

Marine Protected Areas

A Tool to Safeguard the Ocean's Resilience to Climate Change

■ Marine Protected Areas (MPAs) are:

Clearly defined geographic areas in the ocean that are dedicated to and managed for the long-term conservation of nature, together with the ecosystem services and cultural values they provide.

■ Facts: (Source: the IPCC Fifth Assessment report)

Ocean temperature rise: More than 90% of heat generated by CO₂ emission from 1971–2010 is stored in the ocean and the temperature has been rising accordingly.

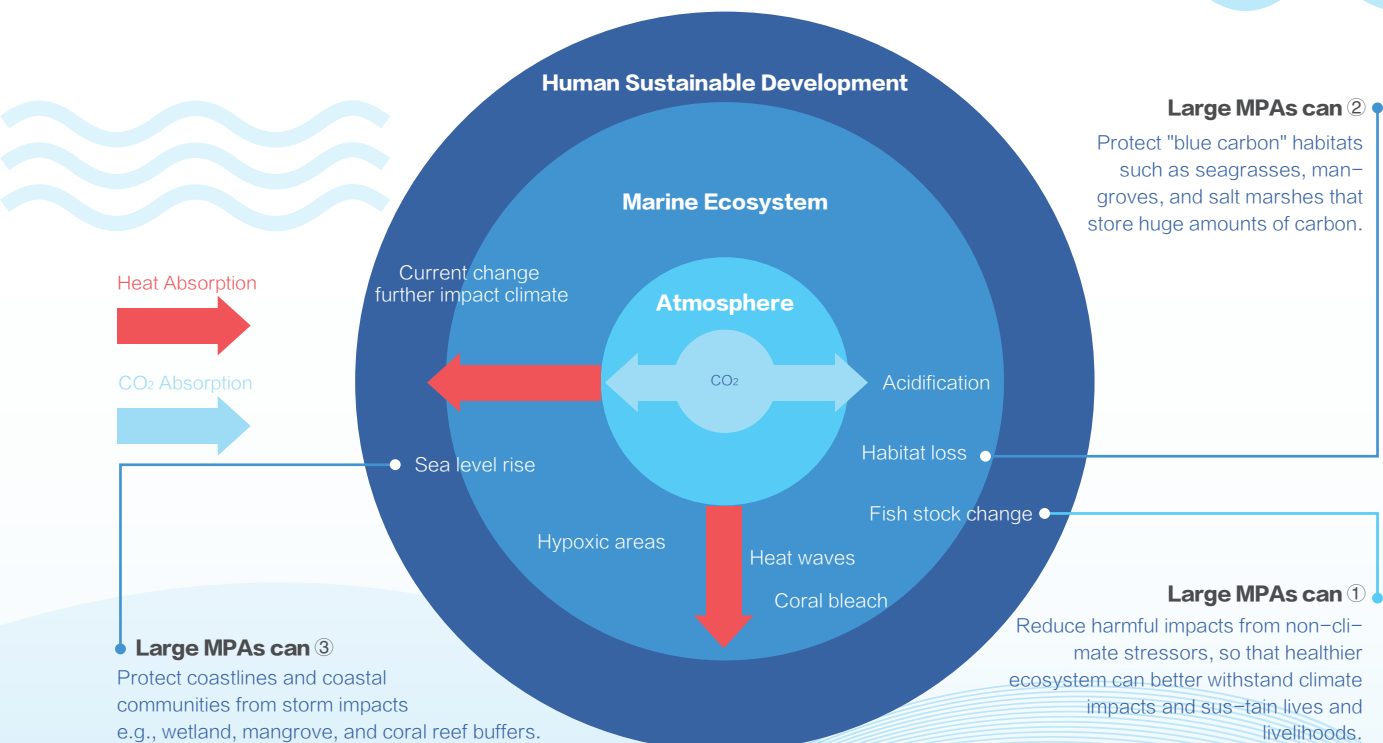
Cryosphere shrinking: Greenland and Antarctic ice sheets have been losing ice over the past 20 years, while Arctic sea ice and spring snow cover in the Northern Hemisphere continue to shrink.

Sea-level rise: During the 1901–2010 years, the global mean sea level rose by 0.19[0.17 to 0.21] m.

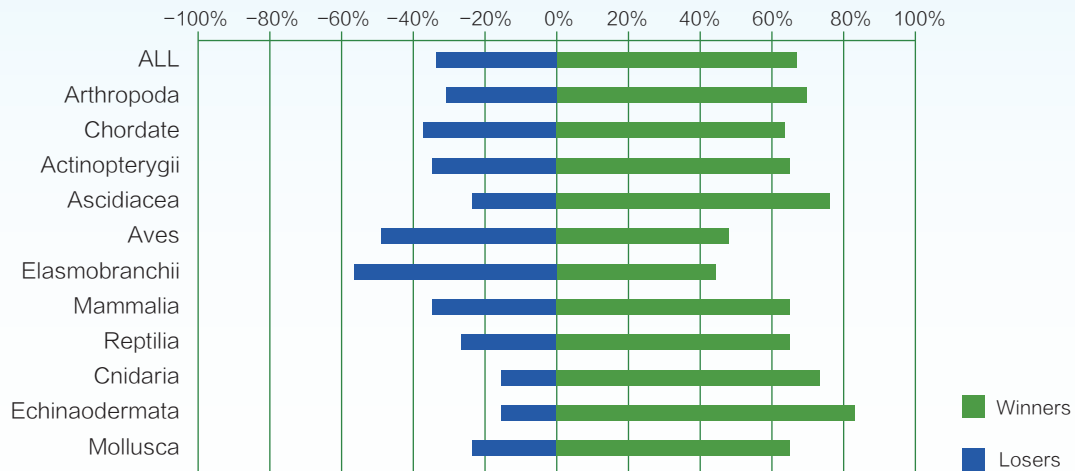
Ocean acidification: The ocean has absorbed about 30% of its carbon dioxide emissions, leading to ocean acidification.

Ocean oxygen: Medium reliability indicates that the oxygen content in the high sea thermocline has decreased in many areas since the 1960s.

■ Role of large MPAs in addressing climate change:

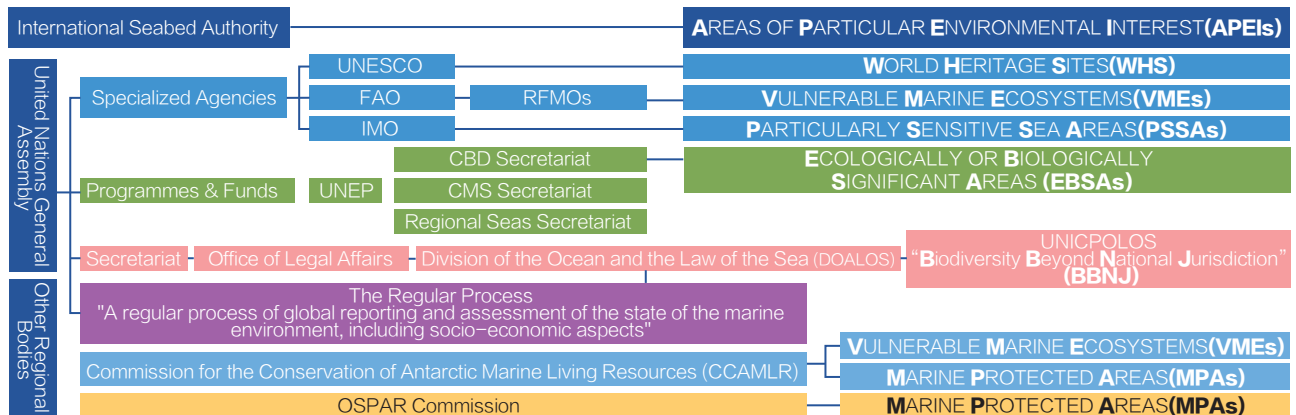


■ Large MPAs can safeguard the ocean's resilience



Percentage of species projected to gain (winners = green), or lose (losers = blue) representation of their range in large MPAs, under a climate change scenario by 2100. Data are shown for all species found within designated large MPAs (ALL), for the five largest phyla, with Chordata split by its six largest classes. (Tammy E Davies, et al. 2017)

■ Existing International MPAs processes



■ Recommendation

To fulfill the objectives of the Paris Agreement, the parties of the United Nations Framework Convention on Climate Change (UNFCCC) are in need to work together in all international fora, to build a large representative MPAs network in global oceans.

About Greenovation Hub

Greenovation Hub (GHUB) is a Chinese environmental Think-Do organization with a global outlook. We promote the development and implementation of sound climate and environmental friendly policies through conducting in-depth analysis and research, as well as fostering dialogue among stakeholders, in order to drive China's green transition towards a sustainable, equitable and climate resilient future, while contributing to the reduction of global ecological footprint.

GHUB's Ocean Program

GHUB is a partner of the Antarctic and Southern Ocean Coalition, an international NGO coalition committed to conserve Antarctica. Since 2012, GHUB has been working on the campaign to establish a representative network of marine protected areas in the Southern Ocean. For six years, we have been tracking the process of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) MPAs process and facilitating relevant multidisciplinary debate in China. Since 2016, GHUB has also been following the Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ) process and contributing to the domestic and international debates.

