

NALSAR University of Law

Regional approaches to the protection of the marine environment and Role of technology in protection of marine environment

By

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Introduction

- Regional approaches to the protection of the marine environment refer to the collective efforts of countries within a specific geographical region to address and manage marine environmental issues.
- It also refers to the development of strategies and plans to manage and protect marine environments at a regional level.
- Regional approaches are important for addressing cross-border issues such as pollution, overfishing, and climate change that affect multiple countries and require cooperation and coordination among neighboring states.
- It also involve a range of activities, such as the development of regional policies and strategies, the establishment of marine protected areas (MPAs), the implementation of regulations and guidelines, and the promotion of sustainable practices.

Regional Organisations in marine environment protection

OSPAR

- Derived from combination of 2 agreements – Oslo Convention and the Paris Convention in 1992
- 15 contracting parties, including EU states and Norway
- protection and conservation of the marine environment in Northeast Atlantic

HELCOM

- Helsinki Commission established in 1974
- HELCOM's member countries include Denmark, Estonia, the European Union, Finland, Germany, Latvia, Lithuania, Poland, Russia, and Sweden
- protection of the marine environment of the Baltic Sea

ASEAN

- Association of Southeast Asian Nations
- ten member states in Southeast Asia: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam

Other R.Os

NEAFC

- North East Atlantic Fisheries Commission
- established to manage and conserve fishery resources in the North East Atlantic
- Its activities include setting fishing quotas, monitoring fishing activities, and addressing issues related to the conservation of marine biodiversity

FFA

- Pacific Islands Forum Fisheries Agency
- member countries include Pacific Island nations and territories, as well as Australia, New Zealand, and the United States
- works towards the sustainable management of tuna fisheries in the Pacific
- activities include fisheries management, research, monitoring, and surveillance

CCAMLR

- Commission for the Conservation of Antarctic Marine Living Resources
- manages and conserves the marine living resources of the Antarctic

Contd..

PICES

- North Pacific Marine Science Organization established in 1992
- Has 8 member states and 2 cooperating states
- promotes and coordinates marine research in the North Pacific Ocean
- Focuses on issues including ocean acidification, fisheries management, climate change, and marine biodiversity

NAMMCO

- North Atlantic Marine Mammal Commission established in 1992
- Has 5 member states
- conservation and management of marine mammals in the North Atlantic region
- Main focus include research, monitoring, and management of marine mammal populations, as well as addressing the impacts of human activities on these animals

CCAMLR

- Commission for the Conservation of Antarctic Marine Living Resources established in 1982
- Has 26 member states
- manages and conserves the marine living resources of the Antarctic.
- main areas of focus include the conservation of Antarctic marine ecosystems, the sustainable use of marine resources, and the prevention of illegal, unreported, and unregulated fishing

Contd..

CRFM

- Caribbean Regional Fisheries Mechanism
- works towards the sustainable management of fisheries in the Caribbean.
- Its activities include research, monitoring, and policy development related to fisheries management

SEAFDEC

- The Southeast Asian Fisheries Development Center
- works towards the sustainable development of fisheries in Southeast Asia.
- Its activities include research, training, and policy development related to fisheries management

MAP

- The Mediterranean Action Plan
- works towards the protection of the Mediterranean Sea and its coastal areas.
- Its work includes addressing issues related to marine pollution, coastal development, and the conservation of marine biodiversity

Legal Instruments



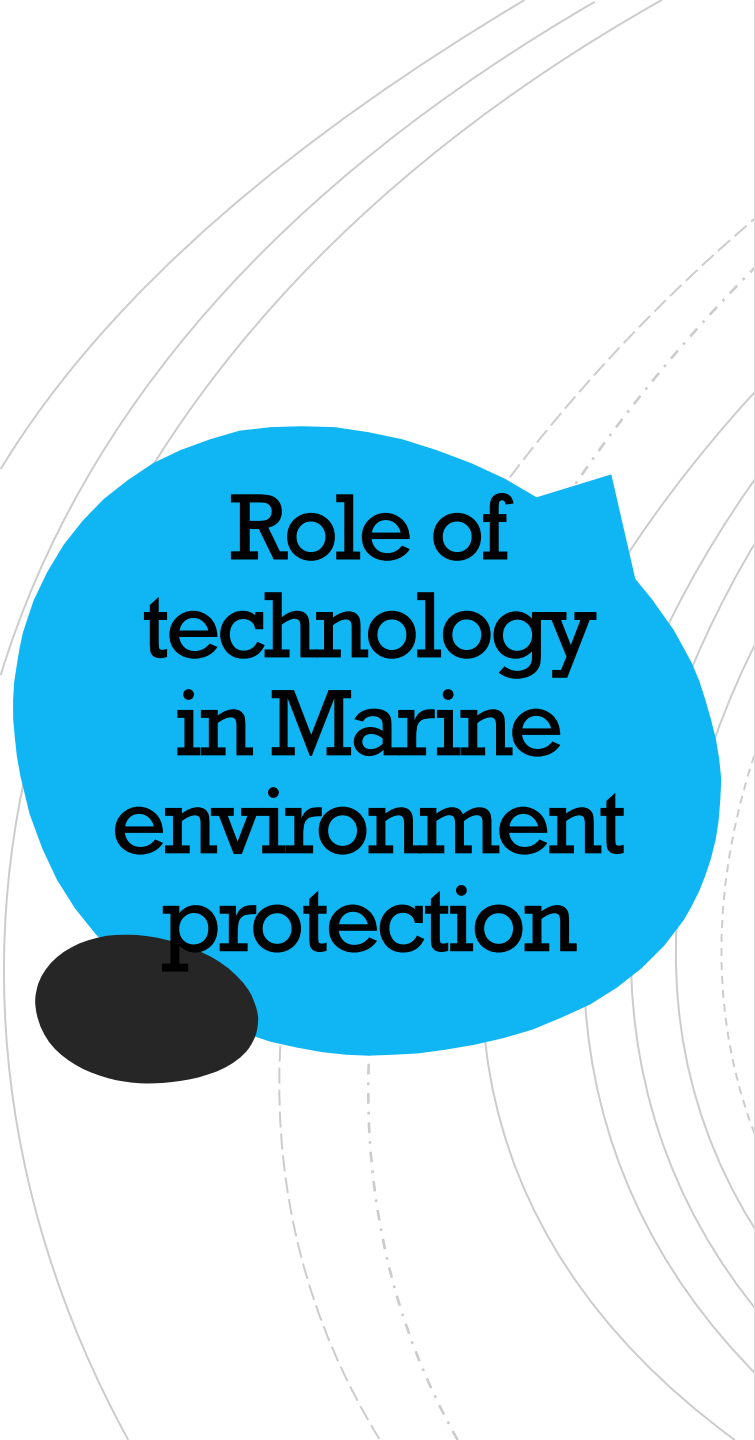
- The Barcelona Convention and its protocols
- The OSPAR Convention
- The Helsinki Convention and its protocols
- The ASEAN Agreement on Transboundary Haze Pollution
- The Cartagena Convention and its protocols
- The Abidjan Convention
- The Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution
- The Nairobi Convention
- The Antarctic Treaty System
- The Regional Plan of Action for the Protection of the Marine Environment from Land-based Activities in the Pacific

Regional Seas Programme

- The Regional Seas Programme is a global network of intergovernmental organizations that work together to protect and manage the marine environment in different regions of the world.
- The program was established by the United Nations Environment Programme (UNEP) in 1974, and currently consists of 18 regions, covering areas such as the Mediterranean, the Baltic Sea, the Black Sea, the Caribbean, and the South China Sea.
- The main objective of the Regional Seas Programme is to provide a framework for the coordinated management of regional marine environments, and to promote sustainable development practices in the regions.
- The program provides a platform for member countries to cooperate on issues related to marine environmental protection, such as pollution prevention, biodiversity conservation, and sustainable fisheries management.

Coral Triangle Initiative

- The Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF) is a regional effort aimed at conserving the marine and coastal resources of the Coral Triangle, a region located in the western Pacific Ocean that encompasses the waters and coastlines of Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands, and Timor-Leste.
- The initiative aims to address the threats facing the Coral Triangle, including overfishing, habitat destruction, climate change, and pollution, through a coordinated and integrated approach to conservation and management.
- Some of the key initiatives and activities of the CTI-CFF include the establishment of a regional plan of action for the conservation and management of the Coral Triangle, the development of a network of marine protected areas, the promotion of sustainable fisheries management practices, and the implementation of programs to reduce pollution and promote sustainable tourism.



Role of technology in Marine environment protection

Technologies are used -

Monitoring and Surveillance

Cleanup and remediation

Sustainable fishing practices

Renewable energy

Marine spatial planning

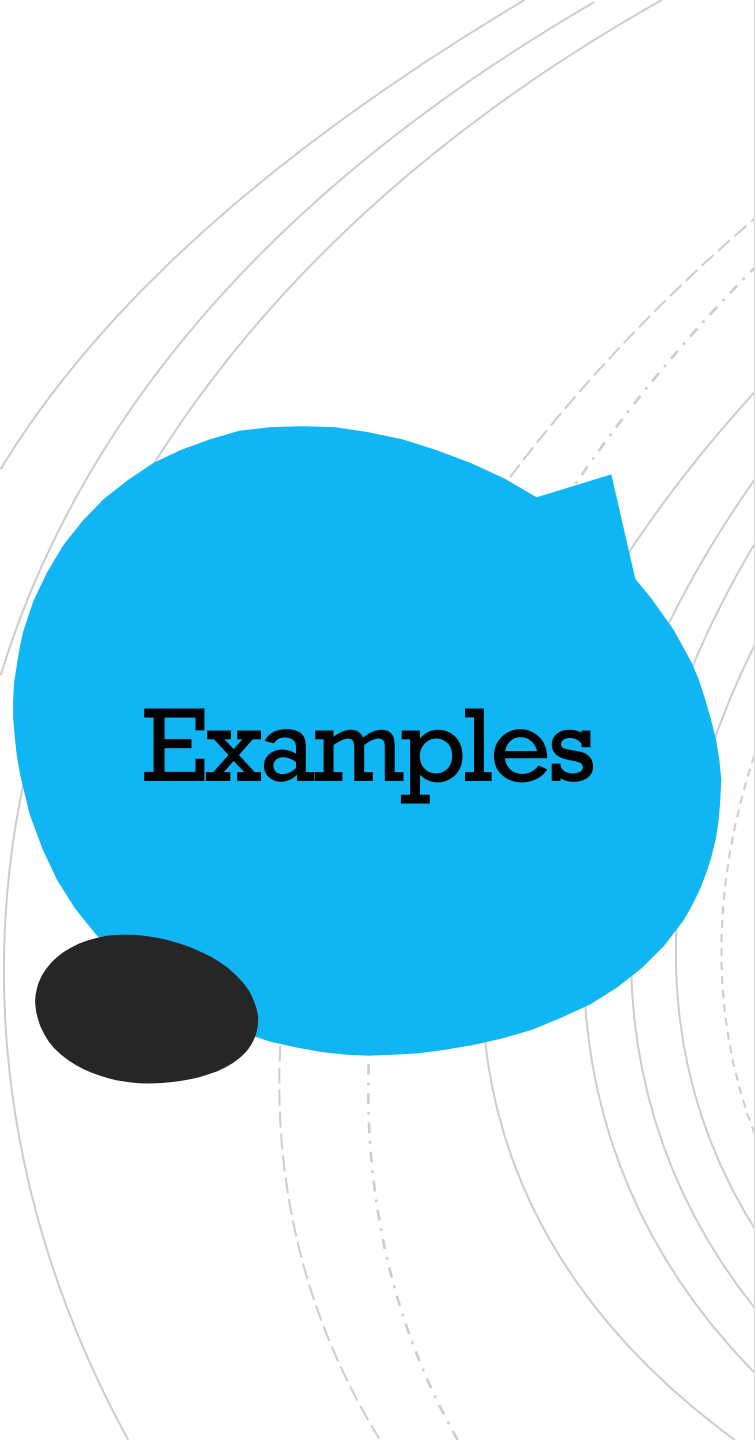
Marine Debris Tracking

Ocean Acidification Monitoring

Marine Protected Area (MPA) Management

Aquaculture Management

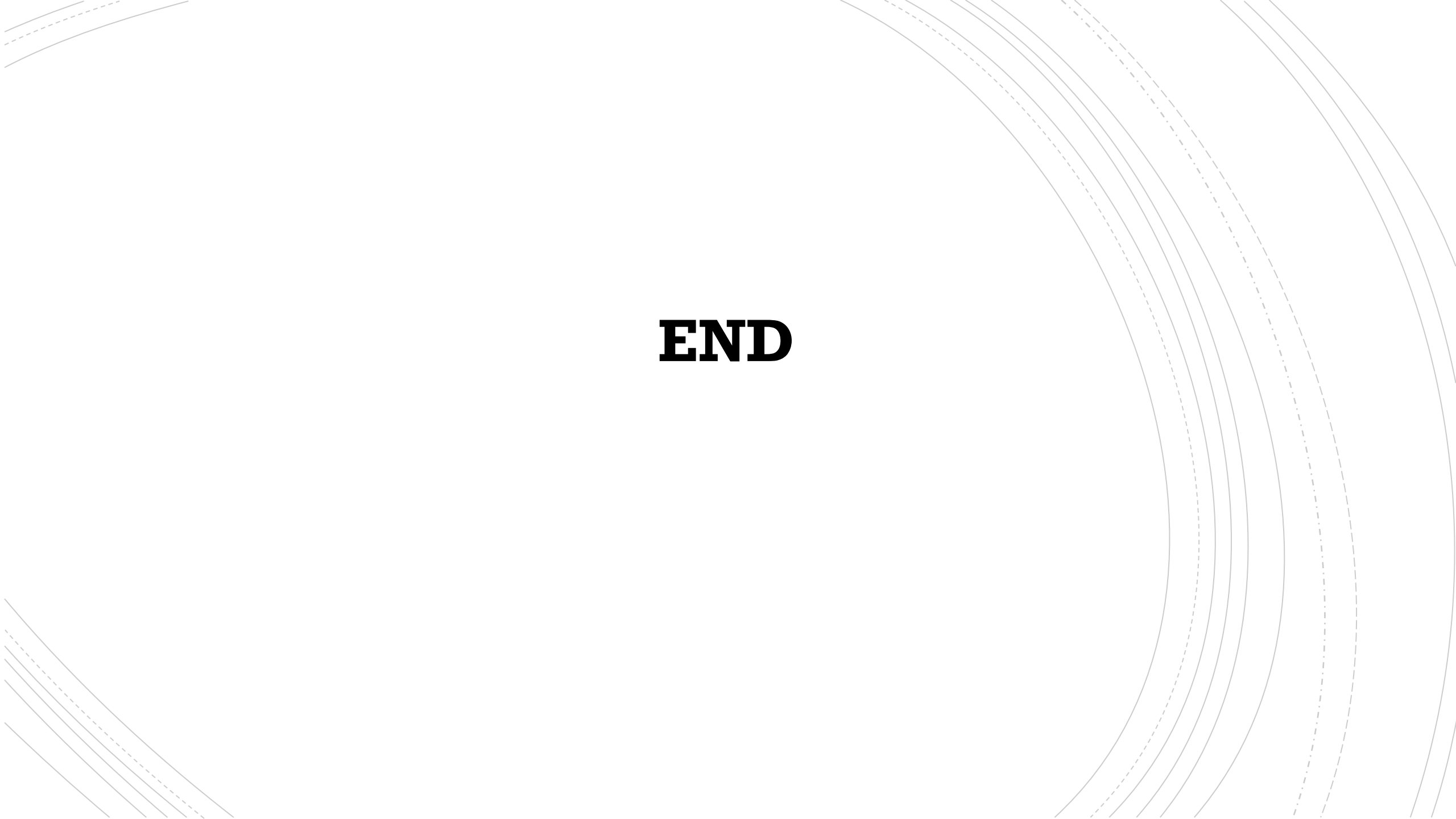
Sustainable Shipping



Examples

Some examples where technologies are used for marine environment protection include -

- The Great Barrier Reef Foundation's "Reef Resilience and Adaptation Program"
- The Ocean Cleanup Project
- SmartBay Ireland
- Aqua-4D
- MARPOL Compliance Monitoring
- Manta Ray Advocates
- Ocean Wise Seafood Program
- Marine Debris Tracker
- Coral Reef Watch
- Ocean Robots

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