

# Horizon Europe 2021 Call factsheet



## Key oceanic and polar processes driving regional & global climate change

The Atlantic Meridional Overturning Circulation (AMOC) is a key component of the Earth climate. It can significantly imprint the vertical structure of global ocean heat uptake and drives a large part of the deep-ocean oxygenation and deep storage of anthropogenic carbon. The AMOC is expected to slow down with climate change with strong impact on the oceanic heat storage, carbon pump, and ventilation. Such change in the AMOC is also expected to impact the polar regions that are already experiencing warming at a faster rate than other places. There is deep uncertainty regarding the contribution the melting of the Antarctic ice sheet will make to mean global sea level rise towards the end of this century. The potential consequences vary greatly from region to region making the information needed at local and regional level highly relevant for supporting local and regional adaptation decisions.

### Scope:

Developing innovative approaches to address only one of the following options:

- Regional & global components of the Atlantic meridional overturning circulation
- Improving understanding and observation of Antarctic key processes and the Southern Ocean circulation

### Topics:

- Increased predictability and reduced uncertainty associated with key oceanic and polar processes
- Contribution to the next generation observation and modelling of key ocean-climate processes and indicators
- Contribution to the implementation of the EU Arctic Policy, the All Atlantic Research Alliance, the European Commission-European Space Agency Flagship Action on polar Changes & Global Impacts, European climate policies and a substantial contribution to key international assessments



Horizon Europe

**The indicative budget for this category is EUR 15.00 (Million).**

### Reference:

**HORIZON-CL6-2021-CLIMATE-01-03**

Research and Innovation

Opening: 24 Jun 2021

Deadline: 29 Sep 2021

Call overview, Produced 14/06/2021. Visit our website [www.opencalls.space](http://www.opencalls.space)

### Countries



all

### Technology



earth observation, positioning, navigation related timing data and services with Copernicus Galileo/EGNOS (+other data and services)

### Activities



Research on oceanic processes, implement EU climate policies

### Contact



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