

# Artificial energy atolls offer unique opportunities for long-term offshore monitoring programmes

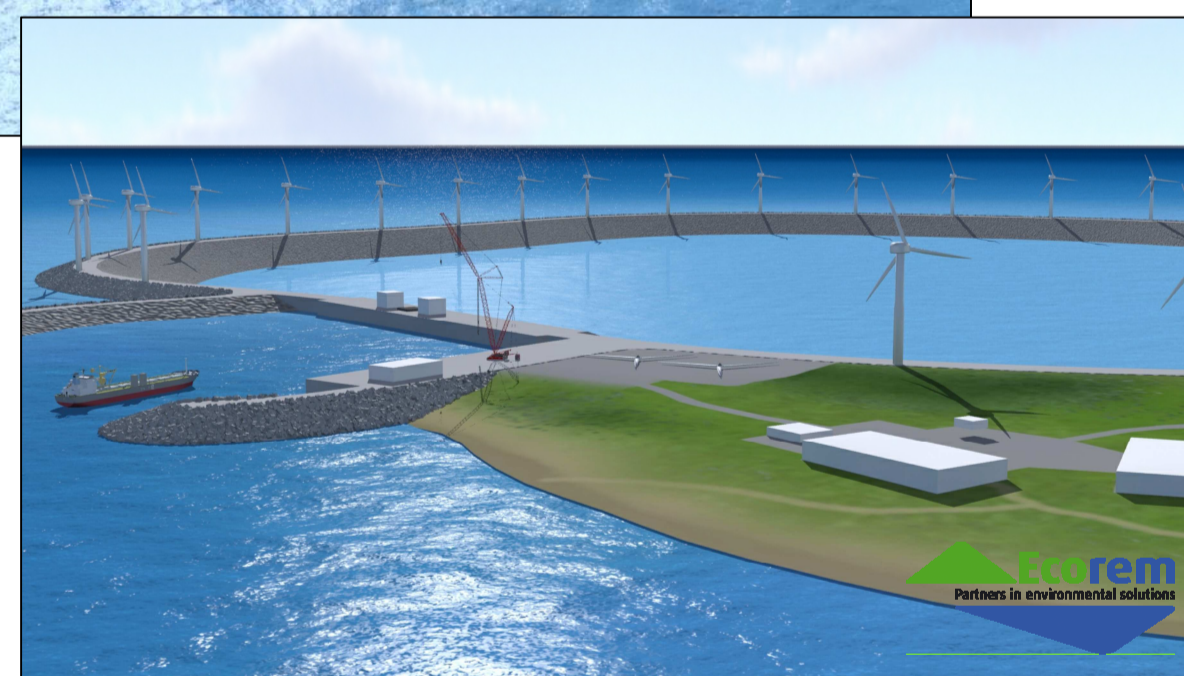
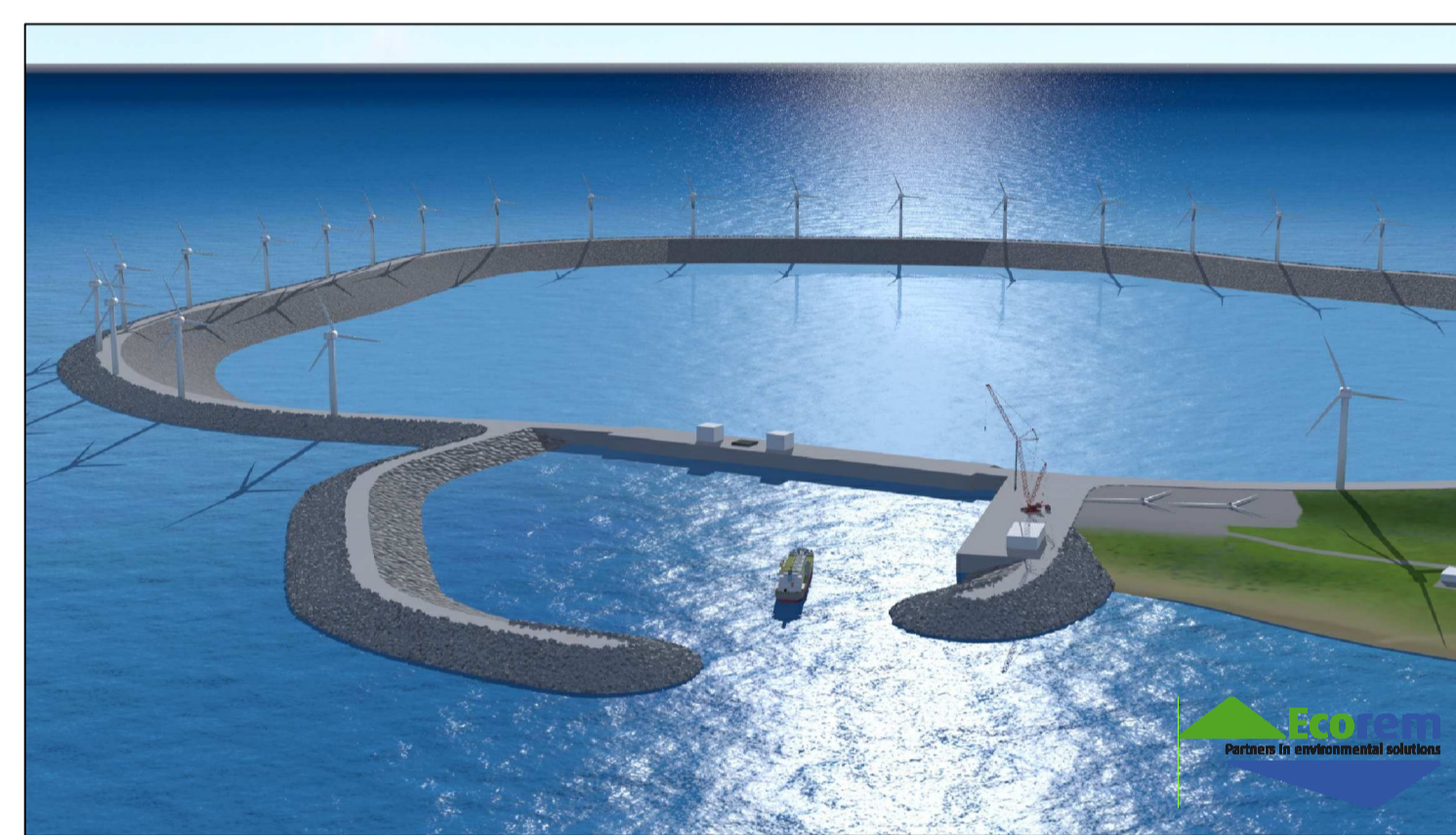
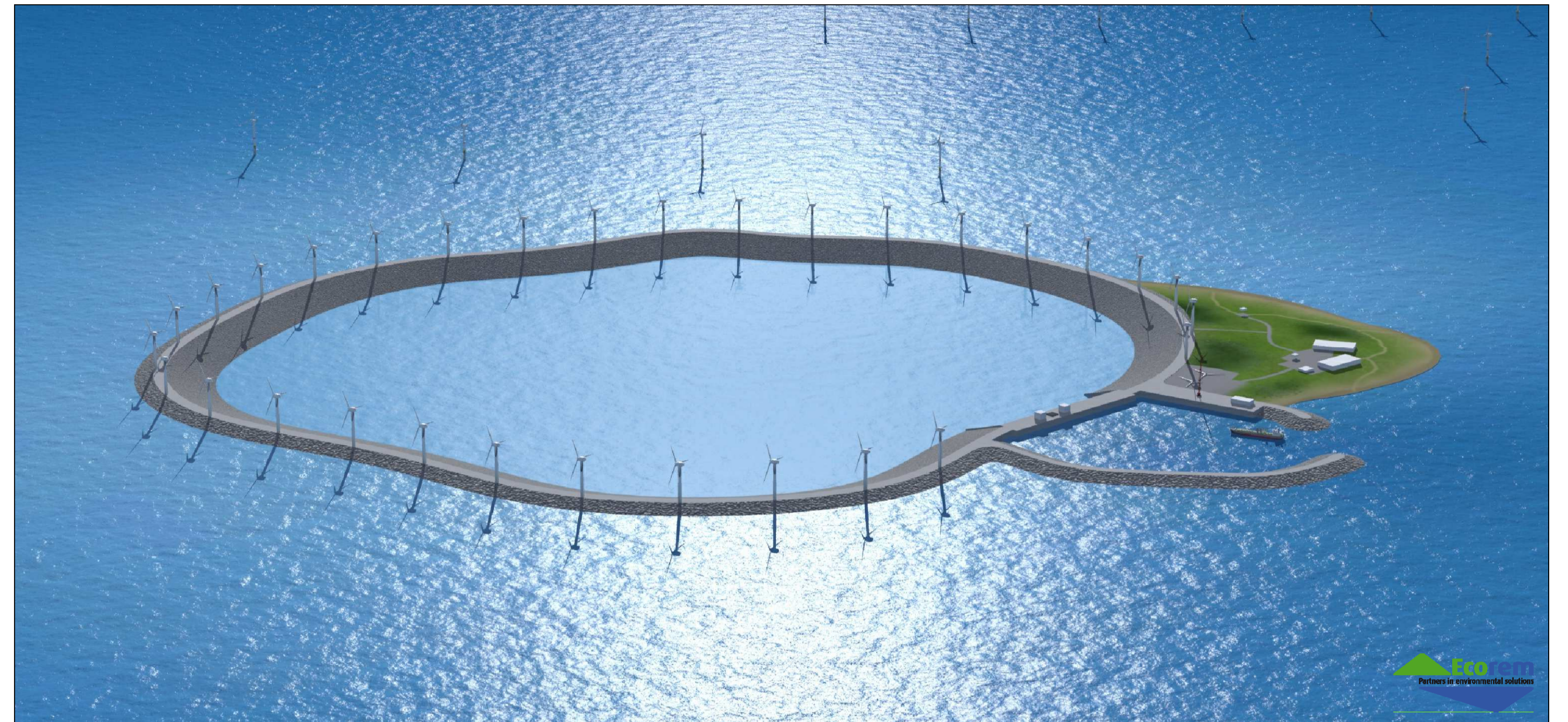
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## Feasibility study performed by Ecorem

- Artificial atolls for producing and buffering energy
- Analysis of alternatives:
  - ◆ Environmental impact
  - ◆ Financial and socio-economic feasibility

One of the main findings of the feasibility study was that an energy atoll in the North Sea can be cost-effective by using its multifunctional potential

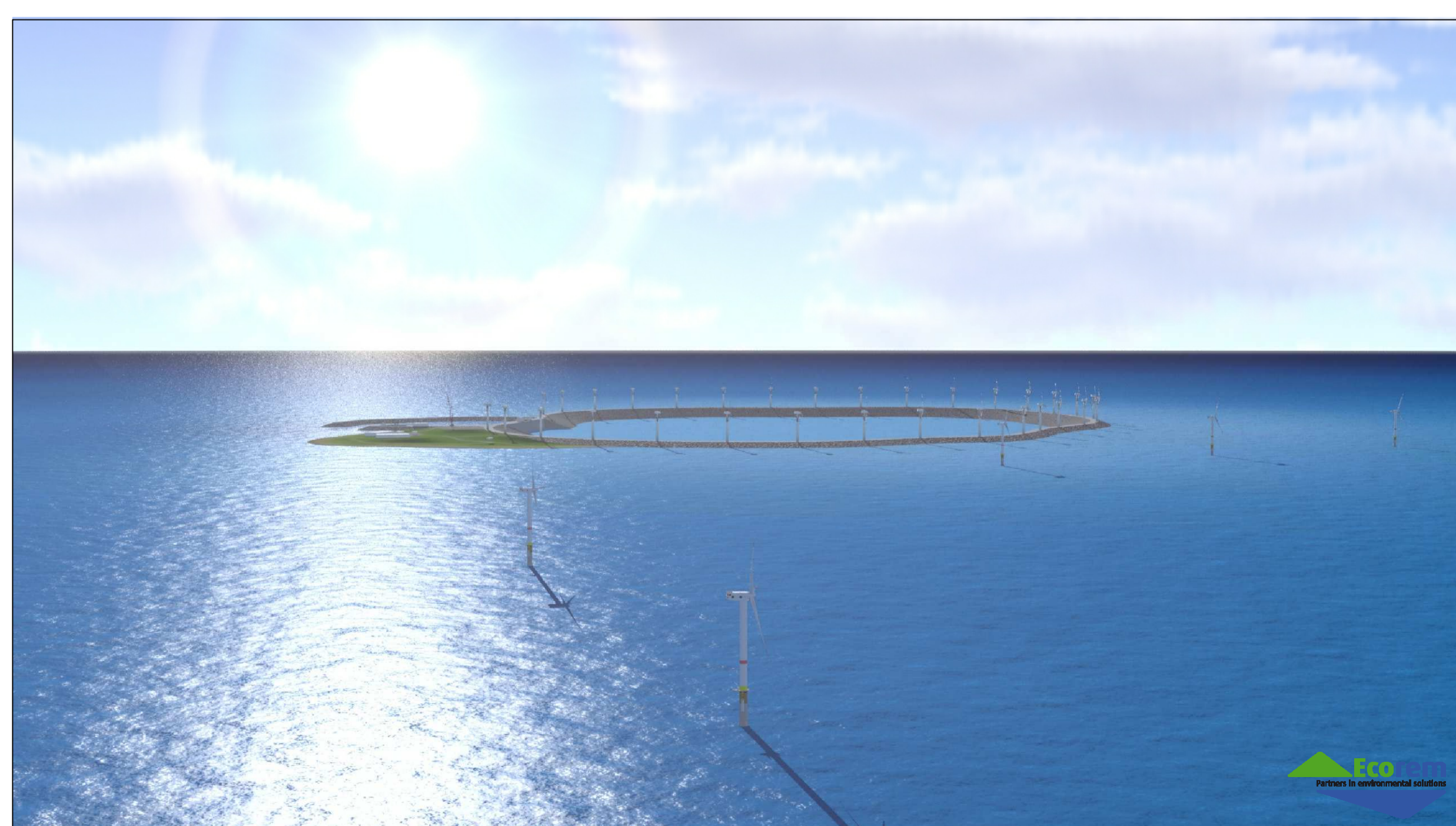


## The atoll

- A large reservoir
- A dike that carries hydropower turbines and windmills
- An artificial land mass

## Opportunities

- Creating an 'operating base' that is manageable logistically and in maintenance
- Scientific research station:
  - ◆ Synergies between windmill farms and the atoll in their impact on (avi)fauna
  - ◆ Marine fauna monitoring programmes
  - ◆ Permanent weather stations
  - ◆ Monitoring abiotic conditions above and below the water surface



## Subject of further investigation

- **Collaboration** in search for clean energy production, sustainable infrastructure development, and scientific progress
- **Shaping ideas** and overcoming major logistical obstacles for research

