

Renewable Energy Sources Power FOrecasting and SyNchronisation for Smart GriD NETworks MaNagement

Fact Sheet

Project Information

RESPONDENT

Grant agreement ID: 101082355

DOI

[10.3030/101082355](https://doi.org/10.3030/101082355) 

EC signature date

17 October 2022

Start date

1 November 2022

End date

30 April 2025

Funded under

Digital, Industry and Space

Total cost

€ 2 745 275,00

EU contribution

€ 2 147 112,50

Coordinated by

FUTURE INTELLIGENCE

EREVNA TILEPIKINONIAKON KE

PLIROFORIAKON SYSTIMATON

EPE



Greece

Project description

A renewables boost for power grids

A successful green transition hinges on the integration of renewable energy sources into the power grid. However, solar power, wind power and hydropower are vulnerable to microclimatic conditions. Their generation capacity varies based on the weather. It is this variability that makes renewable energy sources difficult to integrate. In this context, the EU-funded RESPONDENT project will address these challenges by developing AI and machine learning power generation and demand

forecasting algorithms. In addition to renewable energy power conversion models, the project will consider weather data from space (Copernicus Earth observation), site-specific weather data and multiphysics models. Additionally, RESPONDENT will build Galileo-enabled phasor measurement units to measure the electrical signals of the grid in a precise and synchronised way.

Fields of science

[engineering and technology](#) > [environmental engineering](#) > [energy and fuels](#) > [renewable energy](#) > **[solar energy](#)**

[engineering and technology](#) > [electrical engineering, electronic engineering, information engineering](#) > [electrical engineering](#) > [power engineering](#) > **[electric power transmission](#)**

[natural sciences](#) > [computer and information sciences](#) > [artificial intelligence](#) > **[machine learning](#)**

Programme(s)

[HORIZON.2.4 - Digital, Industry and Space](#) MAIN PROGRAMME

[HORIZON.2.4.10 - Space, including Earth Observation](#)

Topic(s)

[HORIZON-EUSPA-2021-SPACE-02-51 - EGNSS and Copernicus applications fostering the European Green deal](#)

Call for proposal

[HORIZON-EUSPA-2021-SPACE](#)

[See other projects for this call](#)

Funding Scheme

[IA - Innovation action](#)

Coordinator



FUTURE INTELLIGENCE EREVNA TILEPIKINONIAKON KE PLIROFORIAKON SYSTIMATON EPE

Net EU contribution

€ 438 375,00

Address

**Patriarxou grigoriou neapolews
15341 Athina**

 **Greece** 

SME 

Yes

Region

Αττική > Αττική > Βόρειος Τομέας Αθηνών

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Other funding

€ 187 875,00

Participants (7)



FUNDACION CENTRO DE TECNOLOGIAS DE INTERACCION VISUAL Y COMUNICACIONES VICOMTECH

 **Spain**

Net EU contribution

€ 430 150,00

Address

**Paseo mikeletegi parque tecnologico de miramon 57
20009 Donostia san sebastian** 

SME 

Yes

Region

Noreste > País Vasco > Gipuzkoa

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Other funding

€ 0,00



CARR COMMUNICATIONS LIMITED

 Ireland

Net EU contribution

€ 227 500,00

Address

24 fitzwilliam place

A96 PR60 Dublin 

SME 

Yes

Region

Ireland > Eastern and Midland > Dublin

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Other funding

€ 97 500,00



KIEFER TEK ETAIREIA PERIORISMENIS EFTHYNIS

 Greece

Net EU contribution

€ 175 437,50

Address

Naxou 12
15235 Chalandri



SME

Yes

Region

Αττική > Αττική > Βόρειος Τομέας Αθηνών

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Other funding

€ 75 187,50



GREENESCO ENERGEIAKI ANONYMI ETAIREIA

Greece

Net EU contribution

€ 162 400,00

Address

Omiron 8
10564 Athina

Region

Αττική > Αττική > Κεντρικός Τομέας Αθηνών

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Other funding

€ 69 600,00



ESTABANELL Y PAHISA ENERGIA SA

 Spain

Net EU contribution

€ 285 250,00

Address

Calle ponent 7

08401 Granollers 

SME 

Yes

Region

Este > Cataluña > Barcelona

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Other funding

€ 122 250,00



FUNDACIO INSTITUT DE RECERCA DE L'ENERGIA DE CATALUNYA

 Spain

Net EU contribution

€ 321 250,00

Address

C/ jardins de les dones de negre 1

08930 Sant adria de besos 

Region

Este > Cataluña > Barcelona

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Other funding

€ 0,00



ELECTROTECNICA DEL URUMEA SL

 Spain

Net EU contribution

€ 106 750,00

Address

Poligono industrial borda berri c3

20140 Andoain 

SME 

Yes

Region

Noreste > País Vasco > Gipuzkoa

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

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Other funding

€ 45 750,00

Last update: 21 October 2022

Permalink: <https://cordis.europa.eu/project/id/101082355>

European Union, 2023