

Imperial College London Participation

Cluster 5: Climate, Energy & Mobility

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Introduction

This booklet comprises the Horizon Europe Projects under Cluster 5 'Climate, Energy & Mobility' that Imperial participates in as an Associated Partner. Funding from UKRI Horizon Guarantee.

Expanding Integrated Assessment Modelling: Comprehensive and Comprehensible Science for Sustainable, Co-Created Climate Action

Fact Sheet

Project Information

IAM COMPACT

Grant agreement ID: 101056306

DOI

[10.3030/101056306](https://doi.org/10.3030/101056306) 

EC signature date

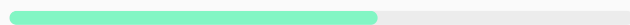
19 July 2022

Start date

1 September 2022

End date

31 August 2025



Funded under

Climate, Energy and Mobility

Total cost

€ 4 461 325,75

EU contribution

€ 4 461 323,00

Coordinated by

ETHNICON METSOVION

POLYTECHNION

 Greece

Project description

Actions for climate policies short of targets

There is a gap between current climate policies and the Paris Agreement's objectives. The difference refers to the current level of global greenhouse gas emissions and the emissions reductions required. This highlights the need for increased ambition and stronger climate action from all countries to bridge this gap and avoid the worst impacts of climate change. With this in mind, the EU-funded IAM COMPACT project will design a multi-dimensional set of policy measures using a

diverse ensemble of models, tools and insights from various fields. The project will involve non-scientists in the modelling process. It will also support the assessment of global climate goals, progress, and feasibility space.

Fields of science

[medical and health sciences](#) > [health sciences](#) > [infectious diseases](#) > [RNA viruses](#) > **[coronaviruses](#)**
[social sciences](#) > **[political sciences](#)**

Keywords

[integrated assessment modelling](#)

[extremes](#)

[climate policy](#)

[NDCs](#)

[global stocktake](#)

[Paris Agreement](#)

[major emitters](#)

[non-high-income countries](#)

[capacity development](#)

[open science](#)

[interdisciplinarity](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.1 - Climate Science and Solutions](#)

Topic(s)

[HORIZON-CL5-2021-D1-01-04 - Enhanced integrated assessment in pursuit of global climate goals](#)

Call for proposal

[HORIZON-CL5-2021-D1-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



ETHNICON METSOVION POLYTECHNION

Net EU contribution

€ 601 562,00

Address

**HEROON POLYTECHNIOU 9 ZOGRAPHOU CAMPUS
157 80 ATHINA**

Greece

Region

Αττική > Αττική > Κεντρικός Τομέας Αθηνών

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#)

Total cost

€ 601 562,50

Participants (20)



AALTO KORKEAKOULUSAATIO SR

Finland

Net EU contribution

€ 206 967,00

Address

OTAKAARI 1

02150 Espoo

Region

Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 206 967,00



AALBORG UNIVERSITET

 Denmark

Net EU contribution

€ 223 812,00

Address

FREDRIK BAJERS VEJ 7K

9220 Aalborg 

Region

Danmark > Nordjylland > Nordjylland

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 223 812,50



ASOCIACION BC3 BASQUE CENTRE FOR CLIMATE CHANGE - KLIMA ALDAKETA IKERGAI

 Spain

Net EU contribution

€ 306 125,00

Address

EDIFICIO 1 PLANTA 1 PARQUE CIENTIFICO DE UPV/EHU BARRIO SARRIENA

48940 Leioa 

Region

Noreste > País Vasco > Bizkaia

Activity type

Research Organisations

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 306 125,00



BRUEGEL AISBL*

 Belgium

Net EU contribution

€ 337 115,00

Address

RUE DE LA CHARITE 33

1210 Bruxelles / Brussel 

Region

Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest > Région de Bruxelles-Capitale/ Brussels Hoofdstedelijk Gewest > Arr. de Bruxelles-Capitale/Arr. Brussel-Hoofdstad

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 337 115,00



FUNDACION CARTIF

 Spain

Net EU contribution

€ 222 500,00

Address

PQ TECNOLOGICO BOECILLO 205

47151 Boecillo 

Region

Centro (ES) > Castilla y León > Valladolid

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 222 500,00



CICERO SENTER FOR KLIMAFORSKNING

 Norway

Net EU contribution

€ 250 000,00

Address

GAUSTADALLEEN 21

0349 Oslo 

Region

Norge > Oslo og Viken > Oslo

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 250 000,00



E3-MODELLING AE

 Greece

Net EU contribution

€ 353 125,00

Address

PANORMOU 70-72

11523 ATHINA 

SME 

Yes

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](#) 

Total cost

€ 353 125,00



KUNGLIGA TEKNISKA HOEGSKOLAN

 Sweden

Net EU contribution

€ 356 893,00

Address

BRINELLVAGEN 8

100 44 Stockholm 

Region

Östra Sverige > Stockholm > Stockholms län

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 356 893,75



POLITECNICO DI MILANO

 Italy

Net EU contribution

€ 270 000,00

Address

PIAZZA LEONARDO DA VINCI 32

20133 Milano 

Region

Nord-Ovest > Lombardia > Milano

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 270 000,00



UNIVERSITY OF PIRAEUS RESEARCH CENTER

 Greece

Net EU contribution

€ 202 937,00

Address

AL. PAPANASTASIOU 91

185 33 PIRAEUS 

Region

Αττική > Αττική > Πειραιάς

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 202 937,50



UNIVERSIDAD DE VALLADOLID

Spain

Net EU contribution

€ 234 625,00

Address

**PLAZA SANTA CRUZ 8 PALACIO DE SANTA CRUZ
47002 VALLADOLID**

Region

Centro (ES) > Castilla y León > Valladolid

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#)

Total cost
€ 234 625,00



WUPPERTAL INSTITUT FUR KLIMA, UMWELT, ENERGIE GGMBH

Germany

Net EU contribution

€ 336 250,00

Address

**DOPPERSBERG 19
42103 Wuppertal**

SME

Yes

Region

Nordrhein-Westfalen > Düsseldorf > Wuppertal, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 336 250,00



INDIAN INSTITUTE OF MANAGEMENT

 India

Net EU contribution

€ 98 125,00

Address

VASTRAPUR

380 015 Ahmedabad 

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 98 125,00



TSINGHUA UNIVERSITY

 China

Net EU contribution

€ 90 000,00

Address

QING HUA YUAN

100084 BEIJING 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 90 000,00



THE UNIVERSITY OF MARYLAND FOUNDATION INC

 United States

Net EU contribution

€ 0,00

Address

METZEROTT ROAD 3300

20783 Adelphi 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 150 387,50

 **THIRD-PARTY** 

University System of Maryland


 United States

Net EU contribution

€ 150 387,00

Address

Metzerott Road 3300

MD 20783-1690 Adelphi 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

[Website](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 150 387,50



ADDIS ABABA UNIVERSITY

 Ethiopia

Net EU contribution

€ 30 750,00

Address

ADDIS ABABA UNIVERSITY

1176 Addis Ababa 

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 30 750,00



INTERNATIONAL CIVIC ORGANISATION KYIV ECONOMICS INSTITUTE

 Ukraine

Net EU contribution

€ 81 250,00

Address

PETRA SAHAIDACHNOHO STREET 16 B APT 23

04070 Kyiv 

Activity type

Research Organisations

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 81 250,00



RAJA RATA UNIVERSITY OF SRI LANKA

Sri Lanka

Net EU contribution

€ 40 150,00

Address

ANURADHAPURA ROAD

50900 Mihintale

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)

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

[HORIZON collaboration network](#)

Total cost

€ 40 150,00



TECHNICAL UNIVERSITY OF MOMBASA

Kenya

Net EU contribution

€ 68 750,00

Address

TOM MBOYA STREET

80100 Mombasa

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)

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

[HORIZON collaboration network](#)

Total cost

€ 68 750,00

Partners (2)



UNIVERSITE DE GENEVE

Switzerland

Net EU contribution

€ 0,00

Address

RUE DU GENERAL DUFOUR 24

1211 Geneve

Region

Schweiz/Suisse/Svizzera > Région lémanique > Genève

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#)

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

United Kingdom

Net EU contribution

€ 0,00

Address

SOUTH KENSINGTON CAMPUS EXHIBITION ROAD

SW7 2AZ LONDON

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 15 September 2022

Permalink: <https://cordis.europa.eu/project/id/101056306>

European Union, 2024


NEXTAIR - multi-disciplinary digital - enablers for NEXT-generation AIRcraft design and operations

Fact Sheet

Project Information

NEXTAIR

Grant agreement ID: 101056732

DOI[10.3030/101056732](https://doi.org/10.3030/101056732) **EC signature date**

11 May 2022

Start date

1 September 2022

End date

31 August 2025

Funded under

Climate, Energy and Mobility

Total cost

€ 4 720 526,75

EU contribution

€ 4 720 525,00

Coordinated byOFFICE NATIONAL D'ETUDES ET
DE RECHERCHES
AEROSPATIALES France

Project description

Digital solutions for climate-neutral aviation

Mitigating aviation's impact on climate change requires major changes in aircraft configurations and operations. Digital methodologies that optimise aircraft performance will play a key role in this transformation. Through eight industrial test cases, the EU-funded NEXTAIR project will build and validate novel design methodologies, data-fusion procedures and smart health assessment tools. Together, these solutions will lead to the digital transformation of aircraft design,

manufacturing, and maintenance. The project will improve methods to better tackle the uncertainty in manufacturing and the inconsistency in operations for the industrial, multi-disciplinary design of aircraft and engine components.

Fields of science

[engineering and technology](#) > [mechanical engineering](#) > [vehicle engineering](#) > [aerospace engineering](#) > **[aircraft](#)**

[engineering and technology](#) > [mechanical engineering](#) > [vehicle engineering](#) > [aerospace engineering](#) > **[aeronautical engineering](#)**

[natural sciences](#) > [computer and information sciences](#) > [computational science](#) > **[multiphysics](#)**

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

Keywords

[digital enablers](#)

[modelling capabilities](#)

[Multi-disciplinary Optimisation](#)

[machine learning](#)

[uncertainty quantification](#)

[robust design](#)

[digital twin](#)

[green aircraft configuration](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#) MAIN PROGRAMME

[HORIZON.2.5.7 - Clean, Safe and Accessible Transport and Mobility](#)

[HORIZON.2.5.6 - Industrial Competitiveness in Transport](#)

Topic(s)

[HORIZON-CL5-2021-D5-01-06 - Next generation digital aircraft transformation in design, manufacturing, integration and maintenance](#)

Call for proposal

[HORIZON-CL5-2021-D5-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES

Net EU contribution

€ 867 073,00

Address

CHEMIN DE LA HUNIERE

91120 Palaiseau

 France 

Region

Ile-de-France > Ile-de-France > Essonne

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 867 073,00

Participants (12)



AIRBUS OPERATIONS SAS

 France

Net EU contribution

€ 295 175,00

Address

ROUTE DE BAYONNE 316

31060 Toulouse 

Region

Occitanie > Midi-Pyrénées > Haute-Garonne

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](#) 

Total cost

€ 295 175,00



DASSAULT AVIATION

 France

Net EU contribution

€ 456 353,00

Address

9 ROND POINT CHAMPS-ELYSEES-MARCEL DASSAULT

75008 Paris 

Region

Ile-de-France > Ile-de-France > Paris

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](#) 

Total cost

€ 456 353,75



DEUTSCHES ZENTRUM FUR LUFT - UND RAUMFAHRT EV

 Germany

Net EU contribution

€ 484 787,00

Address

LINDER HOHE

51147 Koln 

Region

Nordrhein-Westfalen > Köln > Köln, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 484 787,50



INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET AUTOMATIQUE

 France

Net EU contribution

€ 295 000,00

Address

DOMAINE DE VOLUCEAU ROCQUENCOURT

78153 Le Chesnay Cedex 

Region

Ile-de-France > Ile-de-France > Yvelines

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 295 000,00



IRT ANTOINE DE SAINT EXUPERY

 France

Net EU contribution

€ 532 801,00

Address

B 612 - CS 34436, 3 RUE TARFAYA
31400 Toulouse 

SME 

Yes

Region

Occitanie > Midi-Pyrénées > Haute-Garonne

Activity type

Research Organisations

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 532 801,25



ETHNICON METSOVION POLYTECHNION

 Greece

Net EU contribution

€ 220 000,00

Address

HEROON POLYTECHNIOU 9 ZOGRAPHOU CAMPUS
157 80 ATHINA 

Region

Αττική > Αττική > Κεντρικός Τομέας Αθηνών

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 220 000,00



OPTIMAD ENGINEERING SRL

Italy

Net EU contribution

€ 449 125,00

Address

VIA BLIGNY 5

10122 Torino

SME

Yes

Region

Nord-Ovest > Piemonte > Torino

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](#)

Total cost

€ 449 125,00



SAFRAN SA

France

Net EU contribution

€ 274 386,00

Address

BLVD DU GAL MARTIAL VALIN 2

75015 Paris

Region

Ile-de-France > Ile-de-France > Paris

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](#) 

Total cost

€ 274 386,25



UNIVERSITA DEGLI STUDI DI CAGLIARI

 Italy

Net EU contribution

€ 372 000,00

Address

VIA UNIVERSITA 40

09124 Cagliari 

Region

Isole > Sardegna > Cagliari

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 372 000,00



FUNDACION CENTRO DE TECNOLOGIAS DE INTERACCION VISUAL Y COMUNICACIONES VICOMTECH

 Spain

Net EU contribution

€ 192 325,00

Address

PASEO MIKELETEGI PARQUE TECNOLOGICO DE MIRAMON 57

20009 Donostia San Sebastian 

SME 

Yes

Region

Noreste > Pais Vasco > Gipuzkoa

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 192 325,00



ERDYN CONSULTANTS SARL

 France

Net EU contribution

€ 221 500,00

Address

RUE VERGNIAUD 23

75013 Paris 

SME 

Yes

Region

Ile-de-France > Ile-de-France > Paris

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](#) 

Total cost

€ 221 500,00



ASOUTI V & SIA OE

 Greece

Net EU contribution

€ 60 000,00

Address

MAKRAS STOAS 3
185 31 PIRAEUS 

SME 

Yes

Region

Αττική > Αττική > Πειραιάς

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](#) 

Total cost

€ 60 000,00

Partners (3)



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



ROLLS-ROYCE PLC

 United Kingdom

Net EU contribution

€ 0,00

Address

KINGS PLACE 90 YORK WAY

N1 9FX London 

Region

London > Inner London — West > Camden and City of London

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](#) 

Total cost

No data



THE UNIVERSITY OF SHEFFIELD

 United Kingdom

Net EU contribution

€ 0,00

Address

FIRTH COURT WESTERN BANK

S10 2TN Sheffield 

Region

Yorkshire and the Humber > South Yorkshire > Sheffield

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 26 August 2022

Permalink: <https://cordis.europa.eu/project/id/101056732>

European Union, 2024

Reliability, Resilience and Defense technology for the grid

Fact Sheet

Project Information

R2D2

Grant agreement ID: 101075714

DOI[10.3030/101075714](https://doi.org/10.3030/101075714) **EC signature date**

29 August 2022

Start date

1 October 2022

End date

30 September 2025

Funded under

Climate, Energy and Mobility

Total cost

€ 9 747 375,00

EU contribution

€ 7 335 337,50

Coordinated byETRA INVESTIGACION Y
DESARROLLO SA

Spain

Objective

R2D2 strategic goal is to improve the resilience and reliability of current EPES (Electrical Power and Energy Systems) against a growing number of threats and vulnerabilities that may affect such critical infrastructure, exposing weaknesses with harmful and damaging effects on different stakeholders and final customers.

This will be done through the deployment of four tools dedicated to the prevention, protection and restoration of EPES in two different independent but complementary scenarios in the energy value-chain – from regional coordination between TSOs, to privacy of LV customers. The project will build on top of strong energy coordination actions in South-East Europe (SEE), following EU legislation and in alignment with the recent activities promoted by ENTSO-E about cyber-security in transmission

systems.

Through the demonstration and integration of the innovative solutions proposed by R2D2, it will be possible to achieve a more secure, reliable and resilient energy system in Europe, making a positive and tangible impact throughout the European EPES value chain. In this context, R2D2 will deliver a palette of complementary solutions synthesised into four Products: “Multi-risk assessment framework for power system” (P1 – C3PO), “Resilience suite for TSO & DSO” (P2 - IRIS), “Prevention Systems For Energy Infrastructures Security” (P3 - PRECOG) and “Enhanced Assets Maintenance And Management Toolkit” (P4 - EMMA).

Fields of science

[natural sciences](#) > [computer and information sciences](#) > **[computer security](#)**

Keywords

[Reliability](#)

[Resilience](#)

[Electrical Power and Energy Systems](#)

[Distribution](#)

[Transmission](#)

[Cyber-security](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.3 - Energy Systems and Grids](#)

Topic(s)

[HORIZON-CL5-2021-D3-02-07 - Reliability and resilience of the grid: Measures for vulnerabilities, failures, risks and privacy](#)

Call for proposal

[HORIZON-CL5-2021-D3-02](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-IA - HORIZON Innovation Actions](#)

Coordinator



ETRA INVESTIGACION Y DESARROLLO SA

Net EU contribution

€ 903 656,25

Address

CALLE TRES FORQUES 147

46014 Valencia

Spain

Region

Este > Comunitat Valenciana > Valencia/València

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](#)

Total cost

€ 1 290 937,50

Participants (16)



S2 GRUPO SOLUCIONES DE SEGURIDAD SL

Spain

Net EU contribution

€ 417 550,00

Address

CALLE RAMIRO DE MAEZTU 7 BAJO

46022 Valencia

Region

Este > Comunitat Valenciana > Valencia/València

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](#) 

Total cost

€ 596 500,00



ELPROS ELEKTRONSKI IN PROGRAMSKI SISTEMI DOO

 Slovenia

Net EU contribution

€ 389 375,00

Address

VEROVSKOVA ULICA 64 A

1000 Ljubljana 

SME 

Yes

Region

Slovenija > Zahodna Slovenija > Osrednjeslovenska

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](#) 

Total cost

€ 556 250,00



GUARDTIME OU

 Estonia

Net EU contribution

€ 495 468,75

Address

A H TAMMSAARE TEE 60 KRISTIINE DISTRICT

11316 Tallinn 

SME 

Yes

Region

Eesti > Eesti > Põhja-Eesti

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](#) 

Total cost

€ 707 812,50



CYBER NOESIS PROIGMENES TECHNOLOGIKES LYSEIS IDIOTIKI KEFALAIOUCHIKI ETAIREIA

 Greece

Net EU contribution

€ 346 500,00

Address

ARGONAFTON 65

151 25 MAROUSI 

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](#) 

Total cost

€ 495 000,00



EREVNITIKO PANEPISTIMIAKO INSTITOUTO SYSTIMATON EPIKOINONION KAI YPOLOGISTON

 Greece

Net EU contribution

€ 661 875,00

Address

PATISION 42

106 82 ATHINA 

Region

Αττική > Αττική > Κεντρικός Τομέας Αθηνών

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 661 875,00



Ss. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE

 North Macedonia

Net EU contribution

€ 260 625,00

Address

BLVD GOCE DELCEV 9

1000 Skopje 

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 260 625,00



CENTAR ZA KOORDINACIJU SIGURNOSTI SCC DOO BEOGRAD-VOZDOVAC

Serbia

Net EU contribution

€ 581 787,50

Address

VOJVODE STEPE 412
11000 Beograd

Region

Србија - север > Београдски регион > Београдска област

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](#)

Total cost
€ 831 125,00



EMS SERVICES DOO BEOGRAD-VOZDOVAC

Serbia

Net EU contribution

€ 319 812,50

Address

VOJVODE STEPE 412
11000 Beograd

Region

Србија - север > Београдски регион > Београдска област

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](#) 

Total cost

€ 456 875,00



DIACHEIRISTIS ELLINIKOU DIKTYOU DIANOMIS ELEKTRIKIS ENERGEIAS AE

 Greece

Net EU contribution

€ 433 562,50

Address

**PERRAIVOU 20 KALLIRROIS ODOS 5
117 43 ATHINA** 

Region

Αττική > Αττική > Κεντρικός 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](#) 

Total cost

€ 619 375,00



ELEKTRO LJUBLJANA PODJETJE ZADISTRIBUCIJO ELEKTRICNE ENERGIJE D.D.

 Slovenia

Net EU contribution

€ 215 250,00

Address

**Slovenska cesta 58
1000 Ljubljana** 

Region

Slovenija > Zahodna Slovenija > Osrednjeslovenska

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](#) 

Total cost

€ 307 500,00



ELEKTRO LJUBLJANA OVE, INZENIRING SPODROCJA OBNOVLJIVIH VIROV ENERGIJE, D.O.O.

 Slovenia

Net EU contribution

€ 193 812,50

Address

SLOVENSKA CESTA 56

1000 Ljubljana 

Region

Slovenija > Zahodna Slovenija > Osrednjeslovenska

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](#) 

Total cost

€ 276 875,00



CNET CENTRE FOR NEW ENERGY TECHNOLOGIES SA

 Portugal

Net EU contribution

€ 408 187,50

Address

RUA CIDADE DE GOA 4
2685 039 Sacavem E Prior Velho Lisboa 

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](#) 

Total cost

€ 979 375,00

 **THIRD-PARTY** 

EDP ESPANA SA

 Spain

Net EU contribution

€ 277 375,00

Address

PLAZA DE LA GESTA 2

33007 Oviedo 

Region

Noroeste > Principado de Asturias > Asturias

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](#) 

Total cost

No data



INSTITUT MIHAJLO PUPIN

 Serbia

Net EU contribution

€ 417 375,00

Address

VOLGINA 15

11060 Beograd 

Region

Србија - север > Београдски регион > Београдска област

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 417 375,00



UNIVERSITY OF CYPRUS

 Cyprus

Net EU contribution

€ 367 375,00

Address

AVENUE PANEPISTIMIOU 2109 AGLANTZI

1678 Nicosia 

Region

Κύπρος > Κύπρος > Κύπρος

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 367 375,00



RTE INTERNATIONAL

 France

Net EU contribution

€ 645 750,00

Address

2 PLACE DES VOSGES - LA DEFENSE 5
92400 Courbevoie 

Region

Ile-de-France > Ile-de-France > Hauts-de-Seine

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](#) 

Total cost

€ 922 500,00

Partners (1)



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 13 September 2022

Permalink: <https://cordis.europa.eu/project/id/101075714>

European Union, 2024



SCALING-UP OF A HIGHLY MODULAR ROTATING PACKED BED PLANT WITH AN EFFICIENT SOLVENT FOR CAPTURE COST REDUCTION

Fact Sheet

Project Information

HiRECORD

Grant agreement ID: 101075727

DOI[10.3030/101075727](https://doi.org/10.3030/101075727) **EC signature date**

23 August 2022

Start date

1 November 2022

End date

31 October 2026

Funded under

Climate, Energy and Mobility

Total cost

€ 6 330 101,25

EU contribution

€ 6 330 101,25

Coordinated by

ETHNIKO KENTRO EREVNAS

KAI TECHNOLOGIKIS

ANAPTYXIS

 Greece

Project description

Rotating packed beds can enhance post-combustion CO₂ capture

Rotating packed beds (RPBs) have gained increasing attention recently for their potential in process intensification. RPBs rely on centrifugal force to increase the contact of different phases such as liquid-solid or liquid-gas, thus enhancing mass transfer between the two. In the case of post-combustion CO₂ capture from flue gases, this also enables a reduction in absorber and desorber sizes. The EU-funded

HiRECORD project will demonstrate the high-tech readiness of a modular CO2 capture plant comprising a RPB absorber and advanced RPB desorber with integrated spinning reboiler and advanced, greener solvent. The system will cut CO2 capture costs in half compared to conventional technologies while significantly lowering the environmental and safety impacts.

Fields of science

[engineering and technology](#) > [chemical engineering](#) > [chemical process engineering](#)

[engineering and technology](#) > [environmental engineering](#) > [carbon capture engineering](#)

Keywords

[Rotating Packed Bed](#)

[Solvent](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.2 - Energy Supply](#)

Topic(s)

[HORIZON-CL5-2021-D3-02-13 - Cost reduction of CO2 capture \(new or improved technologies\)](#)

Call for proposal

[HORIZON-CL5-2021-D3-02](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



ΕΘΝΙΚΟ ΚΕΝΤΡΟ ΕΡΕΥΝΑΣ ΚΑΙ ΤΕΧΝΟΛΟΓΙΚΗΣ ΑΝΑΠΤΥΞΗΣ

Net EU contribution

€ 792 562,50

Address

CHARILAOU THERMI ROAD 6 KM

57001 Thermi Thessaloniki

 Greece 

Region

Βόρεια Ελλάδα > Κεντρική Μακεδονία > Θεσσαλονίκη

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 792 562,50

Participants (8)



ARISTOTELIO PANEPISTIMIO THESSALONIKIS

 Greece

Net EU contribution

€ 648 863,75

Address

KEDEA BUILDING, TRITIS SEPTEMVRIOU, ARISTOTLE UNIVERSITY CAMPUS

546 36 THESSALONIKI 

Region

Βόρεια Ελλάδα > Κεντρική Μακεδονία > Θεσσαλονίκη

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 648 863,75



TECHNISCHE UNIVERSITAET WIEN

 Austria

Net EU contribution

€ 395 363,75

Address

KARLSPLATZ 13
1040 Wien 

Region

Ostösterreich > Wien > Wien

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 395 363,75



NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO

 Netherlands

Net EU contribution

€ 228 068,75

Address

ANNA VAN BUERENPLEIN 1
2595 DA Den Haag 

Region

West-Nederland > Zuid-Holland > Agglomeratie 's-Gravenhage

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 228 068,75



JULIUS MONTZ GMBH

 Germany

Net EU contribution

€ 295 000,00

Address

HOFSTRASSE 82

40723 Hilden 

Region

Nordrhein-Westfalen > Düsseldorf > Mettmann

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](#) 

Total cost

€ 295 000,00



ELPEDISON PARAGOGI ILEKTRIKISENERGEIAM MONOPROSOPI ANONYMOS ETAIREIA

 Greece

Net EU contribution

€ 1 473 201,25

Address

FRAGOKKLISIAS 6

151 25 ATHINA 

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](#)

Total cost

€ 1 473 201,25



**CAO HELLAS THESSALIKI ASVESTOPOIIA MONOPROSOPI ANONYMI
ETAIREIA PARAGOGIS KAI EMPORIAS ASVESTOU KAI LOIPON DOMIKON KAI
CHIMIKON ILON**

Greece

Net EU contribution

€ 1 062 500,00

Address

**6TH KM. ODOU LAGADA
56429 NEA EFKARPIA**

SME

Yes

Region

Βόρεια Ελλάδα > Κεντρική Μακεδονία > Θεσσαλονίκη

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](#)

Total cost

€ 1 062 500,00



TOTALENERGIES ONETECH

France

Net EU contribution

€ 1 314 541,25

Address

2 PLACE JEAN MILLIER
92400 Courbevoie 

Region

Ile-de-France > Ile-de-France > Hauts-de-Seine

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](#) 

Total cost

€ 1 314 541,25



SYNDESMOS EXAGOGEON

 Greece

Net EU contribution

€ 120 000,00

Address

PL MORIHOVOU 1
54625 Thessaloniki 

Region

Βόρεια Ελλάδα > Κεντρική Μακεδονία > Θεσσαλονίκη

Activity type

Other

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 120 000,00

Partners (4)



UNIVERSITY OF NEWCASTLE UPON TYNE

United Kingdom

Net EU contribution

€ 0,00

Address

KINGS GATE

NE1 7RU Newcastle Upon Tyne

Region

North East (England) > Northumberland and Tyne and Wear > Tyneside

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#)

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

United Kingdom

Net EU contribution

€ 0,00

Address

SOUTH KENSINGTON CAMPUS EXHIBITION ROAD

SW7 2AZ LONDON

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#)

Total cost

No data



RICHARD ALAN ENGINEERING COMPANY LTD

United Kingdom

Net EU contribution

€ 0,00

Address

**RICHARD ALAN HOUSE, SHAW CROSS BUSI
WF12 7RD Dewsbury**

Region

Yorkshire and the Humber > West Yorkshire > Calderdale and Kirklees

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](#)

Total cost

No data



CARBON CLEAN SOLUTIONS LIMITED

United Kingdom

Net EU contribution

€ 0,00

Address

**47 CASTLE STREET
RG1 7SR Reading Berkshire**

SME

Yes

Region

South East (England) > Berkshire, Buckinghamshire and Oxfordshire > Berkshire

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](#) 

Total cost

No data

Last update: 12 September 2022

Permalink: <https://cordis.europa.eu/project/id/101075727>

European Union, 2024

Ultra-stable, highly efficient, low-cost perovskite photovoltaics with minimised environmental impact

Fact Sheet

Project Information

DIAMOND

Grant agreement ID: 101084124

DOI[10.3030/101084124](https://doi.org/10.3030/101084124) **EC signature date**

5 October 2022

Start date

1 December 2022

End date

30 November 2025

Funded under

Climate, Energy and Mobility

Total cost

€ 5 115 876,00

EU contribution

€ 5 115 876,00

Coordinated byFRAUNHOFER GESELLSCHAFT
ZUR FORDERUNG DER
ANGEWANDTEN FORSCHUNG
EV Germany

Project description

Innovative perovskite photovoltaics to minimise carbon footprint

To curb global warming and tackle climate change, it's important to accelerate the clean energy transition. Photovoltaic (PV) will need to play a significant role in decarbonising electricity supply. However, PV represents only a fraction of today's global energy supply. What's more, nearly all PV modules are imported from outside the EU and associated with high carbon footprint and supply risks. Emerging

perovskite PV has tremendous potential to overcome these problems. The EU-funded DIAMOND project will develop an ultra-stable, highly efficient, and low-cost perovskite PV with reduced environmental impact. DIAMOND will design novel hermetic encapsulation approaches and highly stable device designs to achieve unprecedented stabilities in PV solar cells.

Keywords

[perovskite solar cells](#)

[photovoltaics](#)

[carbon electrodes](#)

[printable module](#)

[hermetic sealing](#)

[solar cells](#)

[standardized stability assessment](#)

[low CO2 footprint](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.2 - Energy Supply](#)

Topic(s)

[HORIZON-CL5-2021-D3-03-07 - Stable high-performance Perovskite Photovoltaics](#)

Call for proposal

[HORIZON-CL5-2021-D3-03](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN
FORSCHUNG EV

Net EU contribution

€ 818 787,50

Address

HANSASTRASSE 27C

80686 Munchen

 **Germany** 

Region

Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 818 787,50

Participants (9)



DYENAMO AB

 Sweden

Net EU contribution

€ 469 425,00

Address

TEKNIKRINGEN 38A

114 28 Stockholm 

SME 

Yes

Region

Östra Sverige > Stockholm > Stockholms län

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](#) 

Total cost
€ 469 425,00



RIJKSUNIVERSITEIT GRONINGEN

 Netherlands

Net EU contribution

€ 576 250,00

Address

**Broerstraat 5
9712CP Groningen** 

Region

Noord-Nederland > Groningen > Overig Groningen

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 576 250,00



BEDIMENSIONAL SPA

 Italy

Net EU contribution

€ 255 583,75

Address

**VIA LUNGOTORRENTE SECCA 30 R
16163 Genova** 

Region

Nord-Ovest > Liguria > Genova

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](#) 

Total cost

€ 255 583,75



UPPSALA UNIVERSITET

 Sweden

Net EU contribution

€ 752 335,00

Address

VON KRAEMERS ALLE 4

751 05 Uppsala 

Region

Östra Sverige > Östra Mellansverige > Uppsala län

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 752 335,00



UNIVERSITA DEGLI STUDI DI ROMA TOR VERGATA

 Italy

Net EU contribution

€ 646 470,00

Address

VIA CRACOVIA 50

00133 Roma 

Region

Centro (IT) > Lazio > Roma

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 646 470,00



UNIVERSIDADE DO PORTO

 Portugal

Net EU contribution

€ 557 855,00

Address

PRACA GOMES TEIXEIRA

4099-002 Porto 

Region

Continente > Norte > Área Metropolitana do Porto

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 557 855,00



PIXEL VOLTAIC LDA

 Portugal

Net EU contribution

€ 126 271,25

Address

UPTEC ASPRELA II, RUA DR JULIO DE MATOS N 828

4200-355 Porto 

Region

Continente > Norte > Área Metropolitana do Porto

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](#) 

Total cost

€ 126 271,25



PHILIPPS UNIVERSITAET MARBURG

 Germany

Net EU contribution

€ 232 670,00

Address

BIEGENSTRASSE 10
35037 Marburg 

Region

Hessen > Gießen > Marburg-Biedenkopf

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 232 670,00



COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES

 France

Net EU contribution

€ 680 228,50

Address

RUE LEBLANC 25
75015 PARIS 15 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 680 228,50

Partners (2)



ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE

 Switzerland

Net EU contribution

€ 0,00

Address

BATIMENT CE 3316 STATION 1

1015 Lausanne 

Region

Schweiz/Suisse/Svizzera > Région lémanique > Vaud

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



SOLARONIX SA

 Switzerland

Net EU contribution

€ 0,00

Address

CHEMIN DE L'OURIETTE 129

1170 Aubonne 

SME 

Yes

Region

Schweiz/Suisse/Svizzera > Région lémanique > Vaud

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](#) 

Total cost

No data

Last update: 13 October 2022

Permalink: <https://cordis.europa.eu/project/id/101084124>

European Union, 2024

Socioeconomic Pathways, Adaptation and Resilience to Changing CLimate in Europe

Fact Sheet

Project Information

SPARCCE

Grant agreement ID: 101081369

DOI[10.3030/101081369](https://doi.org/10.3030/101081369) **EC signature date**

24 April 2023

Start date

1 September 2023

End date

28 February 2027

Funded under

Climate, Energy and Mobility

Total cost

€ 4 610 850,00

EU contribution

€ 4 610 787,50

Coordinated byINTERNATIONALES INSTITUT
FUER ANGEWANDTE
SYSTEMANALYSE Austria

Project description

Advanced projections of climate change impact on socioeconomics

Climate change has significant impacts on humans, ecosystems, and our economy. To effectively prepare Europe, integrated assessment of the risks and options for reducing emissions and adapting to impacts are required. The EU-funded SPARCCE project will develop cutting-edge methodological capabilities across climate science, demography, and economics. This will involve detailed scenario projections of our society and the impacts of extreme events on people,

infrastructure, businesses, and the environment. Co-development of scenarios with private and public sector stakeholders aims to ensure relevance of the findings and data products to a broad audience. Through developing mitigation and adaptation pathways, SPARCCE will deliver actionable insights to policymakers and institutions to assist them in their efforts to urgently deliver a climate resilient, just, and net-zero transition.

Fields of science

[social sciences](#) > [sociology](#) > [demography](#)

[social sciences](#) > [sociology](#) > [social issues](#) > [social inequalities](#)

[natural sciences](#) > [earth and related environmental sciences](#) > [atmospheric sciences](#) > [climatology](#) > [climatic changes](#)

[social sciences](#) > [economics and business](#) > [economics](#) > [sustainable economy](#)

Keywords

[socioeconomic change](#)

[adaptation](#)

[climate risk](#)

[integrated assessment](#)

[mitigation](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.1 - Climate Science and Solutions](#)

Topic(s)

[HORIZON-CL5-2022-D1-01-02-two-stage - Socio-economic risks of climate change in Europe](#)

Call for proposal

[HORIZON-CL5-2022-D1-01-two-stage](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE

Net EU contribution

€ 1 296 312,50

Address

Schlossplatz 1
2361 Laxenburg
 Austria 

Region

Ostösterreich > Niederösterreich > Wiener Umland/Südteil

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 1 296 375,00

Participants (8)



FONDAZIONE CENTRO EURO-MEDITERRANEOSUI CAMBIAMENTI CLIMATICI

 Italy

Net EU contribution

€ 488 625,00

Address

VIA MARCO BIAGI 5
73100 Lecce 

Region

Sud > Puglia > Lecce

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 488 625,00



CLIMATE ANALYTICS GMBH

 Germany

Net EU contribution

€ 784 312,50

Address

RITTERSTRASSE 3

10969 Berlin 

SME 

Yes

Region

Berlin > Berlin > Berlin

Activity type

Research Organisations

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 784 312,50



POTSDAM-INSTITUT FUR KLIMAFOLGENFORSCHUNG EV

 Germany

Net EU contribution

€ 425 875,00

Address

TELEGRAFENBERG A31

14473 Potsdam 

Region

Brandenburg > Brandenburg > Potsdam

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 425 875,00



VRIJE UNIVERSITEIT BRUSSEL

 Belgium

Net EU contribution

€ 347 162,50

Address

PLEINLAAN 2

1050 Bruxelles / Brussel 

Region

Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest > Région de Bruxelles-Capitale/ Brussels Hoofdstedelijk Gewest > Arr. de Bruxelles-Capitale/Arr. Brussel-Hoofdstad

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 347 162,50



E3-MODELLING AE

 Greece

Net EU contribution

€ 483 625,00

Address

PANORMOU 70-72

11523 ATHINA 

SME 

Yes

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](#) 

Total cost

€ 483 625,00



INSTYTUT OCHRONY ŚRODOWISKA - PAŃSTWOWY INSTYTUT BADAWCZY

 Poland

Net EU contribution

€ 200 000,00

Address

UL SŁOWICZA 32

02-170 WARSZAWA 

Region

Makroregion województwo mazowieckie > Warszawski stołeczny > Miasto Warszawa

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 200 000,00



MINISTERIE VAN INFRASTRUCTUUR EN WATERSTAAT

 Netherlands

Net EU contribution

€ 303 250,00

Address

RIJNSTRAAT 8
2500 EX Den Haag 

Region

West-Nederland > Zuid-Holland > Agglomeratie 's-Gravenhage

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 303 250,00



UNIVERSITA DEGLI STUDI DI FIRENZE

 Italy

Net EU contribution

€ 281 625,00

Address

Piazza San Marco 4
50121 Florence 

Region

Centro (IT) > Toscana > Firenze

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 281 625,00

Partners (3)



EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH

 Switzerland

Net EU contribution

€ 0,00

Address

Raemistrasse 101
8092 Zuerich 

Region

Schweiz/Suisse/Svizzera > Zürich > Zürich

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



JRC -JOINT RESEARCH CENTRE- EUROPEAN COMMISSION

 Belgium

Net EU contribution

€ 0,00

Address

Rue de la Loi 200
1049 Bruxelles / Brussel 

Region

Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest > Région de Bruxelles-Capitale/ Brussels Hoofdstedelijk Gewest > Arr. de Bruxelles-Capitale/Arr. Brussel-Hoofdstad

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

**SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON** 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 28 June 2023

Permalink: <https://cordis.europa.eu/project/id/101081369>



Highly Efficient Super Critical ZERO eMission Energy System

Fact Sheet

Project Information

HERMES

Grant agreement ID: 101083748

DOI[10.3030/101083748](https://doi.org/10.3030/101083748) **EC signature date**

4 October 2022

Start date

1 November 2022

End date

31 October 2025

Funded under

Climate, Energy and Mobility

Total cost

€ 2 594 660,00

EU contribution

€ 2 594 660,00

Coordinated by

UNIVERSITEIT TWENTE

 Netherlands

Project description

Greening the gas turbines

Gas turbines are the cleanest conventional energy source. The EU-funded HERMES project will advance gas turbine technology. Specifically, it will develop the first highly efficient closed-loop supercritical zero-emission energy system. This new system is based on locally synthesised renewable liquid and gaseous fuels (methanol or hydrogen) coupled with decentralised carbon capture utilisation and storage. By operating at high-pressure conditions (above 150 bar), the system achieves significantly higher efficiency (above 65 %) than today's gas turbines. The system also produces no pollutants since it uses pure oxygen for fuel oxidation and captures

the bulky flow of exhaust products (H₂O and/or CO₂) and reuses them for fuel synthesis.

Fields of science

[natural sciences](#) > [chemical sciences](#) > [inorganic chemistry](#) > **[noble gases](#)**

[natural sciences](#) > [earth and related environmental sciences](#) > **[environmental sciences](#)**

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

[engineering and technology](#) > [environmental engineering](#) > **[carbon capture engineering](#)**

[natural sciences](#) > [computer and information sciences](#) > [software](#) > [software applications](#) > **[simulation software](#)**

Keywords

[Zero emission closed-loop renewable system](#)

[supercritical fluids](#)

[high pressure gas turbines](#)

[decentralized fuel synthesis with CCUS](#)

[techno-economic](#)

[environmental](#)

[social](#)

[policy assessment](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.2 - Energy Supply](#)

Topic(s)

[HORIZON-CL5-2021-D3-03-02 - Next generation of renewable energy technologies](#)

Call for proposal

[HORIZON-CL5-2021-D3-03](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



UNIVERSITEIT TWENTE

Net EU contribution

€ 574 700,00

Address

**DRIENERLOLAAN 5
7522 NB Enschede**

 **Netherlands** 

Region

Oost-Nederland > Overijssel > Twente

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 574 700,00

Participants (7)



ETHNICON METSOVION POLYTECHNION

 **Greece**

Net EU contribution

€ 372 750,00

Address

**HEROON POLYTECHNIU 9 ZOGRAPHOU CAMPUS
157 80 ATHINA** 

Region

Αττική > Αττική > Κεντρικός Τομέας Αθηνών

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 372 750,00



EXERGIA ENERGY AND ENVIRONMENT CONSULTANTS AE

 Greece

Net EU contribution

€ 248 875,00

Address

15 VOUKOURESTIOU STR

106 71 Athina 

SME 

Yes

Region

Αττική > Αττική > Κεντρικός 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](#) 

Total cost

€ 248 875,00



TEC4FUELS

 Germany

Net EU contribution

€ 283 750,00

Address

KAISERSTRASSE 100
52134 Herzogenrath 

SME 

Yes

Region

Nordrhein-Westfalen > Köln > Städteregion Aachen

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](#) 

Total cost

€ 283 750,00



OWI SCIENCE FOR FUELS GMBH

 Germany

Net EU contribution

€ 265 210,00

Address

KAISERSTRASSE 100
52134 Herzogenrath 

Region

Nordrhein-Westfalen > Köln > Städteregion Aachen

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 265 210,00



CENTRE EUROPEEN DE RECHERCHE ET DEFORMATION AVANCEE EN CALCUL SCIENTIFIQUE

 France

Net EU contribution

€ 293 750,00

Address

AVENUE G CORIOLIS 42
31057 Toulouse Cedex 

Region

Occitanie > Midi-Pyrénées > Haute-Garonne

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](#) 

Total cost

€ 293 750,00



OPRA ENGINEERING SOLUTIONS BV

 Netherlands

Net EU contribution

€ 140 625,00

Address

HAAKSBERGERSTRAAT 71
7554 PA Hengelo 

SME 

Yes

Region

Oost-Nederland > Overijssel > Twente

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](#) 

Total cost
€ 140 625,00



POLITECHNIKA WROCLAWSKA

 Poland

Net EU contribution

€ 415 000,00

Address

WYBRZEZE WYSPIANSKIEGO 27
50-370 Wrocław 

Region

Makroregion południowo-zachodni > Dolnośląskie > Miasto Wrocław

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 415 000,00

Partners (3)



PAUL SCHERRER INSTITUT

 Switzerland

Net EU contribution

€ 0,00

Address

FORSCHUNGSTRASSE 111
5232 Villigen Psi 

Region

Schweiz/Suisse/Svizzera > Nordwestschweiz > Aargau

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE

 Switzerland

Net EU contribution

€ 0,00

Address

BATIMENT CE 3316 STATION 1

1015 Lausanne 

Region

Schweiz/Suisse/Svizzera > Région lémanique > Vaud

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

SOUTH KENSINGTON CAMPUS EXHIBITION ROAD

SW7 2AZ LONDON 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 10 October 2022

Permalink: <https://cordis.europa.eu/project/id/101083748>

European Union, 2024

Transformative Digital Air Vehicle with IoT Sensors for Safer Urban Skies

Fact Sheet

Project Information

AVATAR

Grant agreement ID: 101096073

DOI[10.3030/101096073](https://doi.org/10.3030/101096073) **EC signature date**

30 November 2022

Start date

1 February 2023

End date

31 January 2026

Funded under

Climate, Energy and Mobility

Total cost

€ 2 890 339,25

EU contribution

€ 2 890 339,25

Coordinated by

EVEKTOR SRO

 Czechia

Objective

AVATAR is dedicated to developing a digital twin platform to enable continuous monitoring of the vehicle during its service life for the purpose predictive maintenance. AVATAR's digital twin model acts in parallel to the real structure and provides, where necessary, an early warning of operational behaviour that deviates from expected (simulated). Additionally, by recording the actual load spectrum that each air vehicle experiences during every flight, it will optimize the individual service life, which contributes towards a sustainable air mobility. AVATAR's will contribute to an increase safety of urban skies and has the potential to optimise the design and performance of air vehicles by providing real load data for each vehicle. The IoT sensing skin proposed by AVATAR is a key enabler for real-time critical operational

information acquisition and connectivity between the physical aircraft and the digital counterpart through wireless communication. AVATAR DT platform will provide a seamless integration of IoT, big data and machine learning to collect, compute and predict. AVATAR will conform to the modern approach towards developing a digital twin based on different types of data and advanced analytical methods which eliminates the need for the real air vehicle and the virtual models to be directly connected and builds this connection through ML and AI. AVATAR contributes to the acceleration of digital transformation of air mobility, particularly in urban setting.

Fields of science

[natural sciences](#) > [computer and information sciences](#) > [internet](#) > **[internet of things](#)**

[natural sciences](#) > [computer and information sciences](#) > [data science](#) > **[big data](#)**

[engineering and technology](#) > [mechanical engineering](#) > [vehicle engineering](#) > [aerospace engineering](#) > **[aircraft](#)**

[engineering and technology](#) > [electrical engineering, electronic engineering, information engineering](#) > [electronic engineering](#) > **[sensors](#)**

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

Keywords

[Digital Twin](#)

[IoT](#)

[Sensing skin](#)

[Structural Health Monitoring](#)

[Predictive maintenance](#)

[Advance Analytics](#)

[Cloud base solutions](#)

[Big Data](#)

[Diagnosis and Prognosis](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#) MAIN PROGRAMME

[HORIZON.2.5.7 - Clean, Safe and Accessible Transport and Mobility](#)

[HORIZON.2.5.6 - Industrial Competitiveness in Transport](#)

Topic(s)

[HORIZON-CL5-2022-D5-01-13 - Digital aviation technologies for new aviation business models, services, emerging global threats and industrial competitiveness](#)

Call for proposal

[HORIZON-CL5-2022-D5-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



EVEKTOR SRO

Net EU contribution

€ 873 641,25

Address

LETECKA 1008
686 04 Kunovice

 Czechia 

Region

Česko > Střední Morava > Zlínský kraj

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](#) 

Total cost

€ 873 641,25

Participants (4)



TEKNOLOGISK INSTITUT

 Denmark

Net EU contribution

€ 591 250,00

Address

GREGERSSENSVEJ 1
2630 Taastrup 

Region

Danmark > Hovedstaden > Københavns omegn

Activity type

Research Organisations

Links

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

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


[HORIZON collaboration network](#) 

Total cost

€ 591 250,00



UNIVERSITE DU LUXEMBOURG

 Luxembourg

Net EU contribution

€ 615 510,00

Address

2 PLACE DE L'UNIVERSITE
4365 ESCH-SUR-ALZETTE 

Region

Luxembourg > Luxembourg > Luxembourg

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 615 510,00




NORDIC WING APS

 Denmark

Net EU contribution

€ 200 000,00

Address

HANGARVEJ 21 JONSTRUP
3500 VAERLOSE 

SME 

Yes

Region

Danmark > Hovedstaden > Nordsjælland

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](#) 

Total cost

€ 200 000,00



NTT LUXEMBOURG PSF SA

 Luxembourg

Net EU contribution

€ 609 938,00

Address

89 D RUE DE PAFEBRUCH
8308 WESTSIDE VILLAGE CAPELLEN 

Region

Luxembourg > Luxembourg > Luxembourg

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](#) 

Total cost
€ 609 938,00

Partners (2)



LOUGHBOROUGH UNIVERSITY

 United Kingdom

Net EU contribution

€ 0,00

Address

ASHBY ROAD

LE11 3TU Loughborough 

Region

**East Midlands (England) > Leicestershire, Rutland and Northamptonshire > Leicestershire
CC and Rutland**

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

SOUTH KENSINGTON CAMPUS EXHIBITION ROAD

SW7 2AZ LONDON 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 7 January 2023

Permalink: <https://cordis.europa.eu/project/id/101096073>

European Union, 2024

OPEN FAN VALIDATION FOR CARBON-FREE AIRCRAFTS

Fact Sheet

Project Information

PANDORA

Grant agreement ID: 101096156

DOI[10.3030/101096156](https://doi.org/10.3030/101096156) **EC signature date**

21 November 2022

Start date

1 February 2023

End date

31 January 2027

Funded under

Climate, Energy and Mobility

Total cost

€ 4 255 536,00

EU contribution

€ 4 255 536,00

Coordinated by

UNIVERSIDAD POLITECNICA DE MADRID



Spain

Project description

Filling the gaps: experimental and numerical data supporting open fan concepts

Expanding urbanisation and increasing air travel mean more people are living in the vicinity of busy airports and noise is an important concern. Open fan engine concepts could reduce weight and emissions relative to conventional ducted fans, but they may be noisier. Further, the experimental data and modelling tools available to evaluate and refine open fan designs and reduce noise generation are limited. The EU-funded PANDORA project will address this gap with experimental data and advanced models. The team will collect experimental noise and performance data

from an unducted single fan for short/medium-range aircraft. The data will also help validate and expand the scope of numerical tools to improve further analysis.

Fields of science

[natural sciences](#) > [computer and information sciences](#) > **[databases](#)**

[engineering and technology](#) > [mechanical engineering](#) > [vehicle engineering](#) > [aerospace engineering](#) > **[aircraft](#)**

Keywords

[Aeroengine](#)

[Noise Emissions](#)

[Testing](#)

[Simulation](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#) MAIN PROGRAMME

[HORIZON.2.5.7 - Clean, Safe and Accessible Transport and Mobility](#)

[HORIZON.2.5.6 - Industrial Competitiveness in Transport](#)

Topic(s)

[HORIZON-CL5-2022-D5-01-12 - Towards a silent and ultra-low local air pollution aircraft](#)

Call for proposal

[HORIZON-CL5-2022-D5-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



UNIVERSIDAD POLITECNICA DE MADRID

Net EU contribution

€ 2 451 250,00

Address

CALLE RAMIRO DE MAEZTU 7 EDIFICIO RECTORADO
28040 Madrid

 **Spain** 

Region

Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 2 451 250,00

Participants (4)



DEUTSCHES ZENTRUM FUR LUFT - UND RAUMFAHRT EV

 **Germany**

Net EU contribution

€ 769 448,00

Address

LINDER HOHE

51147 Koln 

Region

Nordrhein-Westfalen > Köln > Köln, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 769 448,00



SAFRAN AIRCRAFT ENGINES

 France

Net EU contribution

€ 265 070,00

Address

**BVD DU GENERAL MARTIAL VALIN 2
75015 Paris** 

Region

Ile-de-France > Ile-de-France > Paris

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](#) 

Total cost

€ 265 070,00



ECOLE CENTRALE DE LYON

 France

Net EU contribution

€ 737 268,00

Address

**AVENUE GUY DE COLLONGUE 36
69134 Ecully** 

Region

Auvergne-Rhône-Alpes > Rhône-Alpes > Rhône

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 769 768,00

 **THIRD-PARTY** 

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS

 France

Net EU contribution

€ 32 500,00

Address

RUE MICHEL ANGE 3

75794 Paris 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 32 500,00

Partners (1)



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

SOUTH KENSINGTON CAMPUS EXHIBITION ROAD

SW7 2AZ LONDON 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 28 November 2022

Permalink: <https://cordis.europa.eu/project/id/101096156>

European Union, 2024

 HORIZON
EUROPE

RE-thinking of approaches and toolkits for transdisciplinary INTEGRATED assessment of climate-compatible energy strategies from the African Union through to the European Union

Fact Sheet

Project Information

RE-INTEGRATE

Grant agreement ID: 101118217

DOI[10.3030/101118217](https://doi.org/10.3030/101118217) **EC signature date**

7 June 2023

Start date

1 September 2023

End date

28 February 2027

Funded under

Climate, Energy and Mobility

Total cost

€ 2 329 860,00

EU contribution

€ 2 329 860,00

Coordinated by

KUNGLIGA TEKNISKA

HOEGSKOLAN

 Sweden

Project description

Coordinated climate solutions for Europe and Africa

In the realm of climate-compatible development planning, scientific tools wielded across the EU and African Union (AU) often miss the mark. Uncoordinated and biased model design by various actors has resulted in a failure to reflect country-specific conditions, leading to a lack of ownership and credibility in energy planning.

With this in mind, the EU-funded RE-INTEGRATE project is on a mission to establish an inclusive environment for knowledge-sharing and context-specific modelling toolkits. The project aims to revolutionise the strategic energy planning process across the EU and AU, paving the way for more credible and effective outcomes. Addressing the AU's need for independent modelling approaches, the project unfolds in 8 AU contexts, harnessing local expertise.

Fields of science

[natural sciences](#) > [biological sciences](#) > [ecology](#) > **[ecosystems](#)**

[social sciences](#) > [political sciences](#) > [political policies](#) > **[civil society](#)**

Keywords

[Knowledge sharing](#)

[Energy system models](#)

[Integrated Assessment](#)

[Climate-compatible development](#)

[Capacity development](#)

[Partnerships](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.2 - Energy Supply](#)

Topic(s)

[HORIZON-CL5-2022-D3-02-02 - AU-EU Energy System Modelling](#)

Call for proposal

[HORIZON-CL5-2022-D3-02](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



KUNGLIGA TEKNISKA HOEGSKOLAN

Net EU contribution

€ 373 518,75

Address

BRINELLVAGEN 8

100 44 Stockholm

 Sweden 

Region

Östra Sverige > Stockholm > Stockholms län

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 373 518,75

Participants (14)



E3-MODELLING AE

 Greece

Net EU contribution

€ 284 875,00

Address

PANORMOU 70-72

11523 ATHINA 

SME 

Yes

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](#) 

Total cost

€ 284 875,00




NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO

 Netherlands

Net EU contribution

€ 281 750,00

Address

**ANNA VAN BUERENPLEIN 1
2595 DA Den Haag** 

Region

West-Nederland > Zuid-Holland > Agglomeratie 's-Gravenhage

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 281 750,00



UNIVERSITY OF CAPE TOWN

 South Africa

Net EU contribution

€ 167 325,00

Address

**PRIVATE BAG X3
7701 Rondebosch** 

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 167 325,00



ADDIS ABABA UNIVERSITY

 Ethiopia

Net EU contribution

€ 124 000,00

Address

ADDIS ABABA UNIVERSITY

1176 Addis Ababa 

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 124 000,00



TECHNISCHE UNIVERSITEIT DELFT

 Netherlands

Net EU contribution

€ 227 200,00

Address

STEVINWEG 1

2628 CN Delft 

Region

West-Nederland > Zuid-Holland > Delft en Westland

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 227 200,00



THE CYPRUS INSTITUTE

 Cyprus

Net EU contribution

€ 131 025,00

Address

CONSTANTINOU KAVAFI 20

2121 Nicosia 

Region

Κύπρος > Κύπρος > Κύπρος

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 131 025,00



ECOLE NATIONALE D'INGENIEURS DE TUNIS

 Tunisia

Net EU contribution

€ 84 375,00

Address

CAMPUS UNIVERSITAIRE EL MANAR

1002 Tunis 

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 84 375,00



UNIVERSITY OF MAURITIUS

 Mauritius

Net EU contribution

€ 70 812,50

Address

Reduit

Reduit 

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 70 812,50



UNIVERSITE CATHOLIQUE DE BUKAVU

 Democratic Republic of the Congo

Net EU contribution

€ 113 750,00

Address

02 AVENUE BUGABO KADUTU

BUKAVU 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 113 750,00



STRATHMORE UNIVERSITY

 Kenya

Net EU contribution

€ 84 291,25

Address

OLE SANGALE ROAD MADARAKA ESTATE

00200 Nairobi 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 84 291,25



TEKNOLOGIAN TUTKIMUSKESKUS VTT OY

 Finland

Net EU contribution

€ 90 000,00

Address

TEKNIKANTIE 21

02150 Espoo 

Region

Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 90 000,00



DANMARKS TEKNISKE UNIVERSITET

 Denmark

Net EU contribution

€ 105 125,00

Address

ANKER ENGELUNDS VEJ 101
2800 Kongens Lyngby 

Region

Danmark > Hovedstaden > Københavns omegn

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 105 125,00



UNIVERSITY OF ZAMBIA

 Zambia

Net EU contribution

€ 85 062,50

Address

GREAT EAST ROAD CAMPUS
10101 Lusaka 

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 85 062,50



ENERGIE-ENVIRONNEMENT-DEVELOPPEMENT ENDA-ENERGIE

 Senegal

Net EU contribution

€ 106 750,00

Address

54 RUE CARNOT

Dakar 

Activity type

Research Organisations

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 106 750,00

Partners (1)



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

SOUTH KENSINGTON CAMPUS EXHIBITION ROAD

SW7 2AZ LONDON 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 14 July 2023

Permalink: <https://cordis.europa.eu/project/id/101118217>

European Union, 2024

Smart, Aware, Integrated Wind Farm Control Interacting with Digital Twins (ICONIC)

Fact Sheet

Project Information

ICONIC

Grant agreement ID: 101122329

DOI[10.3030/101122329](https://doi.org/10.3030/101122329) **EC signature date**

30 August 2023

Start date

1 December 2023

End date

30 November 2027

Funded under

Climate, Energy and Mobility

Total cost

€ 3 897 447,50

EU contribution

€ 3 897 447,50

Coordinated by

UNIVERSITEIT GENT

 Belgium

Project description

Innovative control system improves wind farm efficiency

Wind turbine farms represent a promising renewable energy solution, aligning with the goals of the green deal. However, the advancement of this solution is hindered by the necessity for enhanced batteries and improved turbine efficiency. The EU-funded ICONIC project is committed to developing a groundbreaking, state-of-the-art wind-farm control system, accompanied by physical and digital tools that will pave the way for significant breakthroughs. This system is anticipated to increase power production by up to 20 % and annual energy production by up to 5 %. Furthermore, it

is expected to reduce the levelised energy cost by 6 % through improved efficiency and reduced expenses. The system will incorporate artificial intelligence, digital twins and data-enhanced technologies.

Fields of science

[engineering and technology](#) > [electrical engineering](#), [electronic engineering](#), [information engineering](#) > [electronic engineering](#) > **[control systems](#)**

[engineering and technology](#) > [mechanical engineering](#) > [vehicle engineering](#) > [aerospace engineering](#) > **[aircraft](#)**

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

Keywords

[wind farm control](#)

[artificial intelligence](#)

[digital twin](#)

[reinforcement learning](#)

[data-driven tool](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.2 - Energy Supply](#)

Topic(s)

[HORIZON-CL5-2022-D3-03-04 - Integrated wind farm control](#)

Call for proposal

[HORIZON-CL5-2022-D3-03](#)

[See other projects for this call](#)

Funding Scheme

Coordinator



UNIVERSITEIT GENT

Net EU contribution

€ 788 750,00

Address

SINT PIETERSNIEUWSTRAAT 25

9000 Gent

 **Belgium** 

Region

Vlaams Gewest > Prov. Oost-Vlaanderen > Arr. Gent

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 788 750,00

Participants (10)



NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

 **Norway**

Net EU contribution

€ 466 545,00

Address

HOGSKOLERINGEN 1

7491 Trondheim 

Region

Norge > Trøndelag > Trøndelag

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 466 545,00



AALBORG UNIVERSITET

 Denmark

Net EU contribution

€ 553 942,50

Address

FREDRIK BAJERS VEJ 7K

9220 Aalborg 

Region

Danmark > Nordjylland > Nordjylland

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 553 942,50



KATHOLIEKE UNIVERSITEIT LEUVEN

 Belgium

Net EU contribution

€ 393 531,25

Address

OUDE MARKT 13

3000 Leuven 

Region

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 393 531,25



IKERLAN S. COOP

 Spain

Net EU contribution

€ 385 250,00

Address

P JOSE MARIA ARIZMENDIARRIETA 2
20500 Mondragon 

Region

Noreste > País Vasco > Gipuzkoa

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 385 250,00



C-POWER NV

 Belgium

Net EU contribution

€ 321 750,00

Address

BUSKRUITSTRAAT 1

8400 Oostende 

Region

Vlaams Gewest > Prov. West-Vlaanderen > Arr. Oostende

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](#) 

Total cost

€ 429 750,00

 THIRD-PARTY 

THORNTON BANK MAINTENANCE SERVICES

 Belgium

Net EU contribution

€ 108 000,00

Address

ESPLANADESTRAAT 1

8400 OSTEND 

Region

Vlaams Gewest > Prov. West-Vlaanderen > Arr. Oostende

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](#) 

Total cost

€ 108 000,00




EDR & MEDESO AS

 Norway

Net EU contribution

€ 150 482,50

Address

LEIF TRONSTADS PLASS 4
1337 Sandvika 

Region

Norge > Oslo og Viken > Viken

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](#) 

Total cost

€ 150 482,50



LAU LAGUN BEARINGS SL

 Spain

Net EU contribution

€ 268 196,25

Address

POLIGONO HARIZTI SN
20212 Olaberria 

Region

Noreste > País Vasco > Gipuzkoa

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](#) 

Total cost

€ 268 196,25



SKF BV

 Netherlands

Net EU contribution

€ 167 250,00

Address

MEIDOORNKADE 14
3992 AE Houten 

Region

West-Nederland > Utrecht > Utrecht

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](#) 

Total cost

€ 167 250,00



ZF WIND POWER ANTWERPEN NV

 Belgium

Net EU contribution

€ 293 750,00

Address

GERARD MERCATORSTRAAT 40
3920 Lommel 

Region

Vlaams Gewest > Prov. Limburg (BE) > Arr. Maaseik

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](#) 

Total cost

€ 293 750,00

Partners (4)



EMBOTECH AG

Switzerland

Net EU contribution

€ 0,00

Address

TECHNOPARKSTRASSE 1

8005 Zurich

SME

Yes

Region

Schweiz/Suisse/Svizzera > Zürich > Zürich

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](#)

Total cost

No data



UNIVERSITY OF WARWICK

United Kingdom

Net EU contribution

€ 0,00

Address

KIRBY CORNER ROAD UNIVERSITY HOUSE

CV4 8UW COVENTRY

Region

West Midlands (England) > West Midlands > Coventry

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

**SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON** 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data




BP INTERNATIONAL LIMITED

 United Kingdom

Net EU contribution

€ 0,00

Address

**CHERTSEY ROAD
TW16 7BP Sunbury On Thames** 

Region

South East (England) > Surrey, East and West Sussex > West Surrey

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](#) 

Total cost

No data

Last update: 14 September 2023

Permalink: <https://cordis.europa.eu/project/id/101122329>

European Union, 2024


Scale-resolving Simulations for Innovations in Turbomachinery Design

Fact Sheet

Project Information

Sci-Fi-Turbo

Grant agreement ID: 101138080

DOI[10.3030/101138080](https://doi.org/10.3030/101138080) **EC signature date**

24 November 2023

Start date

1 January 2024

End date

30 June 2027

Funded under

Climate, Energy and Mobility

Total cost

€ 3 436 753,75

EU contribution

€ 3 436 753,75

Coordinated byDEUTSCHES ZENTRUM FÜR
LUFT - UND RAUMFAHRT EV

Germany

Objective

Sci-Fi-Turbo aims to revolutionise the aero engine design process by advancing and integrating high-order scale-resolving simulations (SRS) and optimization methodologies into standard industrial workflows. SRS are a key enabler for developing ultra-efficient propulsion systems that drastically reduce GHG emissions by 2035 and achieve the EU's target to be climate-neutral by 2050. The advancements will boost design process capabilities and reduce product development cycles.

Future engine concepts require opening up the design space and solving complex design problems out of reach for today's standard industrial design processes within

the required timeframe. To achieve the necessary step change in engine design, a similar step change is needed for the design approach. Sci-Fi-Turbo fills this urgent need by exploiting opportunities in three foundation technologies: High-performance computing, high-order numerical methods, and AI/ML. The combination is used to implement and demonstrate two key advancements. First, a highly integrated high-order SRS design process is established for modern CPU/GPU hardware, meeting robustness, accuracy, and turnaround time requirements. It will provide increased functionality and effectivity at an industrial level and pave the way for the uptake of SRS-based design by the industry. The high accuracy of the methodology will also reduce the need for low-TRL testing and enable new concepts and extended operating conditions. Second, an SRS-assisted multi-fidelity, data-driven optimisation framework is developed, which embeds and exploits the advantages of highly accurate high-order SRS while leveraging AI/ML methods to increase the predictive capability of lower-fidelity simulations and maximize overall process accuracy and speed. Dedicated experiments support the technology advancement and will enable the design of net-zero-emission engines in due time and contribute to the digital transformation of the aviation industry.

Fields of science

[engineering and technology](#) > [electrical engineering, electronic engineering, information engineering](#) > [electronic engineering](#) > [computer hardware](#) > **[computer processors](#)**

[natural sciences](#) > [mathematics](#) > [applied mathematics](#) > **[numerical analysis](#)**

Keywords

[Scale-resolving simulations](#)

[machine-learning](#)

[data-driven turbulence modelling](#)

[multi-fidelity optimization](#)

[turbomachinery design](#)

[climate-neutral aviation](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#) MAIN PROGRAMME

[HORIZON.2.5.7 - Clean, Safe and Accessible Transport and Mobility](#)

[HORIZON.2.5.6 - Industrial Competitiveness in Transport](#)

Topic(s)

Call for proposal

[HORIZON-CL5-2023-D5-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



DEUTSCHES ZENTRUM FUR LUFT - UND RAUMFAHRT EV

Net EU contribution

€ 1 032 120,00

Address

LINDER HOHE

51147 Koln

 Germany 

Region

Nordrhein-Westfalen > Köln > Köln, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 1 032 120,00

Participants (7)



GENERAL ELECTRIC DEUTSCHLAND HOLDING GMBH

 Germany

Net EU contribution

€ 303 340,00

Address

BLEICHSTRASSE 64-66
60313 Frankfurt Am Main 

Region

Hessen > Darmstadt > Frankfurt am Main, Kreisfreie Stadt

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](#) 

Total cost

€ 303 340,00



TECHNISCHE UNIVERSITAET BRAUNSCHWEIG

 Germany

Net EU contribution

€ 304 437,50

Address

UNIVERSITAETSPLATZ 2
38106 Braunschweig 

Region

Niedersachsen > Braunschweig > Braunschweig, Kreisfreie Stadt

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 304 437,50



CENTRE DE RECHERCHE EN AERONAUTIQUE ASBL - CENAERO

Belgium

Net EU contribution

€ 578 000,00

Address

**Batiment Eole, 1er étage - rue des Frères Wright 29
6041 Gosselies**

SME

Yes

Region

Région wallonne > Prov. Hainaut > Arr. Charleroi

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#)

Total cost
€ 578 000,00



CINECA CONSORZIO INTERUNIVERSITARIO

Italy

Net EU contribution

€ 218 750,00

Address

**VIA MAGNANELLI 6/3
40033 Casalecchio Di Reno Bo**

Region

Nord-Est > Emilia-Romagna > Bologna

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 218 750,00



SORBONNE UNIVERSITE

 France

Net EU contribution

€ 553 750,00

Address

21 RUE DE L'ECOLE DE MEDECINE

75006 Paris 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 553 750,00



CHALMERS TEKNISKA HOGSKOLA AB

 Sweden

Net EU contribution

€ 298 235,00

Address

-

412 96 GOTEBOG 

Region

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 298 235,00



ANSYS GERMANY GMBH

 Germany

Net EU contribution

€ 148 121,25

Address

BIRKENWEG 14A

64294 Darmstadt 

Region

Hessen > Darmstadt > Darmstadt, Kreisfreie Stadt

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](#) 

Total cost

€ 148 121,25

Partners (3)



ANSYS UK LIMITED

 United Kingdom

Net EU contribution

€ 0,00

Address

3 ST PAUL S PLACE 129 NORFOLK STREET
S1 2JE SHEFFIELD 

Region

Yorkshire and the Humber > South Yorkshire > Sheffield

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](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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


[HORIZON collaboration network](#) 

Total cost

No data



UNIVERSITY OF MELBOURNE

 Australia

Net EU contribution

€ 0,00

Address

PARKVILLEOFFICE OF THE VICE CHANCELLOR
3010 Melbourne 

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 8 January 2024

Permalink: <https://cordis.europa.eu/project/id/101138080>

European Union, 2024

Cloud-aERosol inTeractions & their impActs IN The earth sYstem

Fact Sheet

Project Information

CERTAINTY

Grant agreement ID: 101137680

EC signature date

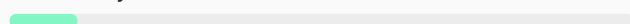
29 October 2023

Start date

1 January 2024

End date

31 December 2027



Funded under

Climate, Energy and Mobility

Total cost

€ 0,00

EU contribution

€ 7 213 742,68

Coordinated by

CENTRE NATIONAL DE LA
RECHERCHE SCIENTIFIQUE
CNRS

 France

Project description

Studying aerosol-cloud processes to improve climate models

Clouds and aerosols play pivotal roles in regulating our climate, yet uncertainties persist in understanding their impact on global and regional climate patterns. In this context, the EU-funded CERTAINTY project will deepen our understanding of aerosol-cloud processes and their influence on the Earth System. Leveraging advanced algorithms, machine learning, and high-resolution models, CERTAINTY integrates a decade of research networks and satellite data to elevate our understanding of climate dynamics. Led by consortium partners at the forefront of aerosol and cloud data, the project's ultimate goal is to enhance predictive models,

providing valuable insights for climate mitigation and adaptation strategies. This innovative endeavour promises a brighter future for European citizens and global society.

Fields of science

[engineering and technology](#) > [mechanical engineering](#) > [vehicle engineering](#) > [aerospace engineering](#) > **[satellite technology](#)**

[natural sciences](#) > [earth and related environmental sciences](#) > [atmospheric sciences](#) > [climatology](#) > **[climatic changes](#)**

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

[natural sciences](#) > [computer and information sciences](#) > [software](#) > [software applications](#) > **[simulation software](#)**

Keywords

[cloud](#)

[aerosols](#)

[interactions](#)

[weather](#)

[climate](#)

[satellite](#)

[observations](#)

[models](#)

[data assimilation](#)

[radiation](#)

[advanced algorithms](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#) MAIN PROGRAMME

[HORIZON.2.5.1 - Climate Science and Solutions](#)

Topic(s)

[HORIZON-CL5-2023-D1-01-04 - Improved knowledge in cloud-aerosol interaction](#)

Call for proposal

[HORIZON-CL5-2023-D1-01](#)

[See other projects for this call](#)

Funding Scheme

Coordinator



CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS

Net EU contribution

€ 1 184 133,00

Address

RUE MICHEL ANGE 3

75794 Paris

 **France** 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Participants (14)



THIRD-PARTY 

SORBONNE UNIVERSITE

 **France**

Net EU contribution

€ 21 729,00

Address

21 RUE DE L'ECOLE DE MEDECINE

75006 Paris 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



ILMATIETEEN LAITOS

 Finland

Net EU contribution

€ 912 178,13

Address

Erik Palmenin aukio 1

00560 Helsinki 

Region

Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS

 United Kingdom

Net EU contribution

€ 744 492,50

Address

SHINFIELD PARK

RG2 9AX Reading 

Region

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



BARCELONA SUPERCOMPUTING CENTER CENTRO NACIONAL DE SUPERCOMPUTACION

 Spain

Net EU contribution

€ 665 092,26

Address

CALLE JORDI GIRONA 31

08034 Barcelona 

Region

Este > Cataluña > Barcelona

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



KONINKLIJK NEDERLANDS METEOROLOGISCH INSTITUUT-KNMI

 Netherlands

Net EU contribution

€ 594 290,00

Address

UTRECHTSEWEG 297

3731 GA De Bilt 

Region

West-Nederland > Utrecht > Utrecht

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



STOCKHOLMS UNIVERSITET

 Sweden

Net EU contribution

€ 494 875,00

Address

UNIVERSITETSVAGEN 10

10691 Stockholm 

Region

Östra Sverige > Stockholm > Stockholms län

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



DEUTSCHES ZENTRUM FUR LUFT - UND RAUMFAHRT EV

 Germany

Net EU contribution

€ 445 029,54

Address

LINDER HOHE

51147 Koln 

Region

Nordrhein-Westfalen > Köln > Köln, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



ETHNIKO ASTEROSKOPEIO ATHINON

 Greece

Net EU contribution

€ 424 875,00

Address

LOFOS NYMFON

11810 Athina 

Region

Αττική > Αττική > Κεντρικός Τομέας Αθηνών

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



LUNDS UNIVERSITET

 Sweden

Net EU contribution

€ 449 030,00

Address

Paradisgatan 5c
22100 Lund 

Region

Södra Sverige > Sydsverige > Skåne län

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



ITA-SUOMEN YLIOPISTO

 Finland

Net EU contribution

€ 454 080,75

Address

YLIOPISTONRANTA 8
70211 KUOPIO 

Region

Manner-Suomi > Pohjois- ja Itä-Suomi > Pohjois-Savo

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



HELSINGIN YLIOPISTO

Finland

Net EU contribution

€ 274 687,50

Address

YLIOPISTONKATU 3

00014 Helsingin Yliopisto

Region

Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#)

Total cost

No data



POLYTECHNEIO KRITIS

Greece

Net EU contribution

€ 249 875,00

Address

BUILDING E4, TECHNICAL UNIVERSITY CAMPUS COUNOUPIDIANA

731 00 Chania

Region

Νησιά Αιγαίου > Κρήτη > Χανιά

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)

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

[HORIZON collaboration network](#)

Total cost

No data



MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV

 Germany

Net EU contribution

€ 198 750,00

Address

HOFGARTENSTRASSE 8
80539 Munchen 

Region

Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



UKRAINIAN RESEARCH HYDROMETEOROLOGICAL INSTITUTE OF THE STATE EMERGENCY SERVICE OF UKRAINE AND THE NATIONAL ACADEMY OF SCIENCE OF UKRAINE

 Ukraine

Net EU contribution

€ 100 625,00

Address

NAUKI AVENUE 37 HOLOSIIVSKYI DISTRICT
03028 Kyiv 

Activity type

Other

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Partners (4)




EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH

 Switzerland

Net EU contribution

€ 0,00

Address

Raemistrasse 101
8092 Zuerich 

Region

Schweiz/Suisse/Svizzera > Zürich > Zürich

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



SCHWEIZERISCHES FORSCHUNGSINSTITUT FUER HOCHGEBIRGSKLIMA UND MEDIZIN IN DAVOS

 Switzerland

Net EU contribution

€ 0,00

Address

OBERE STRASSE 22
7270 Davos Platz 

SME 

Yes

Region

Schweiz/Suisse/Svizzera > Ostschweiz > Graubünden / Grigioni / Grischun

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

**SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON** 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



THE UNIVERSITY OF MANCHESTER

 United Kingdom

Net EU contribution

€ 0,00

Address

OXFORD ROAD

M13 9PL Manchester 

Region

North West (England) > Greater Manchester > Manchester

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 4 December 2023

Permalink: <https://cordis.europa.eu/project/id/101137680>

European Union, 2024

Novel Fuel-Flexible ultra-Low Emissions Combustion systems for Sustainable aviation

Fact Sheet

Project Information

FFLECS

Grant agreement ID: 101096436

DOI[10.3030/101096436](https://doi.org/10.3030/101096436) **EC signature date**

9 October 2023

Start date

1 December 2023

End date

30 November 2026

Funded under


Climate, Energy and Mobility

Total cost

€ 1 905 741,25

EU contribution

€ 1 905 741,00

Coordinated byUNIVERSITA DEGLI STUDI DI
FIRENZE
 Italy

Objective

"Improving Local Air Quality at airports while at the same time decarbonising aviation can be achieved by switching to sustainable aviation fuels (SAFs) and hydrogen (H₂), as confirmed by recent engine development programs. However, both these fuels require significant developments in the gas-turbine combustor because present technologies not only to further reduce NO_x and PM emissions as expected by long-term standards and objectives but also are not normally suitable for 100% direct combustion of hydrogen. In this project, revolutionary combustor architectures will be studied, extending the preliminary results of previous Clean Sky 2 ""Innovative NO_x

Reduction Technologies"" projects in terms of scientific scope and TRL. In particular, this project will advance (i) the Lean Azimuthal Flame (LEAFInnox), a novel combustion system based on Flameless Oxidation, (ii) the Compact Helically Arranged combustoR (CHAIRlift), a new system which uses interacting lean lifted flames, and (iii) plasma and electric manipulation of the spray and of the flame stabilisation mechanism. The fuel flexibility offered by these novel concepts is key to allow for SAF and H2 operations. This unique feature will be exploited to give novel dual-fuel LTO cycle strategies and ultra-low NOx, ultra-low soot single or dual-fuel use. Experiments on available dedicated rigs and numerical work will be performed to provide knowledge at the fundamental and practical level that will allow TRL3 and higher developments at the end of the project. The project will include new CFD, low-order, and AI models, and novel stabilisation techniques ripe for commercial exploitation."

Fields of science

[natural sciences](#) > [chemical sciences](#) > [electrochemistry](#) > [electrolysis](#)

[engineering and technology](#) > [environmental engineering](#) > [air pollution engineering](#)

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

Keywords

[Hydrogen](#)

[SAF](#)

[PM](#)

[NOx](#)

[fuel flexibility](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#) MAIN PROGRAMME

[HORIZON.2.5.7 - Clean, Safe and Accessible Transport and Mobility](#)

[HORIZON.2.5.6 - Industrial Competitiveness in Transport](#)

Topic(s)

[HORIZON-CL5-2022-D5-01-12 - Towards a silent and ultra-low local air pollution aircraft](#)

Call for proposal

[HORIZON-CL5-2022-D5-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



UNIVERSITA DEGLI STUDI DI FIRENZE

Net EU contribution

€ 333 750,00

Address

Piazza San Marco 4

50121 Florence

 **Italy** 

Region

Centro (IT) > Toscana > Firenze

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 333 750,00

Participants (5)




KARLSRUHER INSTITUT FUER TECHNOLOGIE

 **Germany**

Net EU contribution

€ 709 241,00

Address

KAISERSTRASSE 12
76131 Karlsruhe 

Region

Baden-Württemberg > Karlsruhe > Karlsruhe, Stadtkreis

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 709 241,25



UNIVERSITA DEL SALENTO

 Italy

Net EU contribution

€ 296 250,00

Address

PIAZZA TANCREDI 7

73100 Lecce 

Region

Sud > Puglia > Lecce

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 296 250,00



UNIVERSITA DEGLI STUDI DI NAPOLI FEDERICO II

 Italy

Net EU contribution

€ 245 000,00

Address

CORSO UMBERTO I, 40
80138 Napoli 

Region

Sud > Campania > Napoli

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 245 000,00



CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS

 France

Net EU contribution

€ 266 105,00

Address

RUE MICHEL ANGE 3
75794 Paris 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 321 500,00

 **THIRD-PARTY** 

UNIVERSITE DE ROUEN NORMANDIE

 France

Net EU contribution

€ 55 395,00

Address

RUE THOMAS BECKET 1 MONT SAINT AIGNAN
76821 Mont Saint Aignan Cedex 

Region

Normandie > Haute-Normandie > Seine-Maritime

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 55 395,00

Partners (3)



EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH

 Switzerland

Net EU contribution

€ 0,00

Address

Raemistrasse 101
8092 Zuerich 

Region

Schweiz/Suisse/Svizzera > Zürich > Zürich

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

United Kingdom

Net EU contribution

€ 0,00

Address

**SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON**

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#)

Total cost

No data



THE CHANCELLOR MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE

United Kingdom

Net EU contribution

€ 0,00

Address

**TRINITY LANE THE OLD SCHOOLS
CB2 1TN Cambridge**

Region

East of England > East Anglia > Cambridgeshire CC

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 7 November 2023

Permalink: <https://cordis.europa.eu/project/id/101096436>

European Union, 2024

Sustainable Technologies for Reducing Europe's bAttery raw Materials dependance

Fact Sheet

Project Information

STREAMS

Grant agreement ID: 101137771

EC signature date

13 December 2023

Start date

1 January 2024

End date

31 December 2026

Funded under

Climate, Energy and Mobility

Total cost

€ 6 108 632,62

EU contribution

€ 6 094 993,25

Coordinated by

AIT AUSTRIAN INSTITUTE OF
TECHNOLOGY GMBH

 Austria

Project description

New technologies for sustainable battery production

Battery technology plays a crucial role in electrical machinery, vehicles, and various components, serving as a cornerstone for developing, integrating, and advancing novel renewable energy solutions and energy storage technologies. However, the value chain of most batteries heavily relies on harmful critical raw materials and often involves highly polluting manufacturing processes, posing significant environmental risks. The EU-funded STREAMS project aims to showcase, develop, and validate 12 scalable and adaptable technologies focused on the sustainable production of

battery-grade precursors and corresponding anode and cathode active materials. It will demonstrate these solutions using primary, secondary, and recycled materials, with the outcomes poised to substantially enhance European competitiveness.

Fields of science

[social sciences](#) > [economics and business](#) > [economics](#) > [sustainable economy](#).

Keywords

[Battery-grade intermediates](#)

[recovery](#)

[recycling](#)

[reconditioning](#)

[sustainable processing](#)

[purification processes](#)

[raw materials](#)

[primary and secondary sources](#)

[black mass](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.9 - Energy Storage](#)

Topic(s)

[HORIZON-CL5-2023-D2-01-01 - Technologies for sustainable, cost-efficient and low carbon footprint downstream processing & production of battery-grade materials \(Batt4EU Partnership\)](#)

Call for proposal

[HORIZON-CL5-2023-D2-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GMBH

Net EU contribution

€ 792 960,75

Address

GIEFINGGASSE 4

1210 Wien

 **Austria** 

Region

Ostösterreich > Wien > Wien

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 794 098,56

Participants (14)



ETI BAKIR ANONIM SIRKETI/MAZIDAGI SUBESI

 **Türkiye**

Net EU contribution

€ 600 322,50

Address

KOCAKENT MAH KOCAKENT KUMEEVLERI 490/1-270 MAZIDAGI

47700 MARDIN 

Region

Güneydoğu Anadolu > Mardin > Mardin

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](#) 

Total cost

€ 600 322,50



GLOCK TECHNOLOGY GMBH

 Austria

Net EU contribution

€ 95 757,50

Address

GASTON-GLOCK-PARK 1

9170 Ferlach 

Region

Südösterreich > Kärnten > Klagenfurt-Villach

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](#) 

Total cost

€ 95 757,50



SIPOW AS

 Norway

Net EU contribution

€ 84 330,00

Address

TUNRINGEN 33

2016 FROGS 

SME 

Yes

Region

Norge > Oslo og Viken > Viken

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](#) 

Total cost

€ 84 330,00



INSTYTUT SORBTSIYI TA PROBLEM ENDOEKOLOHIYI NATSIONALNOYI AKADEMIYI NAUK UKRAYINY

 Ukraine

Net EU contribution

€ 700 020,00

Address

**VULYTSYA HENERALA NAUMOVA, BUDYNOK 13
03164 KYIV** 

Activity type

Research Organisations

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 700 020,00



OULUN YLIOPISTO

 Finland

Net EU contribution

€ 484 187,50

Address

**PENTTI KAITERAN KATU 1
90014 Oulu** 

Region

Manner-Suomi > Pohjois- ja Itä-Suomi > Pohjois-Pohjanmaa

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 484 187,50



ACONDICIONAMIENTO TARRASENSE ASSOCIACION

 Spain

Net EU contribution

€ 700 503,75

Address

CARRER DE LA INNOVACIO 2

08225 Terrassa 

Region

Este > Catalunya > Barcelona

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 700 503,75



TREIBACHER INDUSTRIE AG

 Austria

Net EU contribution

€ 142 781,25

Address

AUER WELSBACH STRASSE 1

9330 Klagenfurt 

Region

Südösterreich > Kärnten > Unterkärnten

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](#) 

Total cost

€ 142 781,25



UNIVERSITE DE LIEGE

 Belgium

Net EU contribution

€ 550 375,00

Address

PLACE DU 20 AOUT 7

4000 Liege 

Region

Région wallonne > Prov. Liège > Arr. Liège

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 550 375,00



NANOPOW AS

 Norway

Net EU contribution

€ 353 255,00

Address

MARKENSVEGEN 1B
2212 Kongsvinger 

Region

Norge > Innlandet > Innlandet

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](#) 

Total cost

€ 365 755,00



TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU

 Türkiye

Net EU contribution

€ 400 750,00

Address

Ataturk Bulvari 221
06100 Ankara 

Region

Batı Anadolu > Ankara > Ankara

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 400 750,00



SIEC BADAWCZA LUKASIEWICZ - INSTYTUT METALI NIEZELAZNYCH

 Poland

Net EU contribution

€ 349 750,00

Address

SOWINSKIEGO 5

44 100 Gliwice 

Region

Makroregion południowy > Śląskie > Gliwicki

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 349 750,00



ENVIVA IDIOTIKI KEFAIOUCHIKI ETAIREIA/ENVIVA IKE

 Greece

Net EU contribution

€ 100 000,00

Address

KORYTSAS 28

174 55 ALIMOS 

SME 

Yes

Region

Αττική > Αττική > Νότιος 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](#) 

Total cost
€ 100 001,56



F6S NETWORK IRELAND LIMITED

 Ireland

Net EU contribution

€ 263 750,00

Address

**WORK HUB 77 CAMDEN STREET
D02 XE80 LOWER DUBLIN** 

SME 

Yes

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](#) 

Total cost
€ 263 750,00




UKRAINIAN RESEARCH AND DESIGN INSTITUTE OF ELECTROTHERMAL EQUIPMENT

 Ukraine

Net EU contribution

€ 476 250,00

Address

**INDEPENDENT UKRAINE STREET 80/2
69035 ZAPORIZHZHYA** 

Activity type

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

Links

[Contact the organisation](#) 

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

Total cost

€ 476 250,00

Partners (4)



Evolution Energy Minerals Limited

 Australia

Net EU contribution

€ 0,00

Address

1318 Hay Street
6005 West Perth 

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

No data



American Energy Technologies Company

 United States

Net EU contribution

€ 0,00

Address

3825 Lizette lane
60026 GLENVIEW 

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](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

**SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON** 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



UNIVERSITY OF WARWICK

 United Kingdom

Net EU contribution

€ 0,00

Address

**KIRBY CORNER ROAD UNIVERSITY HOUSE
CV4 8UW COVENTRY** 

Region

West Midlands (England) > West Midlands > Coventry

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 8 January 2024

Permalink: <https://cordis.europa.eu/project/id/101137771>

European Union, 2024

DEsigning, Manufacturing and Operating Quantification of Uncertainties to increase Aviation Safety

Fact Sheet

Project Information

DEMOQUAS

Grant agreement ID: 101147454

DOI[10.3030/101147454](https://doi.org/10.3030/101147454) **EC signature date**

18 April 2024

Start date

1 May 2024

End date

30 April 2027

Funded under

Climate, Energy and Mobility

Total cost

€ 2 655 807,50

EU contribution

€ 2 655 807,50

Coordinated byARISTOTELIO PANEPISTIMIO
THESSALONIKIS Greece

Objective

The main goal of DEMOQUAS is to develop an efficient framework of uncertainty quantification (UQ) and provide holistic aircraft/engine design tools (i.e. multi-fidelity, multi-disciplinary, digital threads/twins and Model Based System Engineering {MBSE} or Model Based Definition {MBD} modalities) with the capability to become 'UQ-enabled'. In this way, it will contribute to achieving the highest level of aviation safety, regarding novel propulsion technologies. The project includes representation, characterization and propagation of uncertainties through the life cycle phases of design, manufacturing and operations, applied in six industrially relevant test cases.

In this way, it will contribute to advancing the current state of the art in UQ methods, by effectively improving their efficiency (i.e. regarding ‘curse of dimensionality’ for simulation time and accuracy). The project’s ambition is to provide comprehensive UQ guidelines and enhance decision and policy making of unknown technologies’ development, support virtual certification and ensure a high level of safety and improved risk management.

To achieve its main goal, the project will build on the following main objectives:

- Perform detailed characterization of life cycle uncertainties for components and systems of components developed for a turboprop aircraft, based on a hybridized, liquid-H₂/SAF configuration;
- Employ and further develop UQ methods in a multi-layered manner: [Lifecycle] design, manufacturing/measuring, operations, [Scales/fidelities] sub-systems, systems, systems-of-systems;
- Deliver an ‘as open as possible’ framework that will allow integrated propulsion system design tools/platforms to become ‘UQ-enabled’ and increase safety and risk management;
- Verify and validate the UQ methodologies via testing campaigns (up to TRL5) including operational cases;
- Promote the project's benefits via targeted synergies in European, national and international level.

Fields of science

[engineering and technology](#) > [mechanical engineering](#) > [vehicle engineering](#) > [aerospace engineering](#) > [aircraft](#)

[social sciences](#) > [sociology](#) > [governance](#) > [crisis management](#)

Keywords

[uncertainty propagation across scales](#)

[safety intelligence and risk management](#)

[data fusion](#)

[reliability formulations](#)

[liquid hydrogen storage tank](#)

[compact heat exchangers](#)

[thermal management](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.7 - Clean, Safe and Accessible Transport and Mobility](#)

Topic(s)

[HORIZON-CL5-2023-D6-01-11 - Aviation safety - Uncertainty quantification for safety and risk management](#)

Call for proposal

[HORIZON-CL5-2023-D6-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



ARISTOTELIO PANEPISTIMIO THESSALONIKIS

Net EU contribution

€ 671 500,00

Address

**KEDEA BUILDING, TRITIS SEPTEMVRIOU, ARISTOTLE UNIVERSITY CAMPUS
546 36 THESSALONIKI**

 **Greece** 

Region

Βόρεια Ελλάδα > Κεντρική Μακεδονία > Θεσσαλονίκη

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 671 500,00

Participants (8)



TIRIAKIDIS BASILEIOS ANONIMI BIOMICHANIKI EMPORIKI TECHNIKI ETAIRIA AE

Greece

Net EU contribution

€ 296 250,00

Address

AGROKTIMA FLORINAS AA1834

531 00 FLORINA

Region

Βόρεια Ελλάδα > Δυτική Μακεδονία > Φλώρινα

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](#)

Total cost

€ 296 250,00



EGNATIA AVIATION AEROPORIKI ETAIREIA AEROPORIKES EPICHEIRISEIS ETAIREIA PERIORISMENIS EVTHINIS

Greece

Net EU contribution

€ 159 375,00

Address

AMYGDALONAS AIRPORT

640 12 KAVALA

SME

Yes

Region

Βόρεια Ελλάδα > Ανατολική Μακεδονία > Θάσος

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](#) 

Total cost

€ 159 375,00



TECHNISCHE UNIVERSITEIT DELFT

 Netherlands

Net EU contribution

€ 455 000,00

Address

STEVINWEG 1

2628 CN Delft 

Region

West-Nederland > Zuid-Holland > Delft en Westland

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 455 000,00



SAFRAN SA

 France

Net EU contribution

€ 377 781,25

Address

BLVD DU GAL MARTIAL VALIN 2

75015 Paris 

Region

Ile-de-France > Ile-de-France > Paris

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](#) 

Total cost

€ 377 781,25



ADVANCES & INNOVATION IN SCIENCE & ENGINEERING CO EE

 Greece

Net EU contribution

€ 163 031,25

Address

ODOS GYMNASIARCHOU MADIA 17

82100 Chios 

SME 

Yes

Region

Νησιά Αιγαίου > Βόρειο Αιγαίο > Χίος

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](#) 

Total cost

€ 163 031,25



STAM SRL

 Italy

Net EU contribution

€ 200 000,00

Address

VIA PARETO 8 AR

16129 Genova Ge 

SME 

Yes

Region

Nord-Ovest > Liguria > Genova

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](#) 

Total cost

€ 200 000,00



MODELON AB

 Sweden

Net EU contribution

€ 109 440,00

Address

IDEON SCIENCE PARK

22370 Lund 

SME 

Yes

Region

Södra Sverige > Sydsverige > Skåne län

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](#) 

Total cost

€ 109 440,00



MODELON DEUTSCHLAND GMBH

 Germany

Net EU contribution

€ 223 430,00

Address

AGNES-POCKELS-BOGEN 1

80992 Munchen 

SME 

Yes

Region

Bayern > Oberbayern > München, Kreisfreie Stadt

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](#) 

Total cost

€ 223 430,00

Partners (4)



LIMMAT SCIENTIFIC AG

 Switzerland

Net EU contribution

€ 0,00

Address

INDUSTRIESTRASSE 7

6300 Zug 

Region

Schweiz/Suisse/Svizzera > Zentralschweiz > Zug

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](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

**SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON** 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data



ICOMAT LIMITED

 United Kingdom

Net EU contribution

€ 0,00

Address

**UNIT 29 BROOKGATE
BS3 2UN Bristol** 

SME 

Yes

Region

South West (England) > Gloucestershire, Wiltshire and Bristol/Bath area > Bristol, City of

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](#) 

Total cost

No data



ROLLS-ROYCE PLC

 United Kingdom

Net EU contribution

€ 0,00

Address

KINGS PLACE 90 YORK WAY

N1 9FX London 

Region

London > Inner London — West > Camden and City of London

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](#) 

Total cost

No data

Last update: 22 April 2024

Permalink: <https://cordis.europa.eu/project/id/101147454>



Securely Advancing Future EVs with Li-ION batteries through Optimized Pathways

Fact Sheet

Project Information

SAFELOOP

Grant agreement ID: 101147342

DOI[10.3030/101147342](https://doi.org/10.3030/101147342) **EC signature date**

27 May 2024

Start date

1 June 2024

End date

31 May 2027

Funded under

Climate, Energy and Mobility

Total cost

€ 4 749 117,50

EU contribution

€ 4 749 117,50

Coordinated by

OULUN YLIOPISTO

 Finland

Objective

Envisioned battery demand of 735 GWh for electric mobility by 2025, escalating to a projected 125 million Electric Vehicles (EVs) by 2033, fuels our impetus for innovation. However, these prospects are marred by real safety concerns, evidenced by 2 harrowing ship fires involving luxury EVs, despite adherence to the most stringent safety protocols.

SAFELOOP is a collaborative effort involving 15 entities from 11 countries, representing a blend of research, manufacturing, and business across Europe. Transatlantic partners are joining forces to bolster competitive material-level

technologies and supply chain logistics. Key goals include securing strategic raw material feedstock, reducing reliance on Asian supply chains, intensifying environmental sustainability, optimizing energy-efficient processing, and demonstrating technological leadership.

SAFELOOP's focal point is Gen3 EU EV Li-Ion Battery (LIB) safety, encompassing the entire life cycle of LIBs within EVs. Safety is considered in a broader sense, not just at a cell level, while the latter remains a key pillar of the research at hand. To name a few, material handling, component processing, battery manufacturing, testing, transport, maintenance, and recycling of active materials are considered. A Eurocentric supply chain for EV-grade battery materials will be established, minimizing the environmental and cost impact of long-distance transportation. SAFELOOP ensures that batteries and their components adhere to EU safety and environmental regulations.

Beyond enhancing EU battery safety, the project seeks to develop the world's first EV-rated LIB using up to 25% recycled and fully rejuvenated battery-active materials. This initiative paves the way for an ambitious industry-wide recycling target of 90% within the next decade, akin to today's lead-acid battery industry's 95% recycling rate. These ecologically responsible solutions address key aspects of automotive battery safety within the EU and beyond.

Fields of science

[engineering and technology](#) > [environmental engineering](#) > [waste management](#) > [waste treatment processes](#) > [recycling](#)

[natural sciences](#) > [chemical sciences](#) > [electrochemistry](#) > [electric batteries](#)

[social sciences](#) > [social geography](#) > [transport](#) > [electric vehicles](#)

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

Keywords

[Safety challenges](#)

[Material-level technologies](#)

[Eurocentric](#)

[Recycling](#)

[EVs](#)

Programme(s)

[HORIZON.2.5 - Climate, Energy and Mobility](#)

MAIN PROGRAMME

[HORIZON.2.5.9 - Energy Storage](#)

Topic(s)

Call for proposal

[HORIZON-CL5-2023-D2-02](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



OULUN YLIOPISTO

Net EU contribution

€ 692 250,00

Address

PENTTI KAITERAN KATU 1

90014 Oulu

 Finland 

Region

Manner-Suomi > Pohjois- ja Itä-Suomi > Pohjois-Pohjanmaa

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 692 250,00

Participants (11)



FORSCHUNGSZENTRUM JULICH GMBH

 Germany

Net EU contribution

€ 455 927,50

Address

WILHELM JOHNEN STRASSE

52428 Julich 

Region

Nordrhein-Westfalen > Köln > Düren

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 455 927,50



SIEC BADAWCZA LUKASIEWICZ - INSTYTUT METALI NIEZELAZNYCH

 Poland

Net EU contribution

€ 302 125,00

Address

SOWINSKIEGO 5

44 100 Gliwice 

Region

Makroregion południowy > Śląskie > Gliwicki

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 302 125,00



INSTYTUT SORBTSIYI TA PROBLEM ENDOEKOLOHIYI NATSIONALNOYI AKADEMIYI NAUK UKRAYINY

 Ukraine

Net EU contribution
€ 389 250,00

Address

**VULYTSYA HENERALA NAUMOVA, BUDYNOK 13
03164 KYIV** 

Activity type

Research Organisations

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost
€ 389 250,00



COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES

 France

Net EU contribution
€ 199 958,75

Address

**RUE LEBLANC 25
75015 PARIS 15** 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Research Organisations

Links

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

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

Total cost

€ 199 958,75



TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU

 Türkiye

Net EU contribution

€ 512 387,50

Address

Ataturk Bulvari 221
06100 Ankara 

Region

Batı Anadolu > Ankara > Ankara

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 512 387,50



HHL GEMEINNUTZIGE GMBH

 Germany

Net EU contribution

€ 252 250,00

Address

JAHNALLEE 59
04109 Leipzig 

SME 

Yes

Region

Sachsen > Leipzig > Leipzig

Activity type

Other

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 252 250,00



KOPPERS DENMARK APS

 Denmark

Net EU contribution

€ 410 505,00

Address

AVERNAKKE 1

5800 NYBORG 

Region

Danmark > Syddanmark > Fyn

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](#) 

Total cost

€ 410 505,00



YUNASKO-KYIV LLC

 Ukraine

Net EU contribution

€ 394 700,00

Address

33/37 LABORATORNA STREET

03150 KYIV 

Activity type

Other

Links

[Contact the organisation](#)

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

[HORIZON collaboration network](#)

Total cost

€ 394 700,00



ENVIVA IDIOTIKI KEFAIOUCHIKI ETAIREIA/ENVIVA IKE

Greece

Net EU contribution

€ 213 250,00

Address

KORYTSAS 28

174 55 ALIMOS

SME

Yes

Region

Αττική > Αττική > Νότιος 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](#)

Total cost

€ 213 250,00



ASPILSAN ENERJI SANAYI VE TICARET AS

Türkiye

Net EU contribution

€ 495 338,75

Address

MIMARSINAN OSB MAHALLESİ 1 CADDE 43 MELIKGAZI
38350 KAYSERİ 

Region

Orta Anadolu > Kayseri > Kayseri

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](#) 

Total cost

€ 495 338,75



BOZANKAYA OTOMOTIV MAK İMALAT İTH VE İHR ANONİM SİRKETİ

 Türkiye

Net EU contribution

€ 431 175,00

Address

AHI EVRAN OSB MAHALLESİ ARTUKLULAR SOK 3 SINCAN
06930 Sincan / Ankara 

Region

Batı Anadolu > Ankara > Ankara

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](#) 

Total cost

€ 431 175,00

Partners (3)



American Energy Technologies Company

 United States

Net EU contribution

€ 0,00

Address

3825 Lizette lane
60026 GLENVIEW 

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](#) 

Total cost

No data



FYI Resources Limited

 Australia

Net EU contribution

€ 0,00

Address

Unit 8-9, 88 Forrest Street
6011 Cottesloe 

SME 

Yes

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

No data



IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

 United Kingdom

Net EU contribution

€ 0,00

Address

**SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON** 

Region

London > Inner London — West > Westminster

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 3 June 2024

Permalink: <https://cordis.europa.eu/project/id/101147342>

European Union, 2024