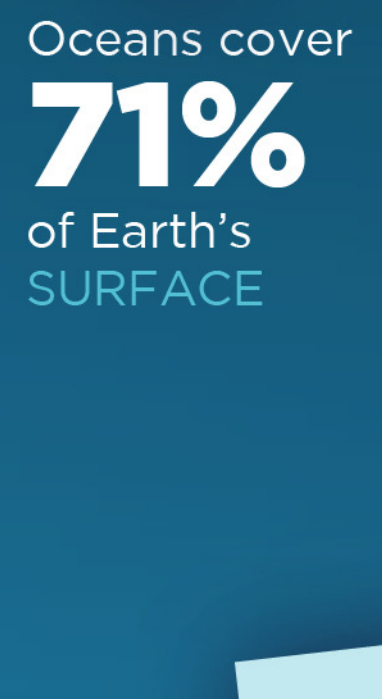
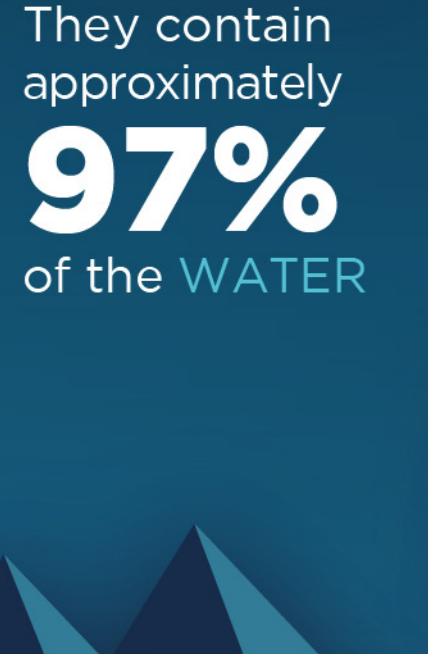


HEALTHY OCEANS, HEALTHY PLANET

WHAT ARE THE OCEANS LIKE?

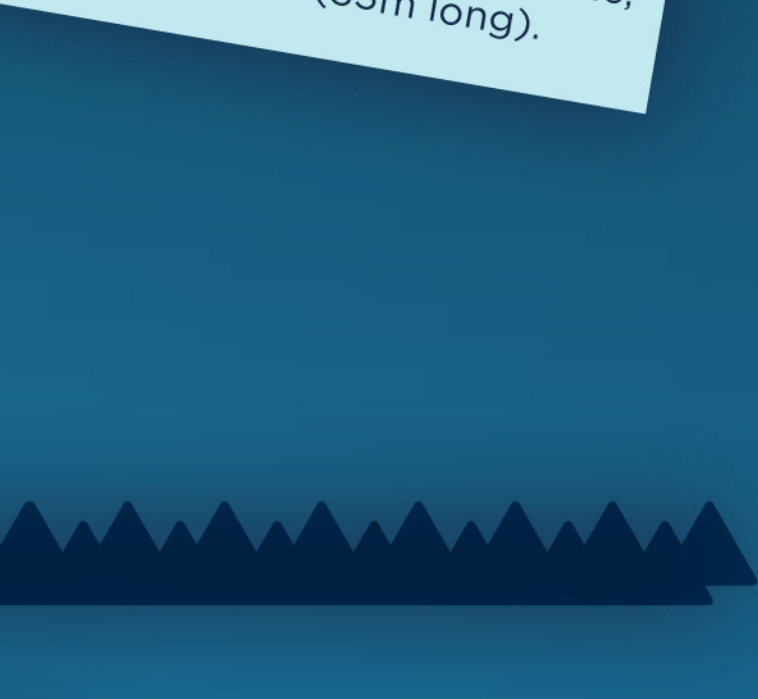


Oceans cover **71%** of Earth's SURFACE



They contain approximately **97%** of the WATER

It is estimated that they are home to **90%** of the WORLD'S BIODIVERSITY



From the smallest vertebrate organism, the 7.9mm **Paedocypris**, to the largest one, the **Blue Whale** (33m long).

The **Mid-Atlantic Ridge** (65,000 km) is the longest mountain range in the world



Most of the world's population lives in coastal areas

Oceans



WHY ARE THE OCEANS IMPORTANT?

Because they make life on Earth possible

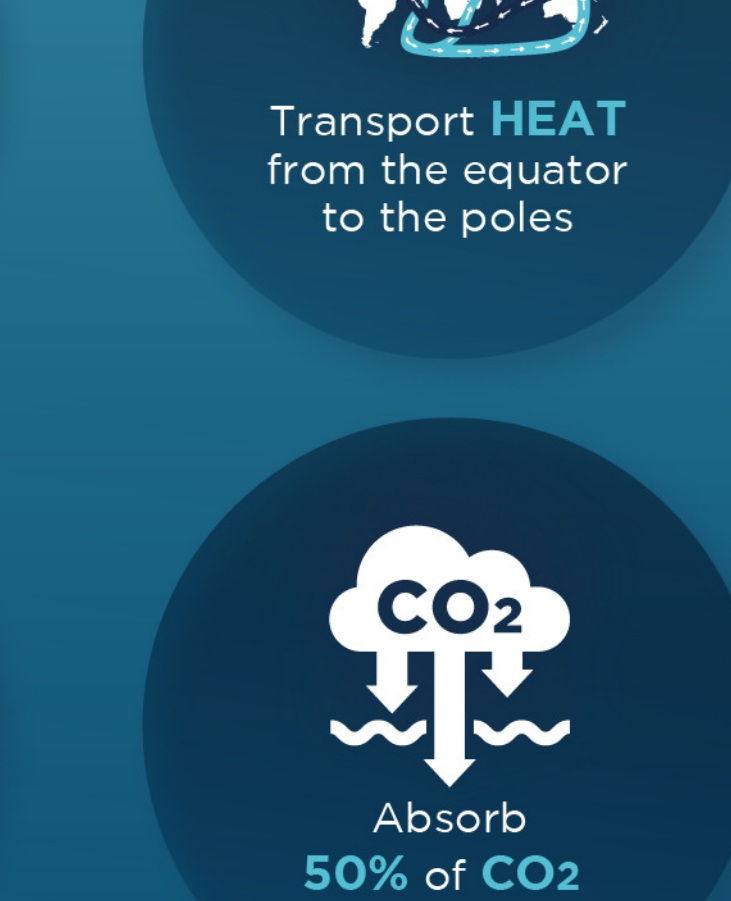
THEY PROVIDE

Oxygen
+ 50% of the oxygen we breathe



Fish is the main source of protein for 1 billion people

Fresh water



Food



Regulate **THE CLIMATE**

Transport **HEAT** from the equator to the poles

Absorb most of the **SUN'S RADIATION**

Interaction with the atmosphere determines **METEOROLOGY** from the local to the global scale

Absorb **50%** of CO₂

Provide **ENERGY, MINERAL** and **PHARMACOLOGICAL RESOURCES**

EMPLOY 35 million people

They are the highway for the **TRANSPORT** of 80% of world trade

They are an ideal place for **LEISURE** (beach, diving, fishing, surfing, sailing)

WHAT THREATENS THE OCEANS?



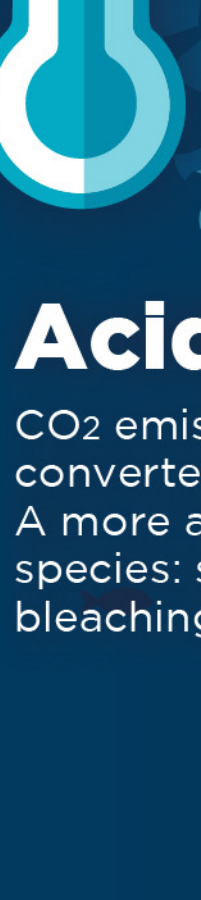
Unsustainable tourism

Overfishing

- It depletes species stocks and exceeds their capacity for recovery
- Destroys ecosystems
- By-catch

Transport

- Invasive species attached to hulls
- Noise pollution that threatens many species



Global warming

Pollution
Solids, plastics, chemicals being discharged into the sea

Acidification

CO₂ emissions absorbed by the ocean are converted into carbonic acid > Lower pH > A more acidic ocean > Threatens many species: shells, oysters, sea urchins, coral bleaching...

Threatened habitats

POSIDONIA MEADOWS

MANGROVES

CORAL REEFS

Increase the **protection** of the OCEANS
1.5% of marine protected areas

Protect **biodiversity**

WHAT CAN WE DO?

Promote **sustainable management** of the OCEANS

Enhance **ocean literacy**

Research
Less than 5% of the oceans have been explored

WHY IS IT IMPORTANT TO RESEARCH THE OCEANS?

To meet the challenges of

Climate change

The shortage of food and resources

Pollution

Oceanography

Studies the biological, physical, geological and chemical processes of the oceans.

The **ICTS SOCIB** researches the Mediterranean Sea, a small-scale oceanic model, through its multi-platform system composed of

- Gliders
- Profilers
- Coastal radars
- Surface drifters
- Oceanographic buoys
- Oceanographic vessels
- Coastal video-monitoring
- Coastal, meteorological and sea level stations
- Satellites

