



Chilean Cluster

A Community-Led mCDR
Case Study

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Vulnerable ecosystems and coastal communities in Chile are facing severe environmental challenges, including ocean acidification and kelp loss.

Opportunity

Chile has the potential to become a global hub for ocean climate solutions.

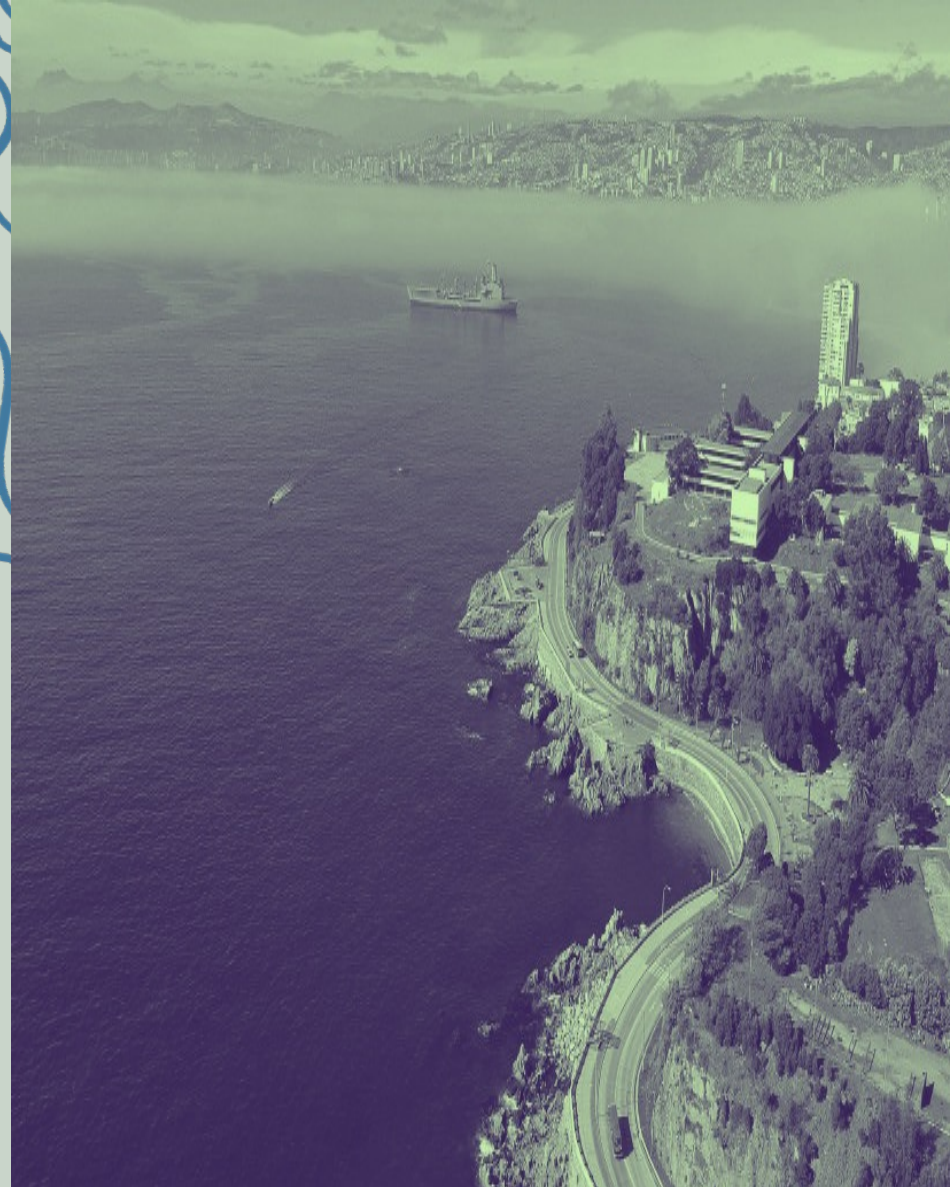
+5.000 km of coastline.

Coastal infrastructure

A globally competitive manufacturing and maritime industry

A world-class R&D ecosystem

Public-private partnership capacity





Two years
ago, we
began
writing this
story

CINCO - Chilean Cluster for
Ocean Innovation

A cluster for us is...

amplify the talent
and potential of
Chile's ocean
ecosystem



Our Pilot Intervention



Stage 1

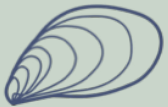
Community-Centric Approach

local insights, ensuring the design aligns with Patagonia's ecological conditions and community needs

Circular economy approach

transforming an environmental problem into a new climate solution.

OAE Patagonia



Shell Waste
25,000–50,000
tons



CaCO_3 &
 Ca(OH)_2

Processed mussel
shells to Alkaline
material



Suralis

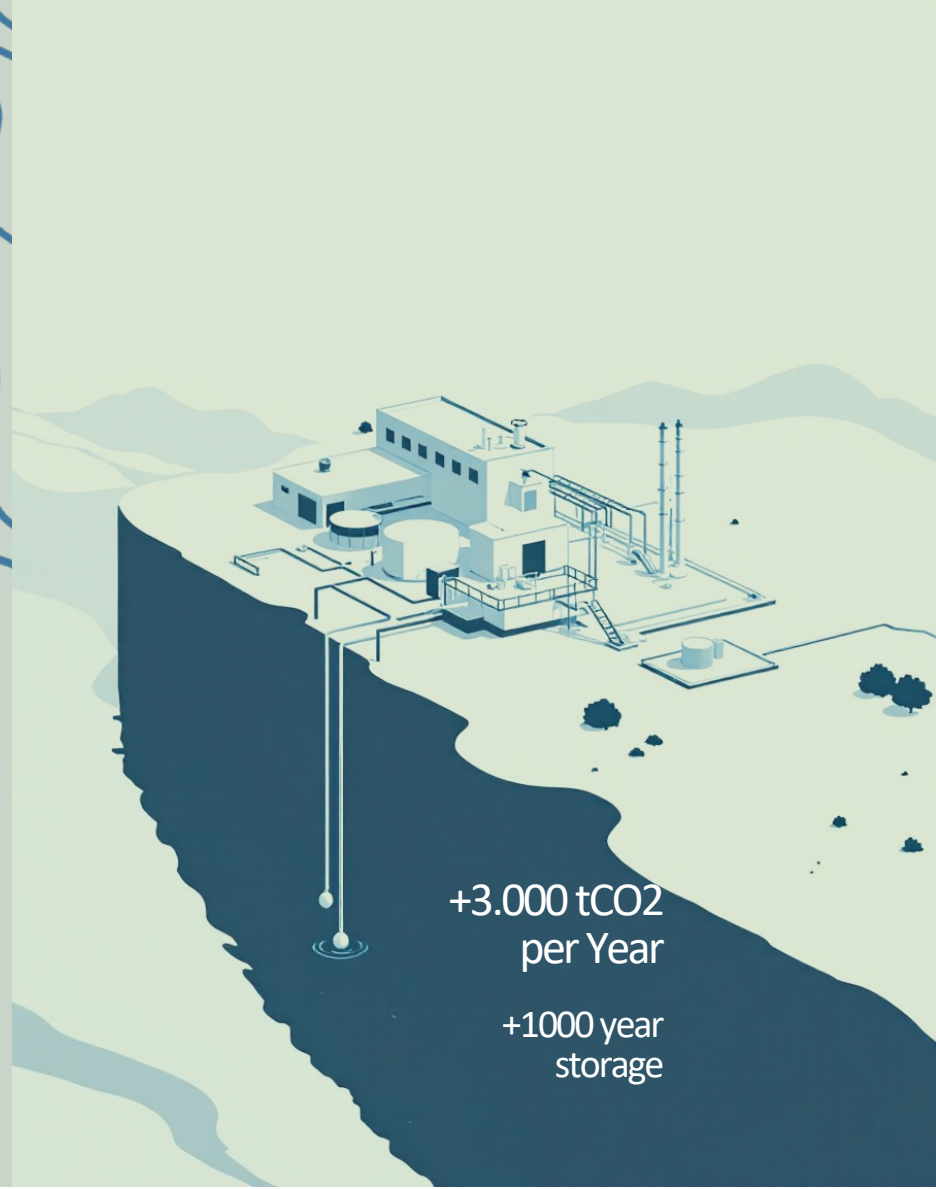
Water Treatment
Facility Partner



Dissolved in treated water

Released through outfall pipes

Enhances ocean CO uptake



Stage 2

Ocean Solutions Caucus cultivated collaboratively, engaging local administration and fostering cooperation across ministries to create impactful environmental policy.

Ministerial support we integrated support from the government departments responsible for science, the economy, the environment and finance.



Funding commitments

Stage 3

Chilean GCF Application

Enable the scaling MRV process, empowering chilean researches and scale mCDR to other potential industries

Public Chilean funds

Securing co-funding from the regional government and economic development agency

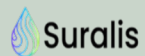
International funds

Identifying potential international partners for the first mCDR pilot project in Chile.

Partners



kétrawa



WOODS HOLE
OCEANOGRAPHIC
INSTITUTION



Lessons Learned



Key Barriers

Limited resources and bureaucratic processes require innovative solutions and a multi-sectoral approach.

Enabling Factors

Ensuring commitment to the initiative required community engagement and active collaboration among stakeholders.

Future Vision

Enable a regulatory framework and position Chile as a leader in mCDR solutions, enhancing regional collaboration.





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