

Research Mission of the German Marine Research Alliance (DAM) **»Marine carbon sinks in decarbonisation pathways«**

Who we are

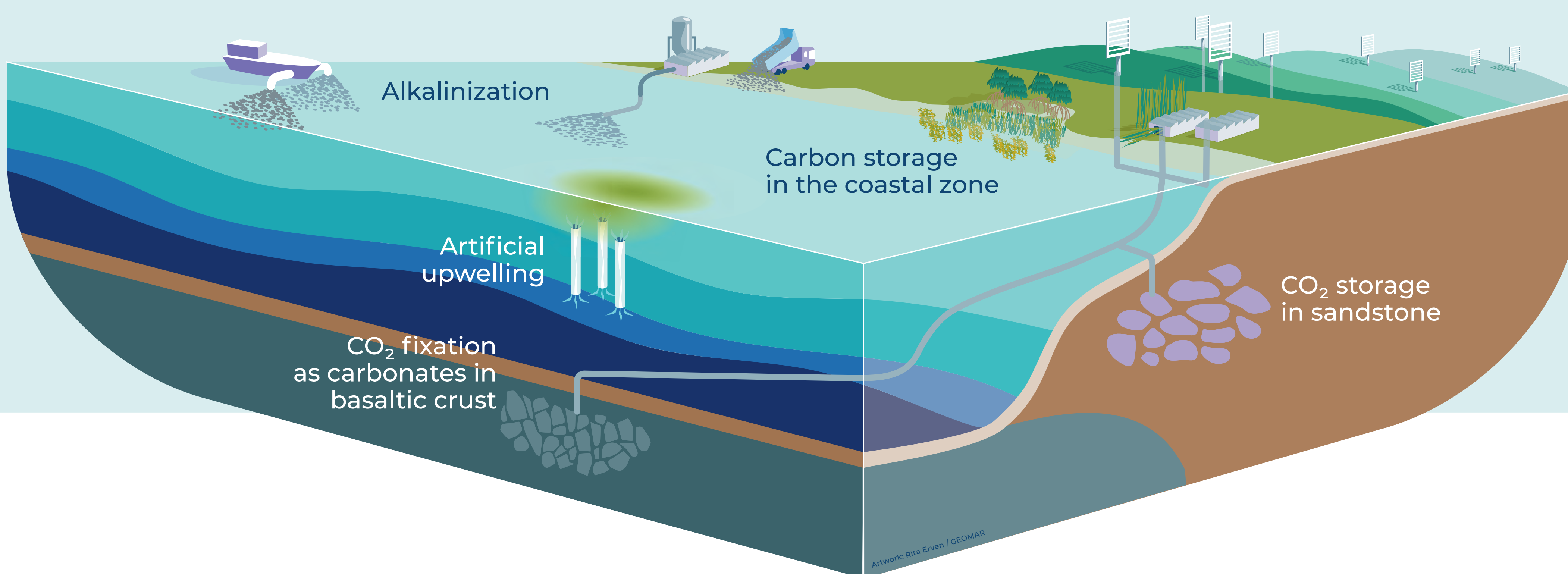
- a large interdisciplinary research mission consisting of 6 research consortia
- 22 partners: universities, research institutes, authorities, economy, museum ➤ more than 200 participants
- 1st phase: 3 years duration ➤ start: 1st August 2021 ➤ total budget: € 26 million

Initial Situation

- A massive reduction of CO₂ emissions alone is no longer sufficient to achieve the Paris climate targets of limiting warming to 1.5 or even 2 degrees.
- 5 – 15 % of today's CO₂ emissions will not be avoidable by mid-century even with an ambitious climate protection policy. They must therefore be removed from the atmosphere and safely stored.
- So far, mainly land-based approaches for CO₂-removal (Carbon Dioxide Removal = CDR) have been discussed, which are often in competition with other land uses. Other options for CO₂-removal and -storage are provided by the ocean due to its extensive climate-regulating capabilities.

Aims of the CDRmare research mission

- To explore & evaluate marine methods of atmospheric CO₂-removal with respect to their potentials and ecological, economic, social and political impacts and risks in the context of a responsible and sustainable use of the ocean.
- Informing and advising policy-makers and society on options for marine CO₂-removal and -storage as well as monitoring and governance approaches.
- The long-term goal is to develop a marine carbon roadmap for Germany.



Ocean-based methods of CO₂-removal and -storage from the atmosphere

