



Explaining and Predicting the Ocean Conveyor

Fact Sheet

Project Information

EPOC

Grant agreement ID: 101059547

DOI

[10.3030/101059547](https://doi.org/10.3030/101059547)

EC signature date

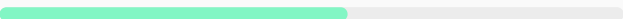
8 June 2022

Start date

1 July 2022

End date

30 June 2027



Funded under

Food, Bioeconomy Natural Resources, Agriculture and Environment

Total cost

€ 4 805 246,75

EU contribution

€ 4 805 246,75

Investment in EU policy priorities

Digital agenda	☐	Clean air	☐
Artificial Intelligence	☐	Climate action	☒
Biodiversity	☐		

Coordinated by

UNIVERSITY OF HAMBURG



Germany

Project description

Updating ocean models to predict rapid climate change

Ocean currents play key roles in regulating the distribution of heat on the Earth, yet there is still much to be learned about how they interact with the planet as a whole. The EU-funded EPOC project seeks to create a new framework for how the Atlantic

meridional overturning circulation (AMOC) impacts the weather and climate. Besides transferring heat, the AMOC is associated with the ventilation of anthropogenic carbon. While existing models rely on very long timescales of thousands of years, EPOC will develop a model that can be used on human timescales of days and years. Doing so can help better explain the AMOC's role in rapid climate change.

Keywords

[AMOC](#)

[Conveyor belt](#)

[high resolution models](#)

[proxy records](#)

[ocean physics](#)

[coupled model intercomparison](#)

Programme(s)

[HORIZON.2.6 - Food, Bioeconomy Natural Resources, Agriculture and Environment](#)

MAIN PROGRAMME

[HORIZON.2.6.4 - Seas, Oceans and Inland Waters](#)

Topic(s)

[HORIZON-CL6-2021-CLIMATE-01-03 - Key oceanic and polar processes driving regional & global climate change](#)

Call for proposal

[HORIZON-CL6-2021-CLIMATE-01](#)

[See other projects for this call](#)

Funding Scheme

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

Coordinator



UNIVERSITY OF HAMBURG

Net EU contribution

€ 742 710,00

Total cost

€ 742 710,00

Address

MITTELWEG 177

20148 Hamburg

 Germany 

Region

Hamburg > Hamburg > Hamburg

Activity type

Higher or Secondary Education Establishments

Links

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

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

[HORIZON collaboration network](#) 

Participants (8)



INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER

 France

Net EU contribution

€ 834 617,50

Address

1625 ROUTE DE SAINTE ANNE ZONE INDUSTRIELLE DE LA POINTE DU DIABLE

29280 Plouzane 

Region

Bretagne > Bretagne > Finistère

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 834 617,50



UNIVERSITAET BREMEN

 Germany

Net EU contribution

€ 1 176 250,00

Address

Bibliothekstrasse 1
28359 Bremen 

Region

Bremen > Bremen > Bremen, 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

€ 1 176 250,00



MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV

 Germany

Net EU contribution

€ 598 106,25

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

€ 598 106,25



NORSK POLARINSTITUTT

 Norway

Net EU contribution

€ 487 125,00

Address

HJALMAR JOHANNESSENS 14

9296 Tromsø 

Activity type

Research Organisations

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 487 125,00



ALFRED-WEGENER-INSTITUT HELMHOLTZ-ZENTRUM FÜR POLAR- UND MEERESFORSCHUNG

 Germany

Net EU contribution

€ 108 750,00

Address

AM HANDELSHAFEN 12

27570 Bremerhaven 

Region

Bremen > Bremen > Bremerhaven, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 108 750,00



HAVFORSKNINGSINSTITUTTET

 Norway

Net EU contribution

€ 267 500,00

Address

NORDNESGATEN 50

5817 Bergen 

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 267 500,00



CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS

 France

Net EU contribution

€ 408 938,00

Address

RUE MICHEL ANGE 3

75794 Paris 

Region

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

Activity type

Research Organisations

Links

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

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

[HORIZON collaboration network](#) 

Total cost
€ 590 188,00

 THIRD-PARTY 

CENTRE EUROPEEN DE RECHERCHE ET DEFORMATION AVANCEE EN
CALCUL SCIENTIFIQUE

 France

Net EU contribution
€ 181 250,00

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
No data

Partners (13)



PARTNER 

FISHERIES AND OCEANS CANADA

 Canada

Net EU contribution
€ 0,00

Address
East White Hills Road 80
A1C5X8 Dartmouth 

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

No data



PARTNER

WOODS HOLE OCEANOGRAPHIC INSTITUTION

United States

Net EU contribution

€ 0,00

Address

WOODS HOLE ROAD 573
02543 Woods Hole

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



PARTNER

UNIVERSITY OF WASHINGTON

United States

Net EU contribution

€ 0,00

Address

BROOKLYN AVENUE NE 4333
98195 9472 Seattle Wa

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



PARTNER

UNIVERSITY OF MIAMI

United States

Net EU contribution

€ 0,00

Address

1320 SOUTH DIXIE HIGHWAY, SUITE 1200
33146 Coral Gables Miami

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



PARTNER

MET OFFICE

United Kingdom

Net EU contribution

€ 0,00

Address

FITZROY ROAD
EX1 3PB Exeter

Region

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

No data



PARTNER

Geophysical Fluid Dynamics Laboratory

United States

Net EU contribution

€ 0,00

Address

201 Forrestal Road
08540 Princeton

Activity type

Research Organisations

Links

- Contact the organisation
- Participation in EU R&I programmes
- HORIZON collaboration network

Total cost

No data



PARTNER

THE UNIVERSITY OF TEXAS SYSTEM

United States

Net EU contribution

€ 0,00

Address

COLORADO STREET 601
78701 2982 Austin 

Activity type
Higher or Secondary Education Establishments

Links
[Contact the organisation](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost
No data



PARTNER 
THE UNIVERSITY OF RHODE ISLAND

 United States
Net EU contribution

€ 0,00

Address
LOWER COLLEGE ROAD 70
02881 Kingston 

Activity type
Higher or Secondary Education Establishments

Links
[Contact the organisation](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost
No data



PARTNER 
NATIONAL OCEANOGRAPHY CENTRE

 United Kingdom
Net EU contribution

€ 0,00

Address

EUROPEAN WAY
SO14 3ZH Southampton 

Region
South East (England) > Hampshire and Isle of Wight > Southampton

Activity type
Research Organisations

Links
[Contact the organisation](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost
No data



PARTNER 
THE UNIVERSITY OF READING

 United Kingdom
Net EU contribution
€ 0,00

Address
WHITEKNIGHTS CAMPUS WHITEKNIGHTS HOUSE
RG6 6AH Reading 

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

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



PARTNER 
UNIVERSITY COLLEGE LONDON

 United Kingdom

Net EU contribution

€ 0,00

Address

GOWER STREET

WC1E 6BT London 

Region

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

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



PARTNER 

SEASCAPE CONSULTANTS LTD

 United Kingdom

Net EU contribution

€ 0,00

Address

THE OLD STABLE CHURCH LANE

SO51 0HN Romsey Awbridge 

SME 

Yes

Region

South East (England) > Hampshire and Isle of Wight > Central Hampshire

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



PARTNER



UNIVERSITAT DE LES ILLES BALEARS

 Spain

Net EU contribution

€ 0,00

Address

CARRETERA DE VALLDEMOSSA KM 7.5

07122 Palma De Mallorca 

Region

Este > Illes Balears > Mallorca

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/101059547>

European Union, 2025