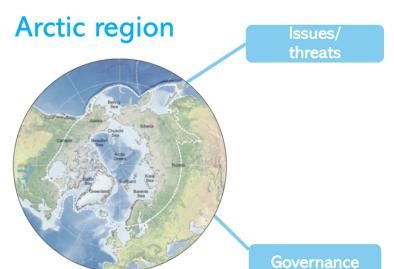
OMOTING SUSTAINABLE MARINE PLANNING IN THE ARCTIC AND ANTARCTIC David Santos1*, Rui Rosa1, Renuka Badhe2, Charles N. Ehler3, Susie M. Grant7, Kevin A. Hughes7, Anton P.

van de Putte4, José C. Xavier5,6, Catarina Frazão Santos1,8 Faculty of Sciences, University of Lisbon, Cascais, Portugal; 2European Polar Board, Den Haag, The Netherlands; 3Ocean Visions Consulting, ciences, Brussels, Belgium; 5 University of Coimbra, Marine and Environmental Sciences Centre (MARE), Department of Life Sciences, 5000-atural Environment Research Council, Cambridge, United Kingdom; 7British Antarctic Survey, Natural Environment Research Council, High 8Environmental Economics Knowledge Center, Nova School of Business and Economics, New University of Lisbon, Carcavelos, Portugal

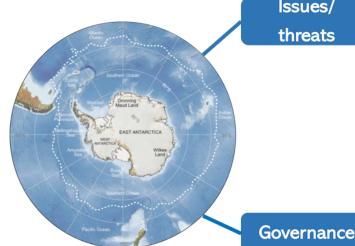
POLAR REGIONS



Climate Change;

- Increasing technology;
- Warming climates;
- Pollution;
- Habitat destruction;
- Wildlife disturbance and non-native species
- New routes of shipping access in the Arctic;
- Economic, political, cultural, and societal changes...
- **Arctic Coucil:**
 - Eight Arctic States;
 - Six Indigenous People Organisations;
 - Numerous state and non-state Observers.





MAJOR PROBLEMS IN POLAR REGIONS:

Tourism;

Issues/ threats

- Climate Change; Increasing technology;
- Warming climates;

- Loss of ice-dependent species;
- Wildlife disturbance and non-native species introductions, Loss of natural services provided by marine ecosystems;
- Overfishing...
- The Antarctic Treaty System (ATS) govern Antarctica and the Southern Ocean to the south of 60°S.
- The ATS comprises:
 - 1959 Antarctic Treaty;
 - 1972 Convention on the Conservation of Antarctic Seals;
 - 1980 Convention on the Conservation of Antarctic Marine Living Resources (CAMLR Convention);

Overfishing

Climate Change; Loss of natural services;

Loss of ice-dependent

species;

New Maritime Transportation

Routes in the Artic Region

1991 Environmental Protocol (Madrid Protocol).

METODOLOGY

(1) using an online survey



Survey: Ocean Planning in the Poles

ations. Data will be used for scientific purposes and published only in aggregated form anonymised. The survey will be online until the end of July 2021.

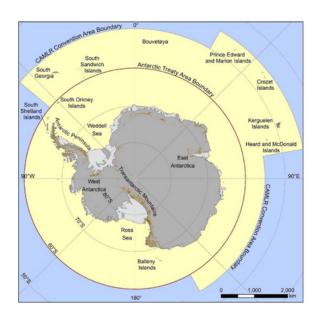
+1000 RESPONSES

(2) developing a small number of dedicated, formal semi-structured interviews





RECOMMENDATIONS FOR THE ANTARCTIC REGION:



- At the Antarctic Treaty Consultative Meetings more goals and objectives for the treaty member states were established.
- Creation of an Adaptive Tourism Management program with establishment o f permanent Tourism Advisory Group;
- Creation of an effort map categorizes anthropogenic activities in the region;



- Organize Arctic Ocean Governance Conference. involving all stakeholders in the region.
- Creation of an effort map that categorizes all anthropogenic activities in the region;

