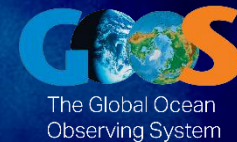


Linking ocean carbon observation to effective climate targets

Anya M. Waite & Toste Tanhua
CoP26, Glasgow, Scotland

1 November 2021



Control

100x

Heat of atmosphere

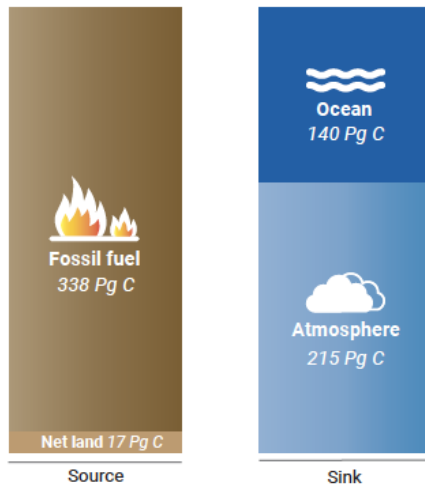
50x

Carbon of atmosphere

Linking ocean carbon observation to effective climate targets

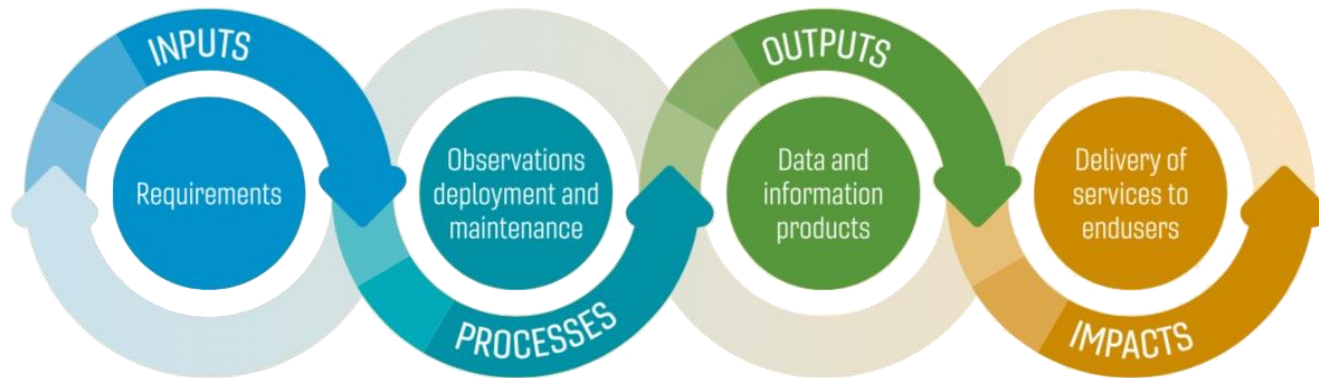
Land-based emissions targets fail to recognize the ocean's carbon absorption:

40% fossil fuel emissions ..



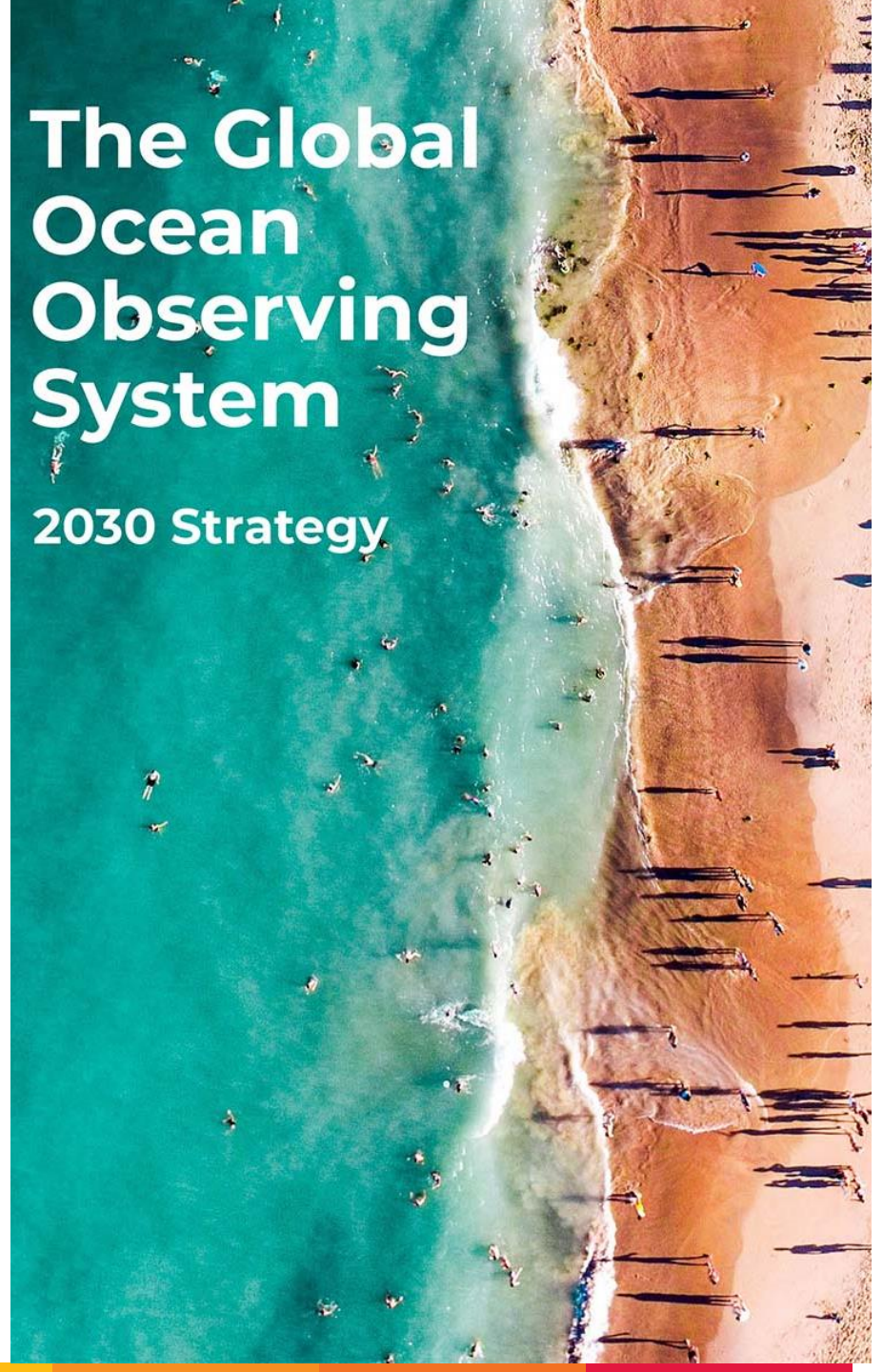
.. But will it continue?

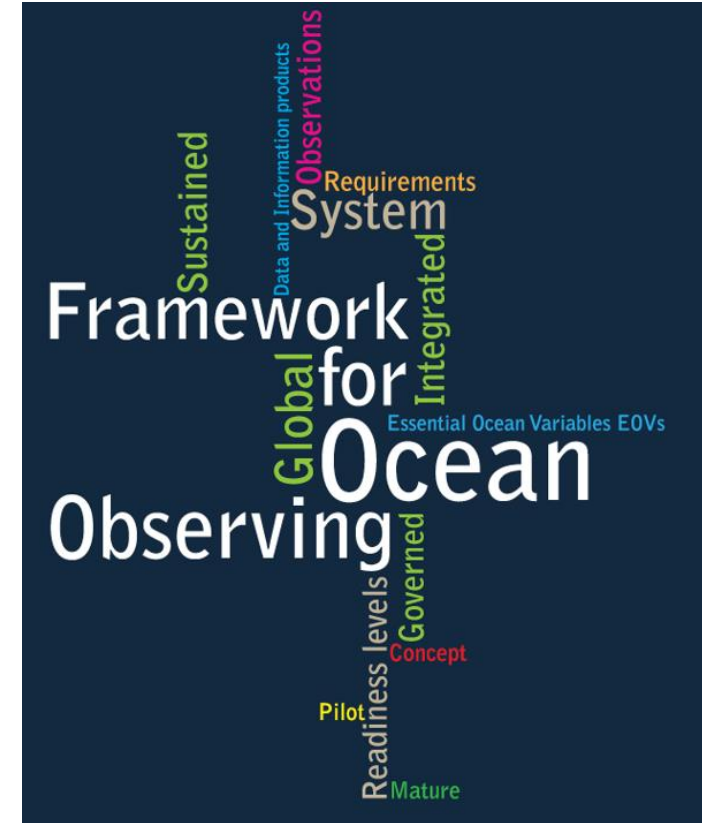
The Global Ocean Observing System (GOOS) coordinates a long-term, sustained ocean observing system



The Global Ocean Observing System

2030 Strategy



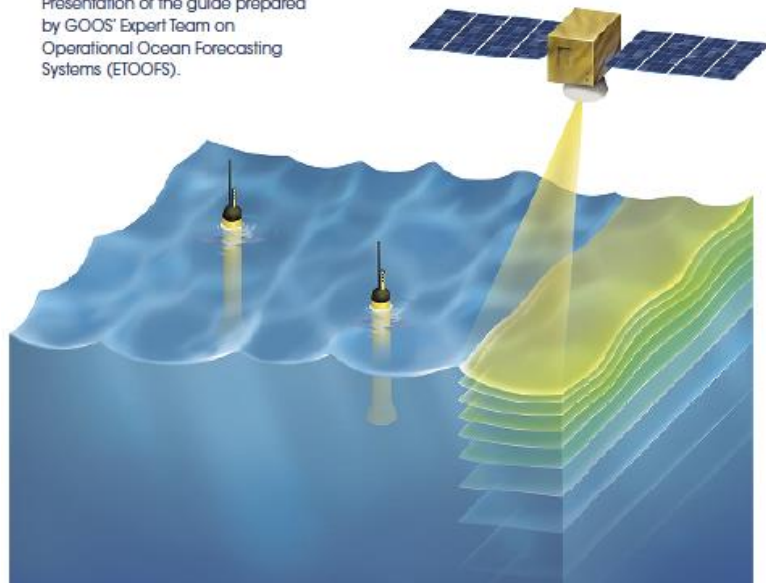


The global community is mature and ready to act

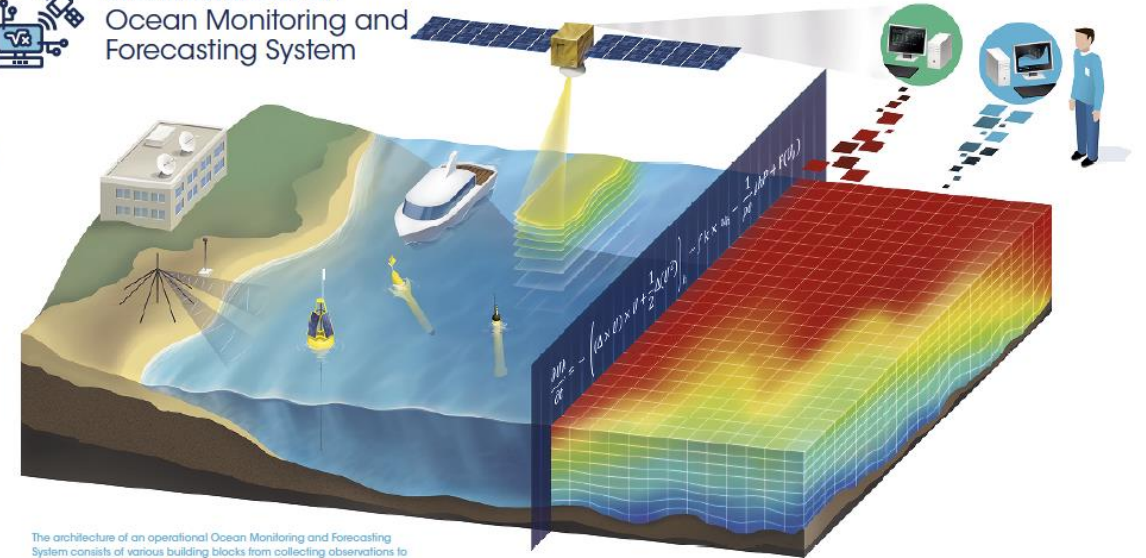
Linking ocean carbon observation to effective climate targets

Implementing Operational Ocean Monitoring and Forecasting Systems

Presentation of the guide prepared by GOOS' Expert Team on Operational Ocean Forecasting Systems (ETOFS).



Architecture of an Ocean Monitoring and Forecasting System



The architecture of an operational Ocean Monitoring and Forecasting System consists of various building blocks from collecting observations to modeling and forecasting the ocean state.

Pre-processing phase Initialisation Forward integration and post-processing

Community is well prepared to design sustained carbon observations

**Policy Makers
Philanthropists
Governments
Foundations**



THE OCEAN IS MISSING!

**G7 Nature Compact
CoP26 Glasgow**

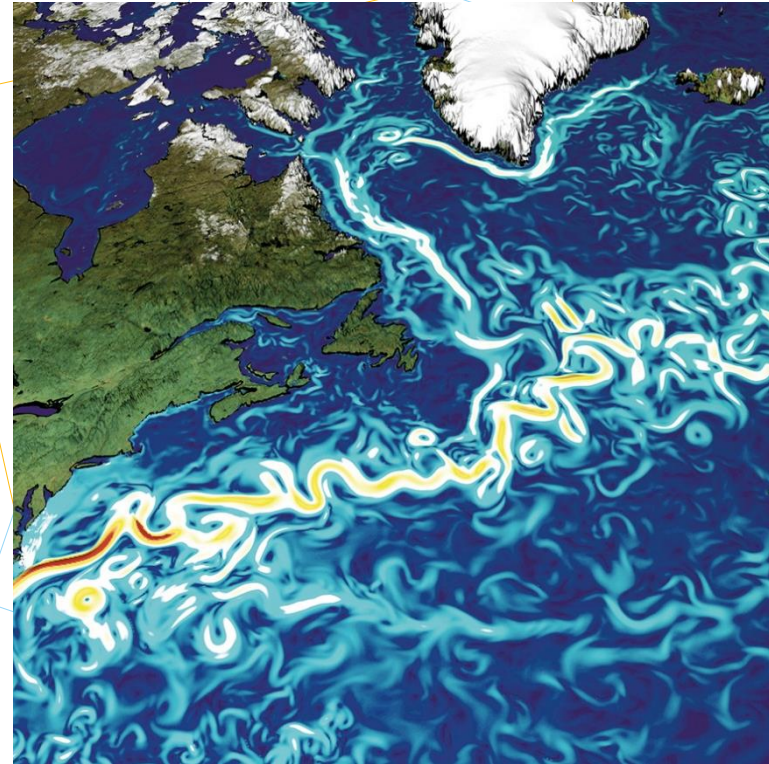
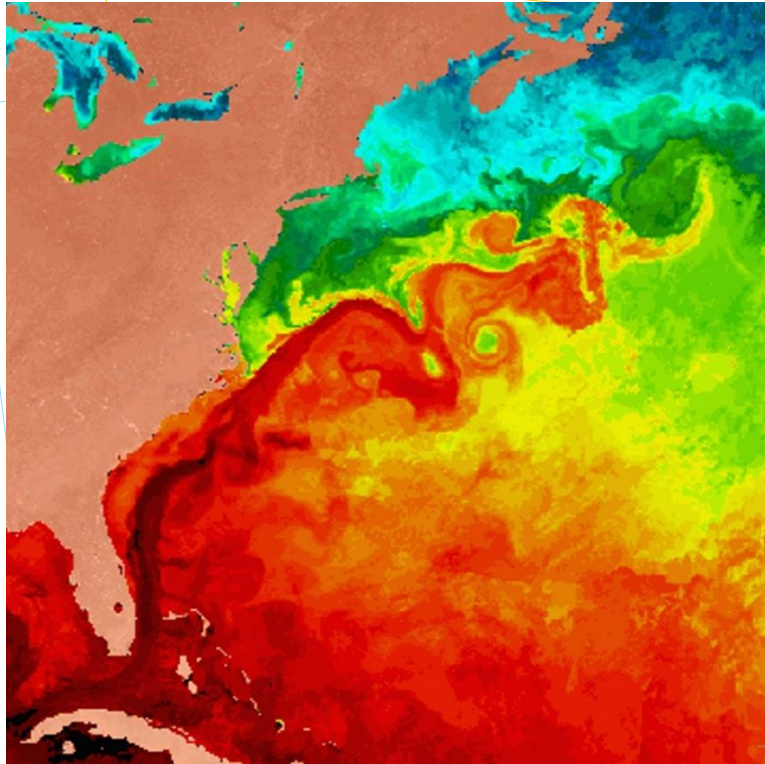
Add the ocean to solve for net zero!



THE OCEAN IS MISSING!

.. with North Atlantic as a global exemplar

North Atlantic Carbon Observatory (NACO)

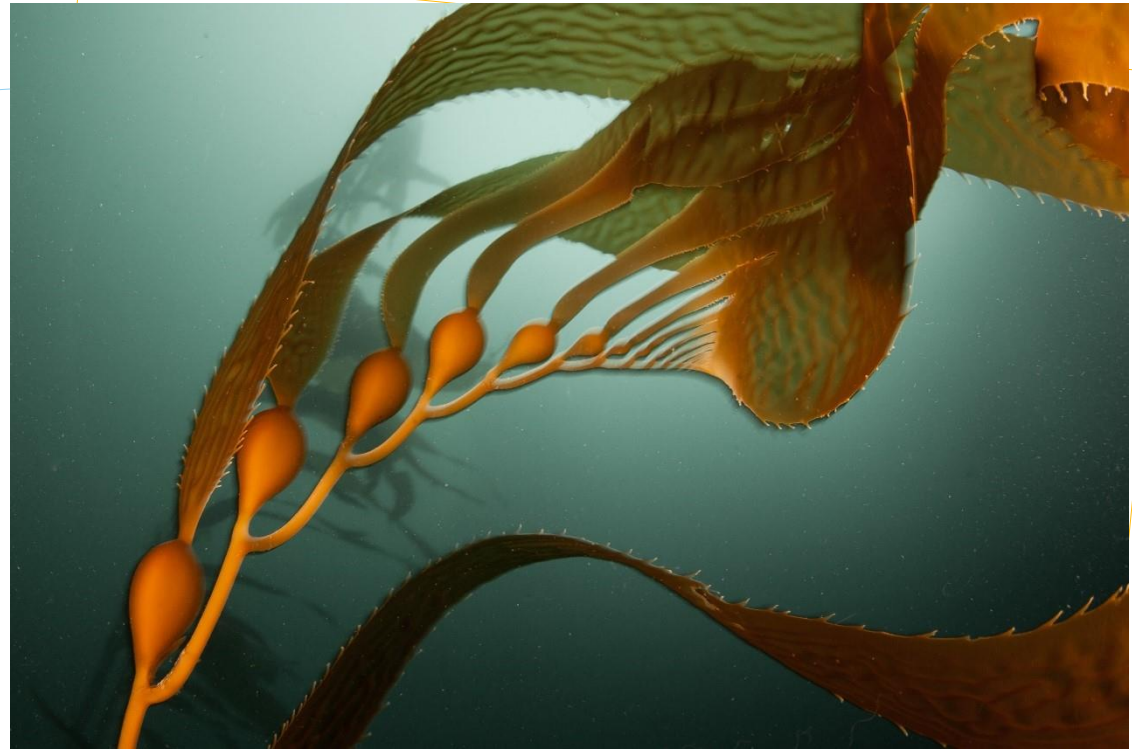


AN EXEMPLAR

Linking ocean carbon observation to effective climate targets

Example:

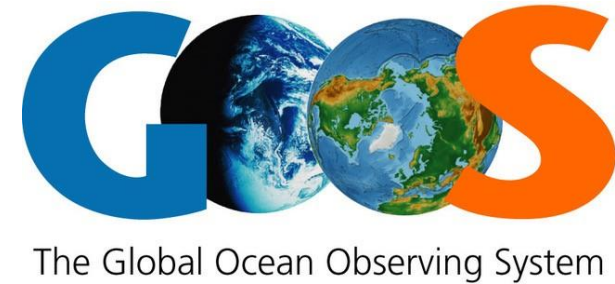
Ocean innovation in CDR urgently needs an ocean baseline



THANK YOU!



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