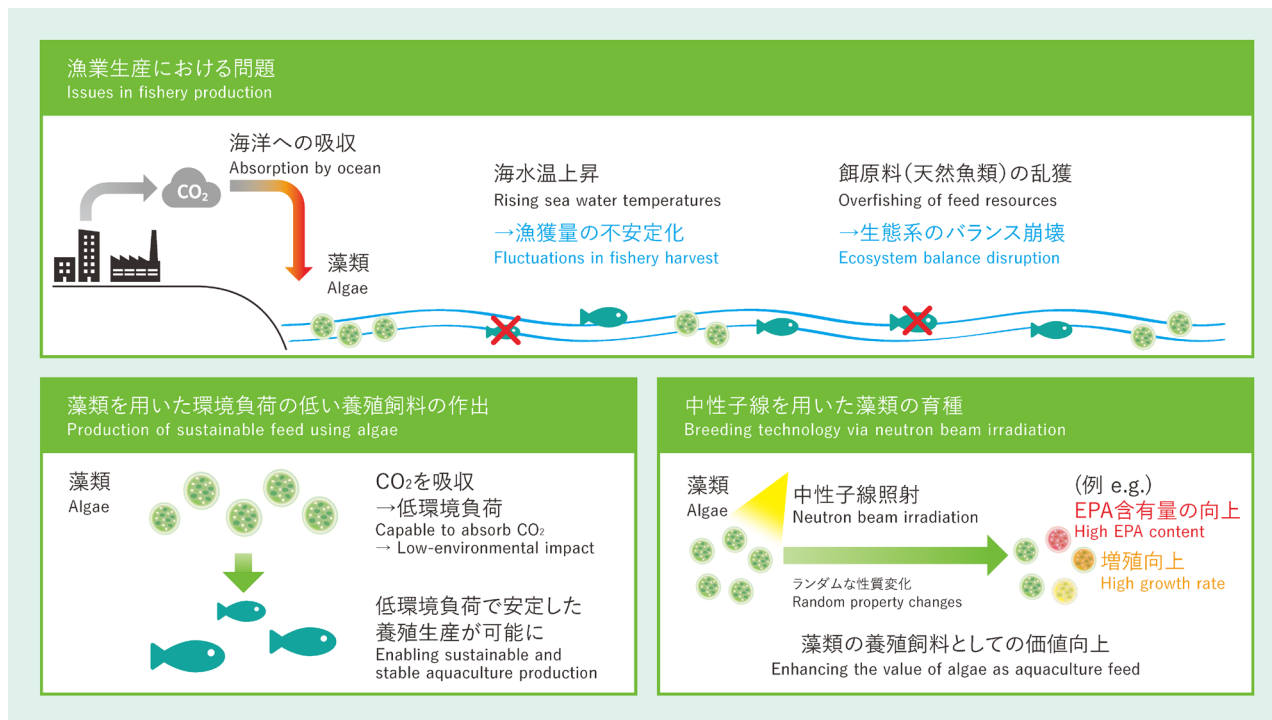


Producing sustainable aquafeed by breeding algae with neutron beams Breeding algae to enhance feed value

Background and Technical Challenges

To produce sustainable aquaculture feed, we must enhance algal traits through breeding. Neutron-beam irradiation shows promise due to its effectiveness and ease of commercialization, but optimal conditions are not yet known.



R&D Goals and Outcomes

Breeding algae with high feed value using neutron beams will contribute to sustainable aquaculture production

Key Technologies

01 Core Technologies

Irradiating algae with neutron beams under optimal conditions to induce mutations.

02 Key Differentiators

- Established neutron-beam irradiation conditions that induce mutations most efficiently, achieving up to 14.5 times the natural mutation rate
- Successfully bred beneficial algae using neutron beams

Use Cases Agriculture, Forestry & Fisheries

R&D phase Research

Technology Schedule FY27-29

Commercialization Schedule TBD

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