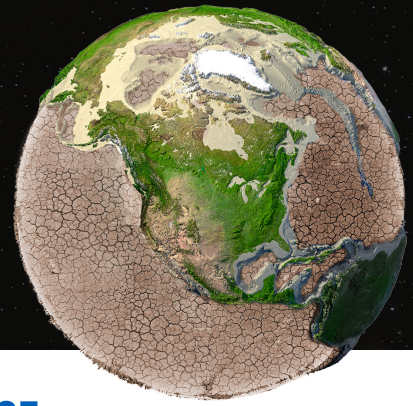


THE OCEAN IS MISSING....

AND WHAT WE DON'T KNOW CAN HURT US



THE OCEAN IS THE MOST IMPORTANT GLOBAL STORAGE DEPOT OF CARBON ON EARTH. IT HOLDS 50 TIMES MORE CARBON THAN THE ATMOSPHERE SOAKING UP MORE EMISSIONS THAN ALL THE WORLD'S RAINFORESTS COMBINED.

The North Atlantic Ocean is the most intense carbon sink on the planet, accounting for approximately 30% of the global ocean CO₂ uptake. This vital carbon sink is particularly sensitive due to its location downstream of the Arctic Ocean and the Greenland Ice Cap, both of which are experiencing extreme warming resulting from climate change. For the first time ever, rain was recorded in Greenland above the Ice Cap, continuing the intensity of fresh water being released into the ocean.

There is compelling evidence that the biogeochemical carbon pump sustaining the North Atlantic carbon sink is changing. There is equal concern that climate estimates do not include ocean changes and therefore have incomplete data. And yet, inexplicably, the North Atlantic's vital carbon-absorbing function remains critically under-observed.

The ocean is missing and this gap represents potentially the most significant miscalculation of climate policy by the numbers. Incomplete and insufficient data harms the credibility of climate targets, including global net-zero aspirations.

This is a critical gap. Nations have the opportunity to ensure that international policy makers and institutional financial investors have confidence in the climate equation.

Climate calculations urgently need a focused carbon observation effort in the North Atlantic. Such an exemplar would allow decision makers to benefit from near real time assessment of how the ocean is changing the global carbon budget.

Data produced will also create the scientific baseline to measure the effectiveness of innovative technologies including Carbon Dioxide Removal (CDR).

For governments and financial institutions, it is essential that investments are focused in the best place to ensure climate targets are met.

In an open letter to the UNFCCC, Peter Thomson, UN Secretary General's Special Envoy for the Ocean, set out the ocean challenges: "The hope of all ... is that the ocean's critical role in climate change mitigation and adaptation will be integral to CoP26 considerations."

US Special Envoy John Kerry specifically referenced the North Atlantic in the context of the climate-ocean nexus and his desire for an ocean 'outcome' at CoP26.

Starting in the North Atlantic, as a global exemplar, a focused ocean carbon observation effort will ensure climate target accuracy and spur innovation.

“THE OCEAN IS MISSING. INCOMPLETE DATA HARMS THE CREDIBILITY OF GLOBAL CLIMATE TARGETS.”

Dr. Anya Waite
CEO, Ocean Frontier
Institute