

HORIZON
2020

E-ferry – prototype and full-scale demonstration of next generation 100% electrically powered ferry for passengers and vehicles

Fact Sheet

Project Information

E-ferry

Grant agreement ID: 636027

[Project website](#) 

DOI

[10.3030/636027](https://doi.org/10.3030/636027) 

Project closed

EC signature date

17 April 2015

Start date

1 June 2015

End date

31 May 2020

Funded under

SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Total cost

€ 21 303 820,74

EU contribution

€ 15 141 035,88

Coordinated by

AERO KOMMUNE



Denmark

Objective

E-ferry addresses the urgent need for reducing European CO2 emissions and air pollution from waterborne transportation by demonstrating the feasibility of a 100% electrically powered, emission free, medium sized ferry for passengers and cars, trucks and cargo relevant to island communities, coastal zones and inland

waterways. The vessel will be based on a newly developed, energy efficient design concept and demonstrated in full-scale operation on longer distances than previously seen for electric drive train ferries (> 5 Nm), i.e. the medium range connections Soeby-Fynshav (10.7 Nm) and Soeby-Faaborg (9.6 Nm) in the Danish part of the Baltic Sea, connecting the island of Aeroe (Ærø) to the mainland.

E-ferry builds on the Danish ERDF funded project Green Ferry Vision proving feasibility of the concept to be demonstrated and indicating significant potential impacts compared to conventionally fuelled ferries operating on the same medium range routes; energy savings of up to 50%, annual emission reductions of approx. 2,000 tonnes CO₂, 41,500 kg NO_x, 1,350 kg SO₂ and 2,500 kg particulates.

E-ferry is likely to be the one with the largest battery-pack ever installed in a ferry with a record breaking high charging power capacity of up to 4 MW allowing for short port stays. On top of being 100% powered by electricity, the innovative novelties of the E-ferry design concept and its expected impacts addresses flaws in current state-of-the-art by demonstrating a concept based on optimised hull-shape, lightweight equipment and carbon composite materials, ensuring reduced weight by up to 60% on parts replaced by composite elements. Approval of the use of carbon fibre-reinforced composite modules in E-ferry's superstructure according regulation through material and fire testing also is key to the project.

The strong industrial, maritime and public partners also will assure dissemination of results and push for a widespread market up-take of the E-ferry concept.

Fields of science (EuroSciVoc)

[engineering and technology](#) > [materials engineering](#) > **[composites](#)**

[natural sciences](#) > [chemical sciences](#) > [inorganic chemistry](#) > **[post-transition metals](#)**

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

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



Keywords

[Electric ferry](#)

[island communities](#)

[coastal zones](#)

[inland waterways](#)

[emission free](#)

[air pollution reduction](#)

[optimised hull-shape](#)

[Computational Fluid Dynamics](#)

[carbon composite materials](#)

Programme(s)

[H2020-EU.3.4. - SOCIETAL CHALLENGES - Smart, Green And Integrated Transport](#)

MAIN PROGRAMME

Topic(s)

[MG-4.1-2014 - Towards the energy efficient and emission free vessel](#)

Call for proposal

[H2020-MG-2014-2015](#)

[See other projects for this call](#)

Sub call

H2020-MG-2014_TwoStages

Funding Scheme

[IA - Innovation action](#)

Coordinator



AERO KOMMUNE

Net EU contribution

€ 2 938 875,86

Total cost

€ 2 964 076,06

Address

STATENE 2

5970 Aeroskobing

 **Denmark** 

Region

Danmark > Syddanmark > Fyn

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

Participants (10)



SOFARTSSTYRELSEN

Denmark

Net EU contribution

€ 102 250,00

Address

FJORDVAENGET 30
4220 Korsor



SME



Yes

Region

Danmark > Sjælland > Vest- og Sydsjælland

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

€ 102 250,00



ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS

Greece

Net EU contribution

€ 470 781,25

Address

CHARILAOU THERMI ROAD 6 KM
57001 Thermi Thessaloniki 

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

€ 470 781,25



DANSK BRAND- OG SIKRINGSTEKNISK INSTITUT FORENING

 Denmark

Net EU contribution

€ 177 500,00

Address

JERNHOLMEN 12
2650 Hvidovre 

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

€ 177 500,00



RADGIVENDE SKIBSINGENIORER JENS KRISTENSEN APS

 Denmark

Net EU contribution

€ 441 308,27

Address

JAGTVEJ 8

5960 Marstal 

SME 

Yes

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

€ 630 440,39



SOBY VAERFT AS

 Denmark

Net EU contribution

€ 6 013 769,09

Address

DOKVEJ 5

5985 Soby 

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

€ 8 591 098,70



TUCO YACHT VAERFT APS

 Denmark

Net EU contribution

€ 360 587,50

Address

KROGSBJERGVEJ 2

5600 Faaborg 

SME 

Yes

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

€ 515 125,00



DANFOSS EDITRON OY

 Finland

Net EU contribution

€ 2 975 175,00

Address

LENTOKENTAENTIE 44

53600 Lappeenranta 

SME 

Yes

Region

Manner-Suomi > Etelä-Suomi > Etelä-Karjala

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

€ 4 322 750,00

 THIRD-PARTY

EPC - ELECTRIC POWER CONVERSION BV

 Netherlands

Net EU contribution

€ 50 750,00

Address

ICARUS 14
8448 CJ Heerenveen 

Region

Noord-Nederland > Friesland (NL) > Zuidoost-Friesland

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

€ 72 500,00



LECLANCHE GMBH

 Germany

Net EU contribution

€ 1 610 038,91

Address

INDUSTRIESTRASSE 1
77731 Willstatt 

SME 

Yes

Region

Baden-Württemberg > Freiburg > Ortenaukreis

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

€ 2 300 055,59



LECLANCHE SA

 Switzerland

Net EU contribution

€ 0,00

Address

AVENUE DES SPORTS 42

1400 Yverdon-Les-Bains 

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

€ 1 229 743,75

Last update: 27 July 2023

Permalink: <https://cordis.europa.eu/project/id/636027>

