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From “good” data To good decisions

From data to knowledge for sustainable blue growth

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Where to find data

EU and global initiatives on marine data



to assemble,...., facilitate use and re-use of marine data for research AND environmental management.

- SeaDataNet (now SeaDataCloud)
- EMODnet
- Copernicus
- World Ocean Database

MARITIME FORUM
European Commission

Maritime policy

- Finance
- Governance
- Marine and maritime knowledge
- Maritime security
- Maritime spatial planning and coastal zone management
- Maritime surveillance
- Size of blue economy

Marine and maritime knowledge

- Copernicus
- Costs, benefits and needs
- Data Collection Framework
- European Marine Observation and Data Network
- Inter-service group on marine data
- Marine Observation and Data Expert Group
- Ocean Observation Research Coordination Network
- WISE-marine

<https://marine.copernicus.eu/>

National Centers for Environmental Information
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Home Products Services Resources News About Contact

Home Products World Ocean Database

World Ocean Database



The Copernicus Marine Environment Monitoring Service

MULTI-YEAR: 10 to 45 years

REAL-TIME: Daily, hourly

FORECAST: 2 to 10 days

ESSENTIAL MARINE VARIABLES

- Blue (Physics)
- White (Sea ice)
- Green (Biogeochemistry)

OBSERVATIONS: In-situ & Satellites

NUMERICAL MODELS & data assimilation

marine.copernicus.eu



EMODnet
European Marine Observation and Data Network

Bathymetry: Data on bathymetry (water depth), coastlines, and geographical location of underwater features, wrecks.

Geology: Data on seabed substrate, sea-floor geology, coastal behaviour, geological events, and minerals.

Seabed Habitats: Data on modelled seabed habitats based on seabed substrate, energy, biological zone, and salinity.

Chemistry: Data on the concentration of nutrients, organic matter, pesticides, heavy metals, radionuclides and artificial tracers in water, sediment and biota.

Biology: Data on temporal and spatial distribution of species abundance and biomass from several taxa.

Physics: Data on salinity, temperature, waves, currents, sea-level, light attenuation, and FerryBoxes.

Human Activities: Data on the intensity and spatial extent of human activities at sea.

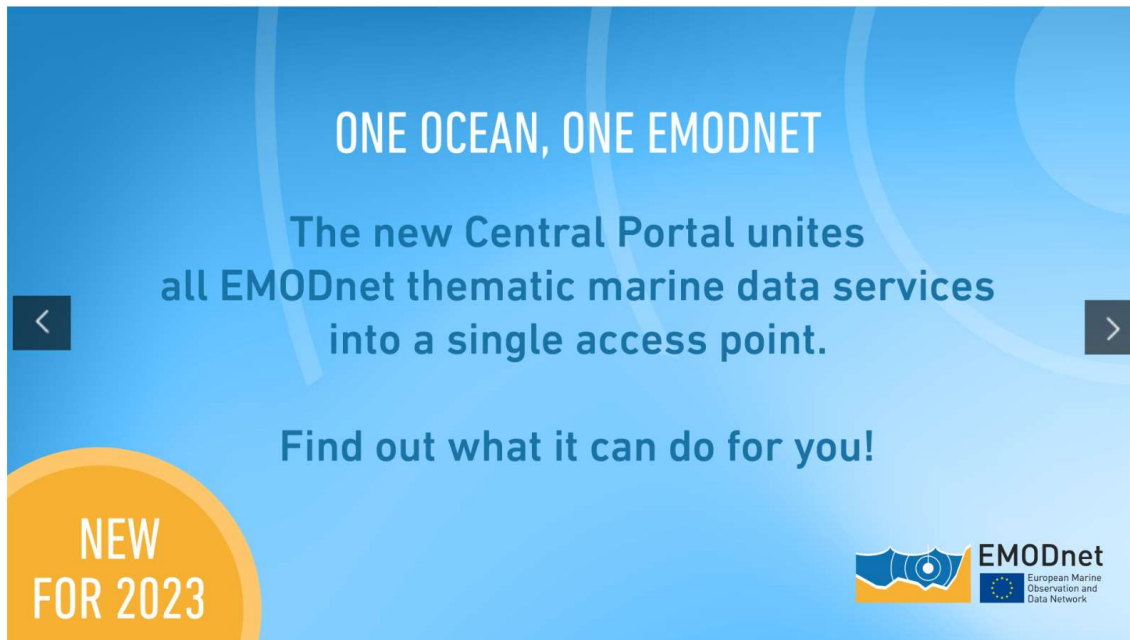
Coastal Mapping: Building a Joint European Coastal Mapping Programme.

<https://www.emodnet.eu/en>

European Marine Observation and Data Network (EMODnet)

[About](#) [Data Services](#) [Solutions](#) [Themes](#) [Community Pages](#) [Atlas of the Seas](#) [EU-China](#) [News & Events](#)

Home




ONE OCEAN, ONE EMODNET

The new Central Portal unites
all EMODnet thematic marine data services
into a single access point.

Find out what it can do for you!

NEW
FOR 2023



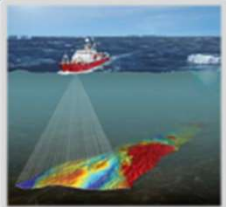



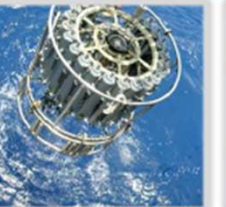


EMODnet
European Marine
Observation and
Data Network

<https://emodnet.ec.europa.eu/en>

The European Marine Observation and Data Network (EMODnet) is a **network** of organisations supported by the EU's integrated maritime policy. These organisations work together to **observe the sea, process the data according to international standards** and **make that information freely available** as interoperable data layers and data products.

This "**collect once and use many times**" philosophy benefits all marine data users, including policy makers, scientists, private industry and the public.

Thematic DATA covered by the portals

Bathymetry	Geology	Seabed habitats	Physics	Chemistry	Biology	Human activities
						
Survey tracks	Seabed substrate	Seabed habitat maps (broad-scale and specific per basin)	Wave height and duration	Acidity	Occurrences and abundances of species of:	Aggregate extraction
Water depth and depth profiles	Sediment accumulation rates	Individual seabed habitat maps from surveys	Sea temperature	Antifoulants	Phytoplankton	Aquaculture
Undersea features	Seafloor lithology	Environmental variables influencing habitat type (depth, salinity, currents, light, ...)	Wind speed and direction	Chlorophyll	Zooplankton	Cultural heritage
Wrecks	Seafloor stratigraphy		Salinity	Dissolved gases	Macro-algae	Dredging
High resolution bathymetry in coastal areas	Coastal behaviour		Horizontal speed of the water column	Fertilisers	Angiosperm	Fisheries
	Geological events and probabilities		Water clarity	Hydrocarbons	Fish	Hydrocarbon extraction
	Mineral occurrences		Changes in sea level	Marine litter (micro, beach, seafloor)	Reptile	Traffic in main ports
			Inflow from rivers	Heavy metals	Benthos	Ocean energy facilities
			Water conductivity / biochemical parameters	Organic matter	Bird	Pipelines and cables
			Atmospheric parameters	Polychlorinated biphenyls	Sea mammal	Protected areas
			Underwater noise	Pesticides and biocides		Status of bathing sites
				Radionuclides		Vessel density
				Silicates		Waste disposal (solids)
						Wind farms
						Other forms of area management/designation

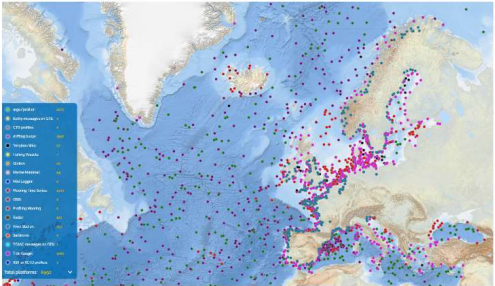


- Administrative units >
- EMODnet Bathymetry >
- EMODnet Biology >
- EMODnet Chemistry >
- EMODnet Geology >
- EMODnet Human Activities >
- EMODnet Physics >
- EMODnet Seabed Habitats >

<https://emodnet.ec.europa.eu/en>

Physics

EMODnet-Physics provides a single point of access to in situ ocean physics data, data products and metadata built with common standards, free of charge and no restrictions. The available parameters cover temperature, salinity and currents profiles, sea level trends, wave height and period, wind speed and direction, water turbidity (light attenuation), underwater noise, river flow, and sea-ice coverage.



Data on temperature, salinity and currents in the water column, sea level trends, wave height and period, wind speed and direction, water turbidity (light attenuation), underwater noise, river flow, and sea-ice coverage.

- EMODnet Physics ▾
- .In situ data >
- Alkalinity >
- Noise >
- River outflow >
- Salinity >
- Sea level >

Layers | **Catalogue**

Search layer

- Administrative units >
- EMODnet Bathymetry >
- EMODnet Biology >
- EMODnet Chemistry >
- EMODnet Geology >
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EMODnet Physics

- .In situ data ▾
- Platforms 0
- Alkalinity >
- Noise >
- River outflow >

Marine regions Search for a region ... ▾

Change basemap EMODNET World Base Layer ▾

Platforms

369635

Data provided by Copernicus Marine Service INS TAC made available by EMODnet Physics

Platform ID	Platform Name	Owner
369635	6902848	IFREMER - Institut Français de Recherche pour l'Exploitation de la Mer

Last date	Latitude	Longitude
07/03/2023	41.53379	18.62547

NRT - sea temperature - degree_Celsius

European Marine Observation and Data Network (EMODnet)

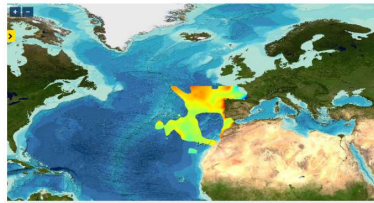
Chemistry

EMODnet Chemistry provides easy access to marine chemical data, standardised harmonized validated data collections and reliable data products, which are highly relevant to assessing ecosystem status according to the Marine Strategy Framework Directive, for all European marine regions.

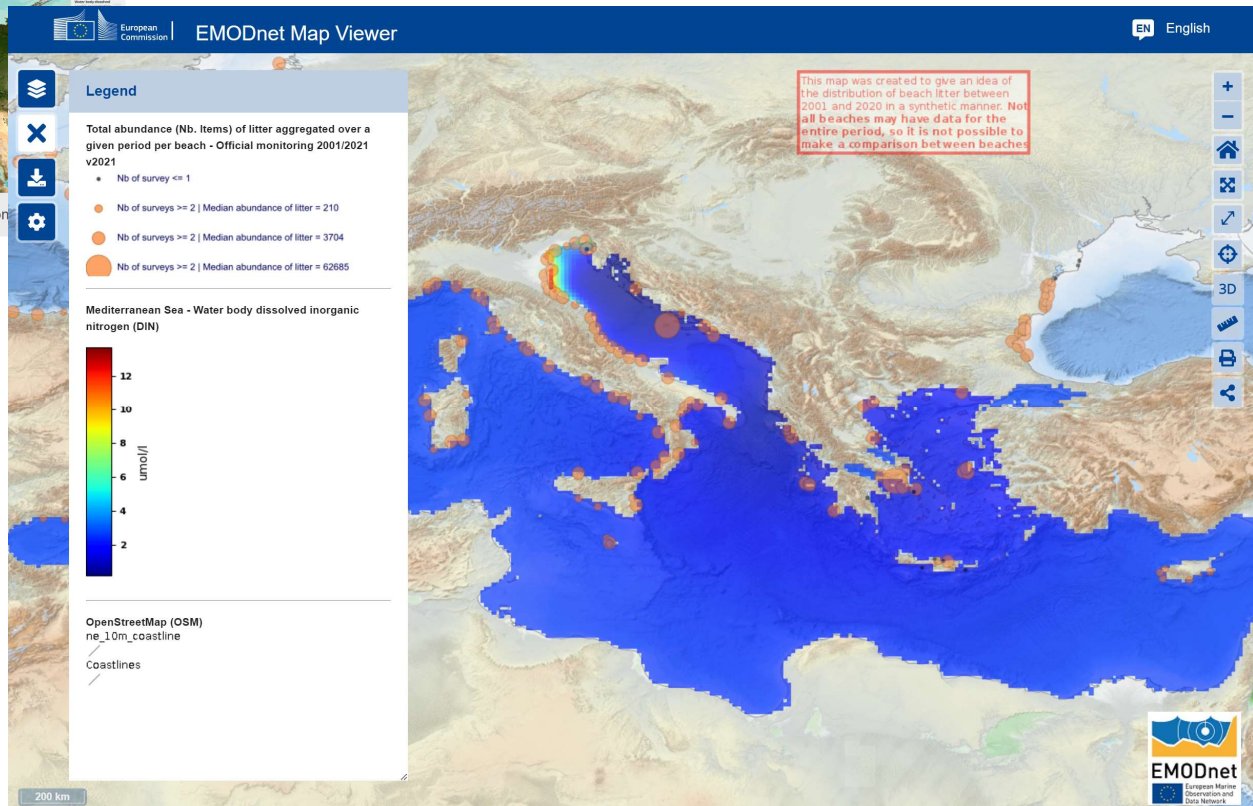
Numerous substances are considered; most of them are invisible to the naked eye and can only be detected and tracked using special sensors or by laboratory analysis. This evidence-based information is essential for understanding seawater chemistry and its natural and/or human-induced variations. It is also essential for identifying and taking action against spatio-temporal environmental changes that pose risks to marine ecosystems and human health.

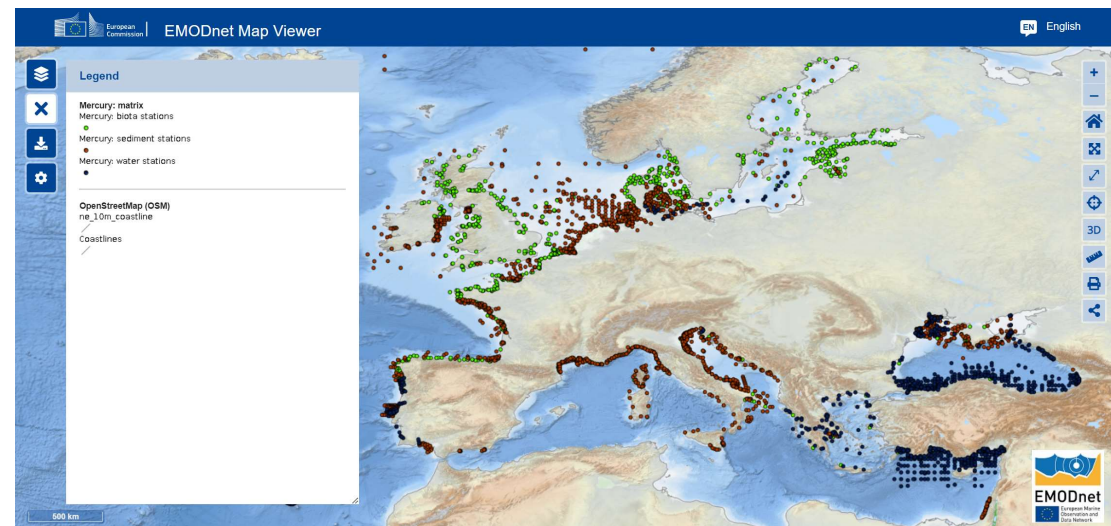
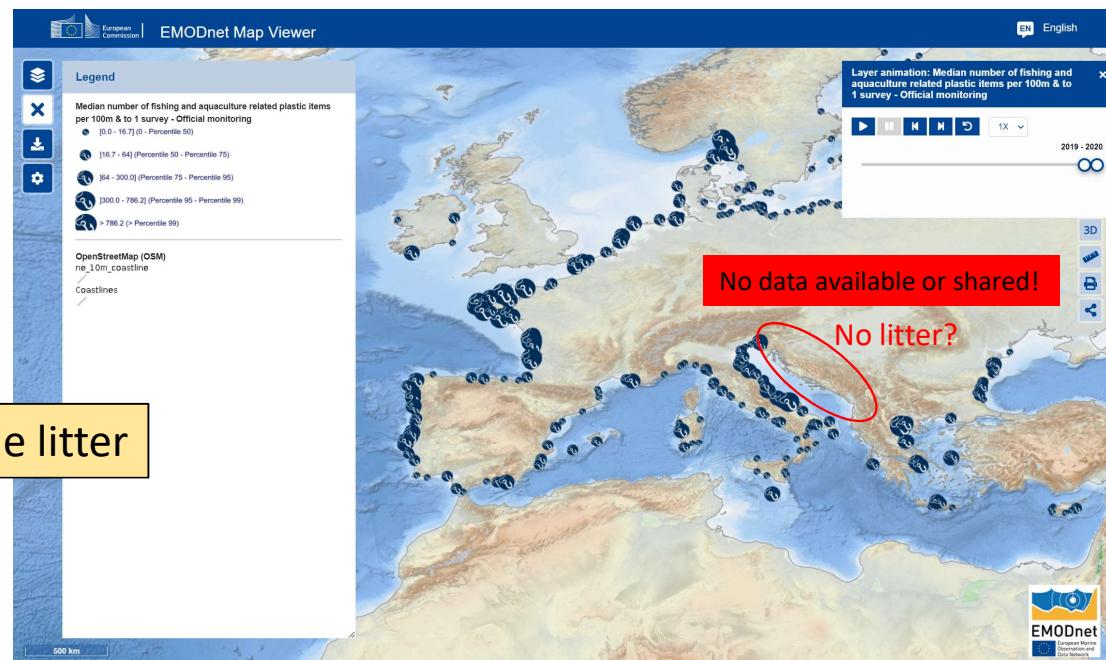
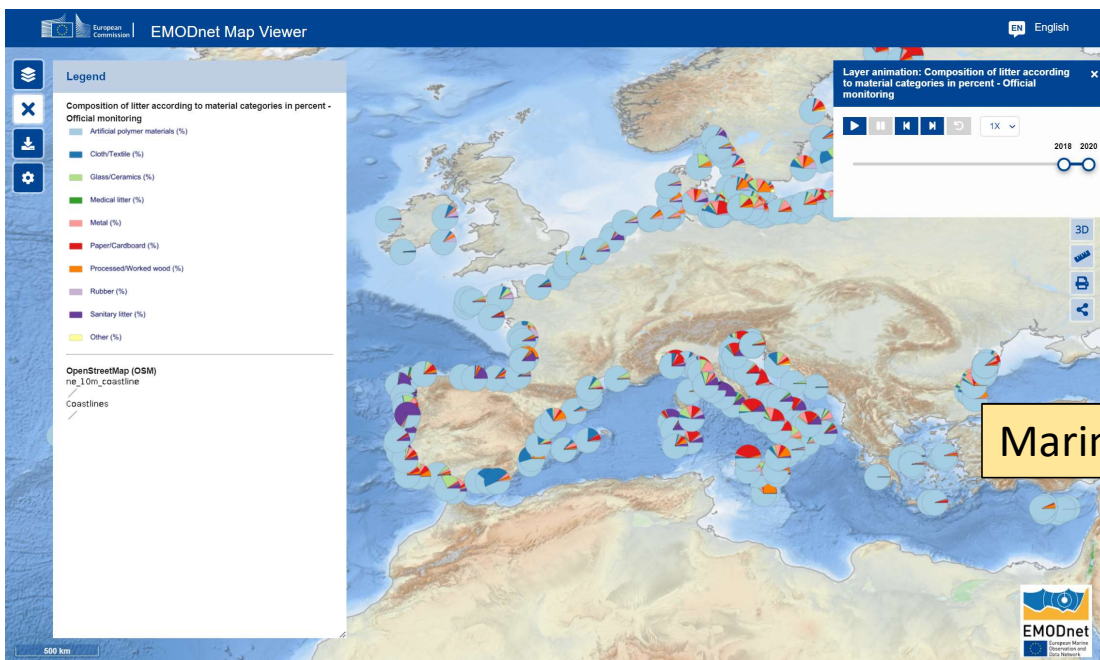
EMODnet Chemistry

- Beach Litter >
- Contaminants >
- Distribution of observations (CDI records) per data category (P36) and MSFD sea regions >
- Eutrophication (all European seas) >
- Eutrophication (by sea regions) >
- Eutrophication (coastal regions) >
- Seafloor Litter >



EMODnet Chemistry - Water body dissolved oxygen concentrations





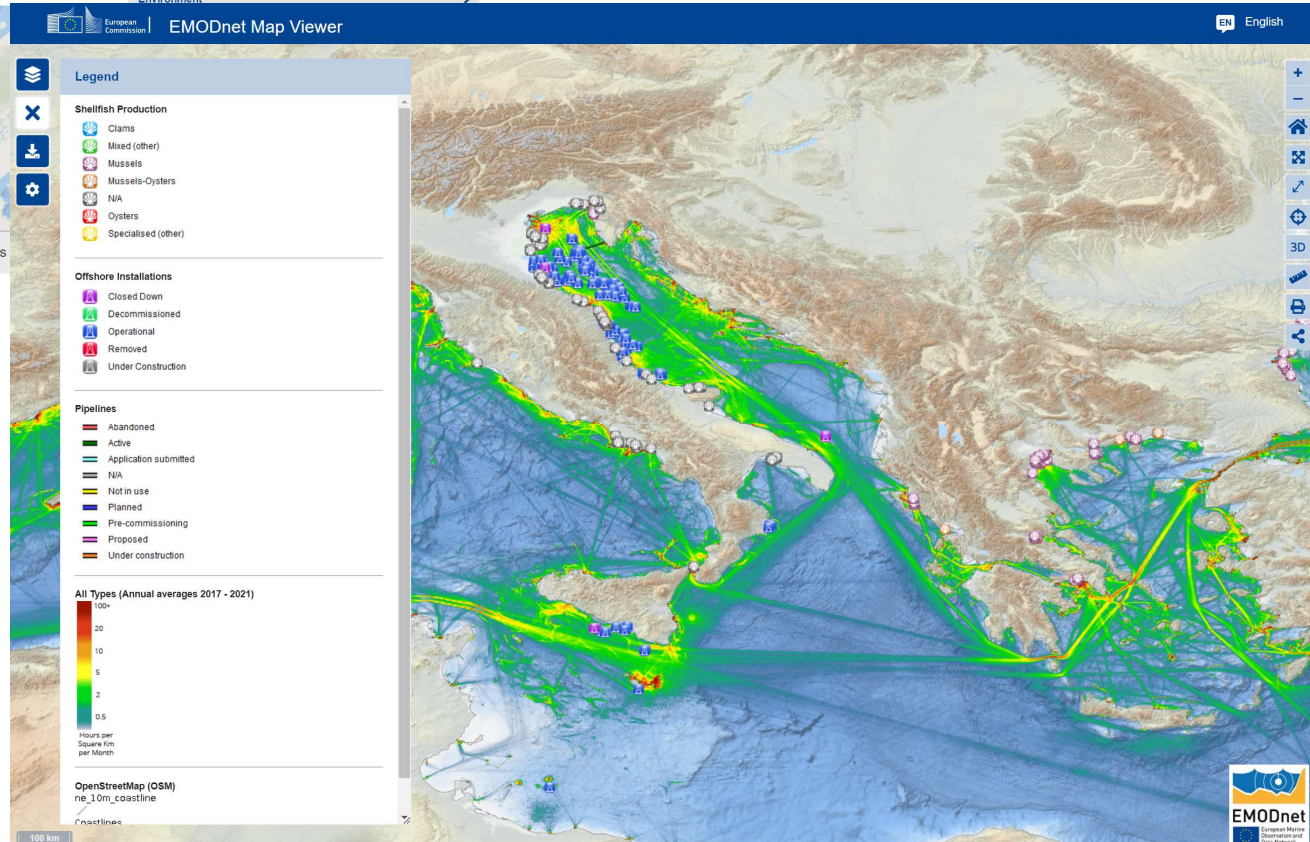
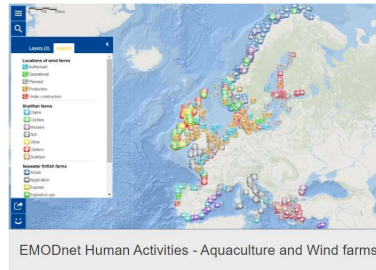
Chemical pollution

European Marine Observation and Data Network (EMODnet)

Human Activities

EMODnet Human Activities aims to facilitate access to existing marine data on activities carried out in EU waters, by building a single entry point for geographic information on 20 different themes.

Data on marine and maritime human activities are essential for effectively managing our seas and oceans in a sustainable way. This is becoming increasingly necessary due to growing population size and greater demand for resources, combined with advances in technology, resulting in a huge increase in the number and extent of marine and maritime human activities. These range from established activities such as fisheries and shipping to more recent activity such as construction of offshore energy facilities. Whilst there is considerable data available on these activities it is often only available on a per country, regional or sector-by-sector basis.



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