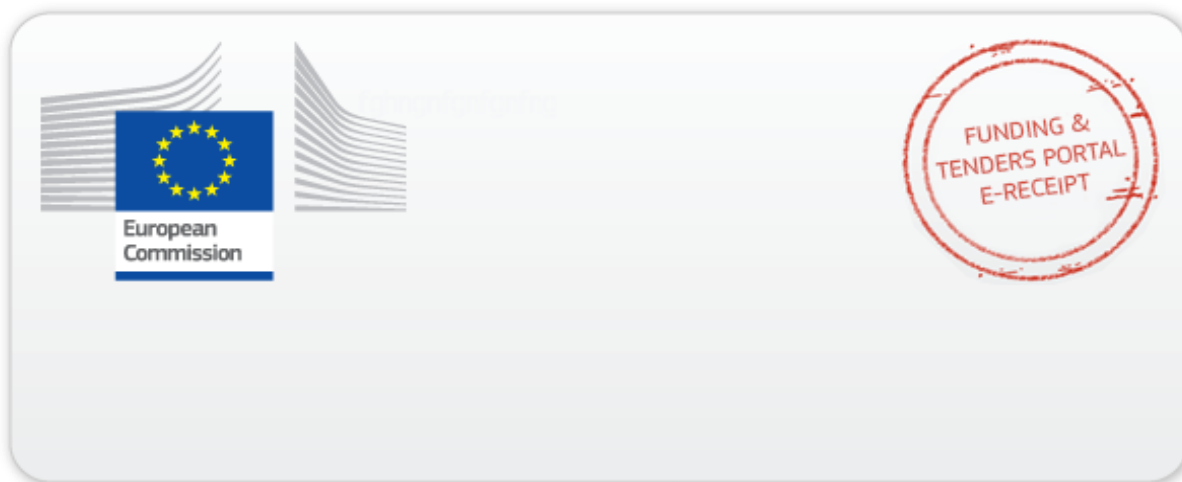
Female

50

Non-binary

0

TOTAL: 160



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