

Initiative for Promoting Blue Carbon Policy Coastal Zone in Japan

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○ The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) in Japan defined Blue Carbon Ecosystem and Biosymbiotic port infrastructure as “Blue Infrastructure”. Through the conservation, restoration, and creation of Blue Infrastructure using dredged sediment, MLIT aims to contribute to achieving carbon neutrality by expanding CO₂ sinks and to realize a rich marine environment through biodiversity.

Blue Infrastructure



【Seagrass Beds】



【Seaweed Beds】

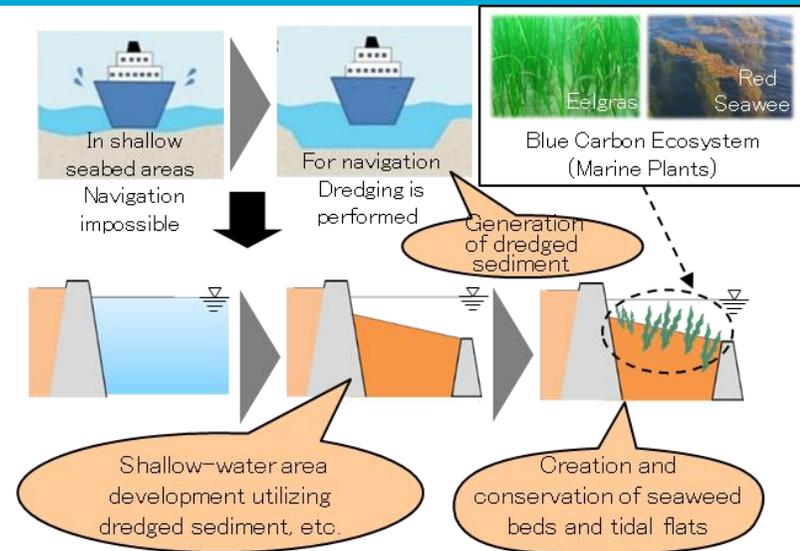


【Tidal Flats】



【Biologically Integrated Harbor Structures】

○ Environmental improvements are being advanced toward the conservation, restoration, and creation of blue infrastructure through shallow-water area development, seagrass bed and tidal flat creation and conservation utilizing dredged sediment and other materials.



Kushiro Port • Island Breakwater Conceptual Diagram



Shallow-water embankments were constructed using dredged sediment generated during navigation channel and anchorage improvements, with seaweed beds formed on top of the embankments.

Tokuyama Kudamatsu Port and Oshima Mudflat



Utilizing dredged sediment generated during navigation channel and anchorage improvements to create artificial tidal flats. The tidal flats will form eelgrass beds and small eelgrass beds.

Susaki Port Blocks mixed with steel slag

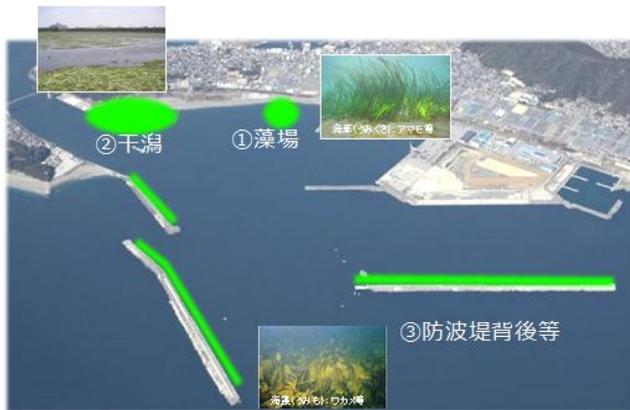


Create seaweed bed formation units utilizing steel slag generated during the steel production process.

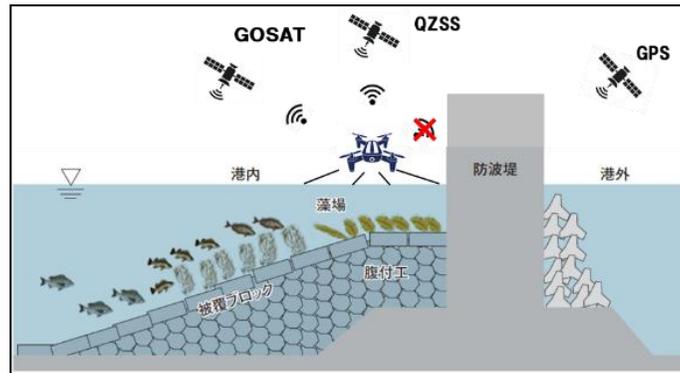
- MLIT is currently developing a system to accurately and efficiently survey and manage the growth area of seaweed beds to calculate greenhouse gas emissions and sequestration amounts etc.

Detail of the system

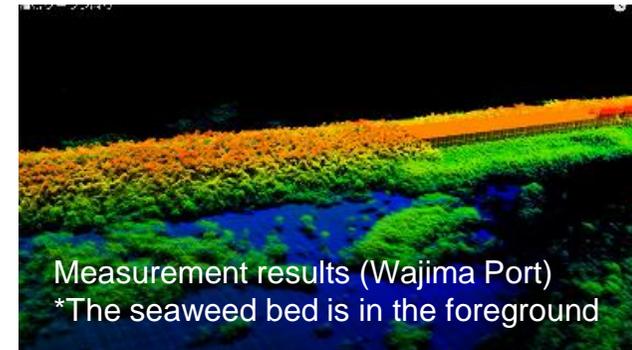
- Development of a drone equipped with a green laser that is highly underwater permeability
- Establishment of highly accurate measurement methods using positioning technology such as quasi-zenith satellites
- Establishment of the system that automatically aggregates acquired data into a database



[Image]
habitats of seaweed beds in the port (Kochi Port)



[Image]
blue carbon observation using quasi-zenith satellite



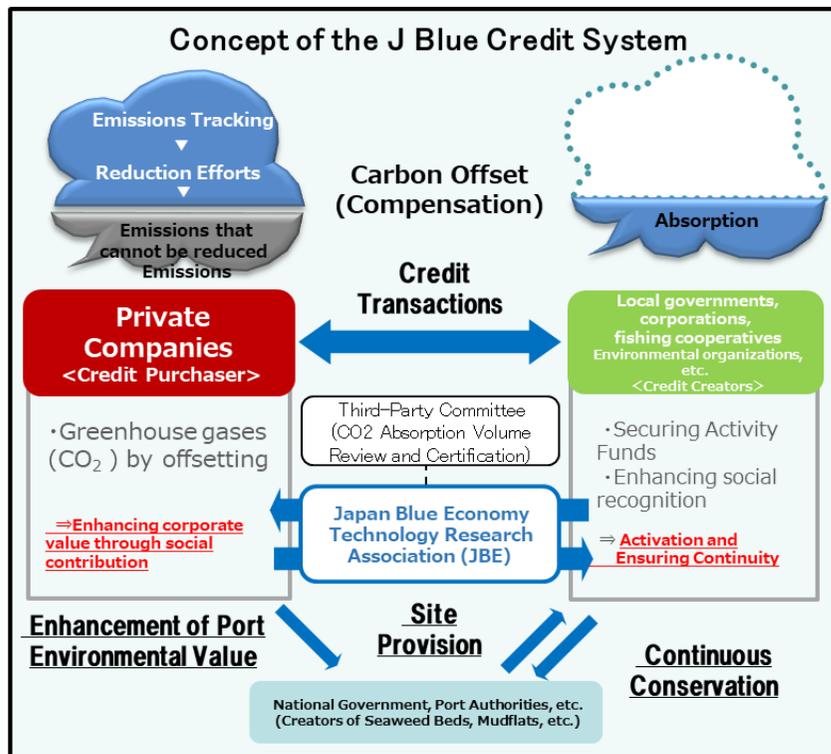
Measurement results (Wajima Port)
*The seaweed bed is in the foreground



Hybrid drone prototype
equipped with green laser

- Japan Blue Economy Association, which was authorized by MLIT, certifies the CO2 removal amount created by organizations (NPOs, environmental groups, etc.), which conserve seaweed beds etc., and allows credit transactions to expand CO2 removal sources using blue carbon ecosystems toward achieving carbon neutrality in 2050.
- This initiative is not only about carbon offset volume; it also leverages regional characteristics to deliver multiple benefits, including water quality improvement, fisheries promotion, and marine education. We have worked on such initiatives in coastal regions to maximize these benefits.

【J Blue Credit Certification Achievements】



- 3rd call for purchase applicants in fiscal 2025 (As of June 18th, 2025)
 - Trading amount: 166.3 (t-CO₂)
 - The number of purchasing companies and organizations: 63 (total number including duplicate)
 - Average transaction price: 352 (\$/t-CO₂) (excluding tax) ※1\$=150yen

【 Activities of Credit Creators 】

○ Seagrass Bed Conservation, Restoration, and Development

Credit creators engage in activities such as seagrass restoration and marine conservation to generate blue carbon value and strengthen collaboration with local communities and businesses. These initiatives contribute not only to environmental sustainability but also to the sustainable use of resources and revitalization of regional economies.



○ J Blue Credit Certification

Quantitatively evaluate the amount of CO₂ absorbed through these activities.



○ Improvement of Marine Environment and Enhancement of Regional Value

Through seagrass restoration, we aim to improve marine environments and enhance regional value, achieving new value creation through water purification and the promotion of fisheries.

To Activity
Funding

【 Activities of Credit Purchasers 】

○ Purchase J Blue Credit

J Blue Credits are purchased by companies and organizations, with a tendency for credits from local activity areas to be bought by local stakeholders.



○ Carbon Offset

Organizations and companies that have purchased J Blue Credits are actively working to offset CO₂ emissions generated from meetings, events, and tourism activities using those credits.

These efforts help improve the added value of the activities involved.



○ Corporate Social Responsibility (CSR) visibility through Environmental Initiatives

Not only can environmental contributions through J Blue Credits be visualized, but regional contributions can also be realized by supporting the conservation of local marine environments

Providing
Opportunities

Impact of J Blue Credits

○ This projects in Japan emphasize biodiversity, fisheries, and community benefits alongside carbon sequestration.

○ In particular, revitalizes local fisheries, creates new income opportunities, and strengthens community engagement.

