

Marine Aquaculture as a Tool for U.S. Climate Action

Growing scientific evidence suggests that responsible marine aquaculture has the potential to **increase the resilience of the global food system and mitigate climate change while feeding a growing population**, making it a valuable tool for the U.S. to meet its climate goals.

Seafood is a Climate-Friendly Protein

Human population will continue to grow and is predicted to approach 10 billion by 2050¹. Global demand for protein will rise by as much as 88 percent². Increasingly, scientists are calling for future protein production to shift towards seafood, which is more climate-friendly than other sources of animal protein^{3,4,5}. But with climate change altering marine and coastal ecosystems, we cannot sustainably meet expected demand with wild capture fisheries alone.

The U.S. has Great Potential for Marine Aquaculture

There is great potential for expansion of marine aquaculture in the U.S., but this potential is largely untapped. The U.S. is the world's leading seafood importer yet ranks #17 in aquaculture production. Studies have shown that, with vast expanses of favorable growing areas with suitable depths, current speeds, temperatures, and access to ports, the U.S. has some of the highest production potential in the world^{6,7}.

Marine Aquaculture can Mitigate Climate Change and Protect Ecosystems

Well-managed marine aquaculture can produce healthful, climate-friendly protein from the ocean with low greenhouse gas emissions and little to no conversion of land⁸. At the same time, some types of marine aquaculture can sequester carbon and may be used as a tool to mitigate global warming by removing carbon dioxide from the atmosphere^{9,10}. Marine aquaculture can also provide other ecosystem services such as improving water quality, regulating ocean acidification, protecting coastlines, and providing habitat for other species, which can help marine ecosystems be more resilient to the impacts of climate change^{11,12}.

“Properly executed aquaculture, paired with sustainable capture fisheries, has the potential to increase food security, sequester CO₂, decrease the carbon footprint of protein sources, and stimulate economic activity in both coastal and inland communities.”

- *Integrating oceans into climate policy: Any green new deal needs a splash of blue*¹³



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