

UNCTAD's sector definition, indicators and data source for oceans based sectors for the Oceans Economy and Trade Strategies Project

- DRAFT Working document. Version 25 April 2018 -

UNCTAD identified 12 sectors relevant to a development strategy focusing on the ocean/blue economy. These 12 sectors comprise both goods and services. Each sector includes several products. To assess the trade potential for each these sectors, UNCTAD compiled a series of indicators. These indicators are comparable across sectors of the same unit of analysis and can share the same data sources. Indicators within the same sector may not be available at the same level of disaggregation.

The objective of this exercise is to help identify four sectors with highest trade potential, for which the consultant will produce more detailed factsheet under the UNCTAD-DOALOS Oceans Economy and Trade Strategies (OETS) Project. This identification requires a clear decision matrix. In addition to the indicators listed for each sector, some basic facts on both supply and demand trends and dynamics should be provided at the regional and world level. The list provided is illustrative and uses HS codes (2012), W120 Trade in Services Classification and the UN CPC V2.1 (2015) (only for services not fully covered by W120).

It is important to note that data on goods is more available and to a greater level of disaggregation. In the case of services, even if classifications exist, the gathering of data is usually much aggregated. In services, better data can be found in tourism, maritime transport, and ports services.

I. Goods Sectors

A. Marine Fisheries	Indicators
<p>Note 1: The sector comprises the following products in the Harmonized System (HS) 2012. Note that only 4-digit entries are reported. However, whenever possible the analysis should be undertaken at the 6-digit level.</p> <p>03.01 Live fish (excluding 0301.11, 0301.19)</p> <p>03.02 Fish, fresh or chilled, excluding fish fillets and other fish meat of heading 03.04</p> <p>03.03 Fish, frozen, excluding fish fillets and other fish meat of heading 03.04.</p>	<p>Note: When relevant and available, data should be collected over the last 5 year.</p> <ul style="list-style-type: none"> • Growth (volume, value and unit value): sector as whole and HS6 products • Exports <ul style="list-style-type: none"> ○ Share in total domestic and world exports: sector ○ Share in sectoral domestic and world exports: products ○ Revealed Comparative advantage (Balassa Index, Productivity estimate, CEPII RCA) ○ ITC Export Potential

03.04 Fish fillets and other fish meat (whether or not minced), fresh, chilled or frozen.

03.05 Fish, dried, salted or in brine; smoked fish, whether or not cooked before or during the smoking process; flours, meals and pellets of fish, fit for human consumption.

03.06 Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine; smoked crustaceans, whether in shell or not, whether or not cooked before or during the smoking process; crustaceans, in shell, cooked by steaming or by boiling in water, whether or not chilled, frozen, dried, salted or in brine; flours, meals and pellets of crustaceans, fit for human consumption

03.07 Molluscs, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine; smoked molluscs, whether in shell or not, whether or not cooked before or during the smoking process; flours, meals and pellets of molluscs, fit for human consumption.

03.08 Aquatic invertebrates other than crustaceans and molluscs, live, fresh, chilled, frozen, dried, salted or in brine; smoked aquatic invertebrates other than crustaceans and molluscs, whether or not cooked before or during the smoking process; flours, meals and pellets of aquatic invertebrates other than crustaceans and molluscs, fit for human consumption.

0511.91 Animal products; of fish or crustaceans, molluscs or other aquatic invertebrates and dead animals of chapter 3,

Note 2: The sector comprises the following products in the Standardized International Trade Classification (SITC), Revision 2 at 4-digits:

- 341
- 342
- 343
- 344
- 366
- 3501
- 3502

- Diversification potential path as suggested by the Atlas of economic complexity
 - Top 10 destination countries (share in sectoral exports)
 - Exports quality (Unit Values, Quality estimates from [Henn Papageorgiou, and Spatafora \(2013\)](#))
 - Imports
 - Share in total domestic and world imports: sector
 - Share in sectoral domestic and world imports: products
 - Top 10 source countries (share in sectoral imports)
 - Imports RCA (Balassa Index)
 - Import quality (Unit Values, Quality estimates from [Henn Papageorgiou, and Spatafora \(2013\), IMF, and Feenstra and Romalis](#))
 - Trade balance
 - Sector Employment
 - Number of workers
 - Share in total employment
 - Informal employment (number and share in sector workforce)
- Note: if possible information should be provided also by gender, age and level of education*
- FDI inflows and outflows in the sector (if available by mode and motivation)
 - Number of enterprises businesses in the sector (exporting versus non-exporting)
 - Market access conditions: Tariffs and Non-Tariff Measures (unctad.org/ntm).

- 3503
- 3504

Data Sources:

UNCTAD Stats

<http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx>

UNCTAD countries profiles

<http://unctadstat.unctad.org/CountryProfile/en-GB/index.html>

WTO trade profiles

<http://stat.wto.org/Home/WSDBHome.aspx?Language=>

First Global marine assessment:

http://www.un.org/depts/los/global_reporting/WOA_RegProcess.htm

ITC Export Potential Map

<http://exportpotential.intracen.org/#/home>

World Bank: World Development indicators

https://knoema.com/WBWDIGDF2017Sep/world-development-indicators-wdi?gclid=EAlaIqobChMlr7zhrpOd1wIVBDPTCh02zQ4LEAAYiAAEgleGPD_BwE

World Bank: WITS

<http://wits.worldbank.org>

Export Quality

<https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Export-Quality-in-Developing-Countries-40536>

Atlas of Economic Complexity

<http://atlas.cid.harvard.edu/>

National Statistics

Labor and Households Surveys

Enterprises Surveys

Customs Data on trade transactions (firm level data)

Atlas of Economic Complexity
<http://atlas.cid.harvard.edu/>

CEPII-Unit Values
http://www.cepii.fr/CEPII/en/bdd_modele/presentation.asp?id=2

Non-tariff measures :
[Unctad.org/ntm](http://unctad.org/ntm)

B. Aquaculture (Production)	Indicators
<p>Note1: Products as defined in FAO classification</p> <p>Note 2: The data are coded using the FAO International Standard Statistical Classification of Fishery Commodities (ISSCFC) which is derived from the United Nations Standard International Trade Classification, Revision 3 (SITC Rev. 3) and linked to the Harmonized Commodity Description and Coding System of the World Customs Organization (formerly the Custom Co-operation Council) and to the FAOSTAT classification</p>	<ul style="list-style-type: none"> • Contribution to GDP: sector and products (Harvested vs farmed product) • Growth (volume and value): sector and products (Harvested vs farmed product) • Share of certified production (both wild and aquaculture) • Species coverage (produced and exported as reported in A) • Number of aquaculture facilities/aquaculture output • Number of fishermen/fishing vessels • Status of key stocks within EEZs • Share of internal consumption vs export • Share of industrial vs small scale, artisanal and subsistence fishing
<p>Data Sources:</p> <p style="text-align: center;">FAO http://www.fao.org/fishery/statistics/en</p> <p style="text-align: center;">FAO State of World fisheries and aquaculture 2016 http://www.fao.org/3/a-i5555e.pdf</p> <p style="text-align: center;">FAO Fishermen http://www.fao.org/fishery/statistics/global-fishers/3/en</p> <p style="text-align: center;">Standards in the blue economy http://www.iisd.org/ssi/standards-and-the-blue-economy/</p>	

C. Seafood processing	Indicators
<p>Note 1: The sector comprises the following products in the Harmonized System (HS) 2012, both at 4-digits and 6-digits.</p> <p>1603. Extracts and juices of fish or crustaceans, molluscs or other aquatic invertebrates</p> <p>16.04 Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs</p> <p>16.05 Crustaceans, molluscs and other aquatic invertebrates, prepared and preserved</p> <p>2301.20 Flours, meals and pellets, of fish or crustaceans, molluscs or other aquatic invertebrates unfit for human consumption</p> <p>2501.00 Salt (Table salt including sea salt)</p> <p>Note 2: The sector comprises the following products in the Standardized International Trade Classification (SITC), Revision 2 at 4-digits:</p> <ul style="list-style-type: none"> • 141 • 371 • 372 • 8142 	<ul style="list-style-type: none"> • Growth (volume and value): sector and products • Exports <ul style="list-style-type: none"> ○ Share in total domestic and world exports: sector ○ Share in sectoral domestic and world exports: products ○ Revealed Comparative advantage (Balassa Index, Productivity estimate, CEPII RCA) ○ ITC Export Potential ○ Diversification potential path as suggested by the Atlas of economic complexity ○ Top 10 destination countries (share in sectoral exports) ○ Exports quality (Unit Values, Quality estimates from Henn Papageorgiou, and Spatafora (2013)) • Imports <ul style="list-style-type: none"> ○ Share in total domestic and world imports: sector ○ Share in sectoral domestic and world imports: products ○ Top 10 source countries (share in sectoral imports) ○ Imports RCA (Balassa Index) ○ Import quality (Unit Values, Quality estimates from Henn Papageorgiou, and Spatafora (2013)) • Trade balance • Sector Employment <ul style="list-style-type: none"> ○ Number of workers ○ Share in total employment ○ Informal employment (number and share in sector workforce) <p><i>Note: if possible information should be provided also by gender, age and level of education</i></p> • FDI inflows and outflows in the sector (if available by mode and motivation) • Number of enterprises businesses in the sector (exporting versus non-exporting) • Level of value addition • Market access conditions: Tariffs and Non-Tariff Measures (unctad.org/ntm).

Data Sources:

UNCTAD Stats

<http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx>

UNCTAD countries profiles

<http://unctadstat.unctad.org/CountryProfile/en-GB/index.html>

WTO trade profiles

<http://stat.wto.org/Home/WSDBHome.aspx?Language=>

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ITC Export Potential Map

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World Bank: World Development indicators

https://knoema.com/WBWDIGDF2017Sep/world-development-indicators-wdi?gclid=EAlaIqobChMir7zhrpOd1wIVBDPTCh02zQ4LEAAYiAAEgleGPD_BwE

World Bank WITS

<http://wits.worldbank.org>

National Statistics

Labor and Households Surveys

Enterprises Surveys

Customs Data on trade transactions (firm level data)

Atlas of Economic Complexity

<http://atlas.cid.harvard.edu/>

CEPII-Unit Values

http://www.cepii.fr/CEPII/en/bdd_modele/presentation.asp?id=2

Non-tariff measures :

Unctad.org/ntm

D. Blue BioTrade	Indicators
<p>Note 1: The sector comprises the following products in the Harmonized System (HS) 2012, both at 4-digits and 6-digits.</p> <p>Note 2: sustainably harvested marine based extracts, ingredients and raw material (sponges, fish oils and fats, algae and seaweeds based products - edible and not edible) for the food, cosmetic, phytomedicine and jewel making (when part of living organisms such as pearls and corals)</p> <p>0509 Natural sponges of animal origin</p> <p>1504 Fats and oils and their fractions of fish or marine mammals; whether or not refined, but not chemically modified</p> <p>1504.10 Fish-liver oils and their fractions</p> <p>1504.20 Fats and oils and their fractions, of fish, other than liver oils</p> <p>1212.21 Seaweeds and other algae fit for human consumption</p> <p>1212.29 Seaweeds and other algae other</p> <p>20.08 Fruit, nuts and other edible parts of plants, otherwise prepared or preserved, whether or not containing added sugar or other sweetening matter or spirit, not elsewhere specified or included.</p> <p>2008.99 other</p> <p>Ornamental fish (live):</p> <p>0301.1100-- Freshwater</p> <p>0301.19 --Other</p>	<ul style="list-style-type: none"> • Growth (volume and value): sector and products • Exports <ul style="list-style-type: none"> ○ Share in total domestic and world exports: sector ○ Share in sectoral domestic and world exports: products ○ Revealed Comparative advantage (Balassa Index, Productivity estimate, CEPII RCA) ○ ITC Export Potential ○ Diversification potential path as suggested by the Atlas of economic complexity ○ Top 10 destination countries (share in sectoral exports) ○ Exports quality (Unit Values, Quality estimates from Henn Papageorgiou, and Spatafora (2013)) • Imports <ul style="list-style-type: none"> ○ Share in total domestic and world imports: sector ○ Share in sectoral domestic and world imports: products ○ Top 10 source countries (share in sectoral imports) ○ Imports RCA (Balassa Index) ○ Exports quality (Unit Values, Quality estimates from Henn Papageorgiou, and Spatafora (2013)) • Trade balance • Sector Employment <ul style="list-style-type: none"> ○ Number of workers ○ Share in total employment ○ Informal employment (number and share in sector workforce) <p><i>Note: if possible information should be provided also by gender, age and level of education</i></p> • FDI inflows and outflows in the sector (if available by mode and motivation) • Number of enterprises businesses in the sector (exporting versus non-exporting) • Market access conditions: Tariffs and Non-Tariff Measures (unctad.org/ntm).

711709 Natural and cultured pearls

050800 Coral and similar materials

Data Sources:

UNCTAD Stats

<http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx>

UNCTAD countries profiles

<http://unctadstat.unctad.org/CountryProfile/en-GB/index.html>

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http://www.cepii.fr/CEPII/en/bdd_modele/presentation.asp?id=2

Non-tariff measures :

Unctad.org/ntm

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E. Ships and parts manufacture	Indicators
<p>Note 1: The sector comprises the following products in the Harmonized System (HS) 2012.</p> <p>8901 Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods</p> <p>8902 Fishing vessels, factory ships and other vessels; for processing</p> <p>8905 Light-vessels, fire-floats, dredgers, floating cranes, other vessels; the navigability of which is subsidiary to main function; floating docks, floating submersible drilling, production platforms</p> <p>8906 Vessels; other, including warships and lifeboats, other</p> <p>Note 2: The sector also comprises the following products in the Harmonized System (HS) 2017 at 6-digits</p> <p>840610 Turbines; steam and other vapour turbines, for marine propulsion</p> <p>840721 Engines; outboard motors for marine propulsion, spark-ignition reciprocating or rotary internal combustion piston engines</p> <p>840729 Engines; for marine propulsion, (other than outboard motors), spark-ignition reciprocating or rotary internal combustion piston engines</p> <p>840810 Engines; for marine propulsion, compression-ignition internal combustion piston engines (diesel or semi-diesel engines)</p>	<ul style="list-style-type: none"> • Growth (volume and value): sector and products • Exports <ul style="list-style-type: none"> ○ Share in total domestic and world exports: sector ○ Share in sectoral domestic and world exports: products ○ Revealed Comparative advantage (Balassa Index, Productivity estimate, CEPII RCA) ○ ITC Export Potential ○ Diversification potential path as suggested by the Atlas of economic complexity ○ Top 10 destination countries (share in sectoral exports) ○ Exports quality (Unit Values, Quality estimates from Henn Papageorgiou, and Spatafora (2013)) • Imports <ul style="list-style-type: none"> ○ Share in total domestic and world imports: sector ○ Share in sectoral domestic and world imports: products ○ Top 10 source countries (share in sectoral imports) ○ Imports RCA (Balassa Index) ○ Exports quality (Unit Values, Quality estimates from Henn Papageorgiou, and Spatafora (2013)) • Trade balance • Sector Employment <ul style="list-style-type: none"> ○ Number of workers ○ Share in total employment ○ Informal employment (number and share in sector workforce) <p><i>Note: if possible information should be provided also by gender, age and level of education</i></p> • FDI inflows and outflows in the sector (if available by mode and motivation) • Number of enterprises businesses in the sector (exporting versus non-exporting) • Market access conditions: Tariffs and Non-Tariff Measures (unctad.org/ntm).
Data Sources:	

UNCTAD Stats

<http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx>

UNCTAD countries profiles

<http://unctadstat.unctad.org/CountryProfile/en-GB/index.html>

WTO trade profiles

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ITC Export Potential Map

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World Bank: World Development indicators

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World Bank WITS

<http://wits.worldbank.org>

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Non-tariff measures :

Unctad.org/ntm

II. Services Sectors

F. Marine and coastal Tourism	Indicators
<p>Note 1: Reference classification: WTO W120</p> <p>9. TOURISM AND TRAVEL RELATED SERVICES</p> <p>A. Hotels and restaurants (incl. catering) 641-643</p> <p>B. Travel agencies and tour operators services 7471</p> <p>C. Tourist guides services 7472</p> <p>D. Other</p>	<p style="text-align: center;"><i>Generic</i></p> <ul style="list-style-type: none"> • Contribution to GDP: sector and products • Growth (volume and value): sector • Exports <ul style="list-style-type: none"> ○ Share in total domestic and world exports: sector ○ Share in sectoral domestic and world exports: sub-sectors ○ Top 10 destination countries (share in sectoral exports) • Imports <ul style="list-style-type: none"> ○ Share in total domestic and world imports: sector ○ Share in sector domestic and world imports: products ○ Top 10 source countries (share in sectoral imports) • Sector Employment <ul style="list-style-type: none"> ○ Number of workers ○ Share in total employment ○ Informal employment (number and share in sector workforce) <p><i>Note: if possible information should be provided also by gender, age and level of education</i></p> <ul style="list-style-type: none"> • Firms: number of firms in the sector, size (sales and employees) distribution, share of exporting firms • FDI inflows and outflows in the sector <p style="text-align: center;"><i>Sector Specific</i></p> <ul style="list-style-type: none"> • Travel data, tourist arrivals and tourists receipts • Share of tourists for leisure and for coastal activities • Number of hotels a 50 Km from the coast • Coastal areas open for touristic investment (if available) • Disaggregated data for type of tourism (sun and sea, cruise, coastal ecotourism, sport, recreation, cultural, diving, marine mammal and bird watching and recreational boating) • Share of marine and coastal ecotourism vs. tourism (if available) <ul style="list-style-type: none"> • Marine protected area vs. total EEZ

Data Sources:	
<p>UNCTAD-WTO ITC annual trade in services dataset https://www.wto.org/english/res_e/statis_e/trade_datasets_e.htm UNCTAD http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx UNWTO highlights (2017) http://mkt.unwto.org/publication/unwto-tourism-highlights UNWTO data http://www2.unwto.org/content/data World Travel and Tourism Council report 2016 https://www.wttc.org/-/media/files/reports/economic%20impact%20research/regions%202016/world2016.pdf</p>	

G. Trade in fisheries services	Indicators
<p>Note 1: Reference classification: WTO W120</p> <p>F Other business services g. Services incidental to fishing</p> <p>Note 2: UN CPC V2.1 2015</p> <p>8615. Support and operation services to fishing (and aquaculture)</p>	<p><i>Generic indicators (as above in marine and costal tourism)</i></p> <p><i>Specific sector indicators</i></p> <ul style="list-style-type: none"> • Number of licensed operators • Internal sales • Variety of services provided • Foreign participation in the sector
No source of data identified at the global level	

H. Maritime transport	Indicators
<p>Note 1: Reference classification: WTO W120</p> <p>Note 2: use indicators in UNCTAD maritime transport country profile and UNCTADstat Database</p>	<p><i>Generic indicators (as above in marine and costal tourism)</i></p> <p><i>Specific sector indicators</i></p> <ul style="list-style-type: none"> • Seaborne trade volumes (levels; growth rates and country grouping)

<p>A. <u>International Maritime Transport Services</u></p> <p>a. Passenger transportation 7211</p> <p>b. Freight transportation 7212</p> <p>c. Rental of vessels with crew 7213</p> <p>d. Maintenance and repair of vessels 8868</p> <p>e. Pushing and towing services 7214</p> <p>f. Supporting services for maritime transport 745</p>	<p>shares)</p> <ul style="list-style-type: none"> • Container port throughput • Carrying capacity (total and per type of ship) • Sizes of the fleet (also by type of ship) • Liner connectivity index (bilateral and national) • Info on GHG emissions from transport • Seafaring jobs
<p>Data Sources:</p> <p style="text-align: center;">UNCTAD-WTO ITC annual trade in services dataset https://www.wto.org/english/res_e/statistics_e/trade_datasets_e.htm</p> <p style="text-align: center;">UNCTAD Review of Maritime Transport http://unctad.org/en/Pages/Publications/Review-of-Maritime-Transport-(Series).aspx</p> <p style="text-align: center;">UNCTADstat maritime database http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx</p> <p style="text-align: center;">UNCTAD countries profiles: http://unctadstat.unctad.org/CountryProfile/en-GB/index.html</p> <p style="text-align: center;">IMO Statistics: http://www.imo.org/en/KnowledgeCentre/ShipsAndShippingFactsAndFigures/Statisticalresources/Pages/default.aspx</p> <p style="text-align: center;">BIMCO-ICS Manpower Report: https://www.bimco.org</p> <p style="text-align: center;">WB Stats: World Development indicators https://knoema.com/WBWDIGDF2017Sep/world-development-indicators-wdi?gclid=EAlaIqobChMlr7zhrpOd1wIVBDPTCh02zQ4LEAAYAAAEgIeGPD_BwE</p>	

I. Marine Biotechnology and bioprospecting	Indicators
<p>Note : Reference classification: WTO W120</p> <p>C. <u>Research and Development Services</u></p> <p>a. R&D services on natural sciences 851</p>	<ul style="list-style-type: none"> • Position in WIPO's Global innovation index • Share of R&D vs. GDP • Share of R&D (public private) in marine biotechnology

<p>c. Interdisciplinary R&D services 853</p> <p>1. Business services</p> <p>F. Other business services</p> <p>e. technical testing and analysis (CPC 8676)</p> <p>m. Related scientific and technical consulting services (CPC 8675)</p>	<ul style="list-style-type: none"> • Number of marine research projects, centres and vessels • Member of CBD and Nagoya and existence of ABS law • Number of patents on marine based inventions • Income for licenses
<p>Data Sources:</p> <p style="text-align: center;">Innovation index http://www.wipo.int/publications/en/details.jsp?id=4193</p> <p style="text-align: center;">Word development indicators https://knoema.com/WBWDIGDF2017Sep/world-development-indicators-wdi?gclid=EAlaIqobChMlr7zhrpOd1wIVBDPTCh02zQ4LEAAYiAAEgleGPD_BwE</p> <p style="text-align: center;">UNESCO R&D indicators http://uis.unesco.org/apps/visualisations/research-and-development-spending/</p> <p style="text-align: center;">http://www.wipo.int/ipstats/en/statistics/country_profile/</p> <p style="text-align: center;">International research vessels https://www.researchvessels.org/</p> <p style="text-align: center;">International Oceanographic Commission http://www.ioc-unesco.org/</p>	

<p>J. Port and related logistical services</p>	<p>Indicators</p>
<p>Note: Reference classification: WTO W120</p> <p>H. <u>Services auxiliary to all modes of transport</u></p> <p>a. Cargo-handling services 741</p> <p>b. Storage and warehouse services 742</p> <p>c. Freight transport agency services 748</p> <p>d. Other 749</p>	<p><i>Generic indicators (as above in marine and coastal tourism)</i></p> <ul style="list-style-type: none"> • Vessel ports calls by region and type (bulk cargo, containers, dry cargo, passengers, tankers, etc.). • Container port throughput • Average port waiting time (all traffic) in days • Position in logistical performance index • Level of implementation of WTO Trade Facilitation Agreement • Level of intermodal connectivity (land, train and air) (if available)

	<ul style="list-style-type: none"> • Cargo clearance time in ports • Transport costs (port charges)
<p>Data Sources:</p> <p style="text-align: center;">World Bank logistical performance index https://lpi.worldbank.org/international/global</p> <p style="text-align: center;">UNCTAD Review of Maritime Transport http://unctad.org/en/Pages/Publications/Review-of-Maritime-Transport-(Series).aspx</p> <p style="text-align: center;">UNCTADstat maritime database http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx</p> <p style="text-align: center;">National transport data observatories (but not available worldwide)</p> <p style="text-align: center;">Trade Facilitation http://www.unescap.org/resources/escap-oecd-handbook-indicators-trade-facilitation</p>	

K. Coastal and marine area management, protection and restoration + Carbon sequestration	Indicators
<p>Note 1: Reference classification: WTO W120</p> <p>6. ENVIRONMENTAL SERVICES</p> <p>A. Sewage services 9401</p> <p>B. Refuse disposal services 9402</p> <p>C. Sanitation and similar services 9403</p> <p>Note 2: UN CPC V2.1 2015</p> <p>839 Other professional, technical and business services</p> <p>83931 Environmental consulting services</p>	<ul style="list-style-type: none"> • Provision, export and import of coastal management, protection and restoration • Providers of marine biomass measurement services • Number of carbon sequestration and restoration project • Number of existing and future marine and coastal related REDD+ projects • Total of GHG storage in REDD + projects

<p>94 Sewage and waste collection, treatment and disposal and other environmental protection services</p> <p>944 Remediation services. (This group includes remediation services, i.e. services dealing with the effects of contamination caused by operation of facilities or by accidents. These services aim to eliminate or contain any existing contamination of the soil, water or air and have to be performed on site.</p> <p>9442 Containment, control and monitoring services and other site remediation services n.e.c.</p> <p>949 Other environmental protection services n.e.c.</p> <p>96422 Nature reserve services including wildlife preservation services</p>	
<p>Data Sources:</p> <p style="text-align: center;">National Sources</p>	

III. Energy as a joint goods and services sector

L. Ocean energy & renewable energy (in this case)	Indicators
<p>Note: No classification available, sources list below based on IPCC references</p> <p>List of applicable technologies and related goods</p> <p>Marine and coastal off shore wind Wave, Tidal and Ocean Current Technologies Submarine Geothermal Energy Marine biomass based biofuels Chemical Potential of Seawater</p> <p>General classification for energy related services in the WTO (W120)(only those applicable to non-fuel based energy generation). W120 is not very good in providing a classification on energy. It is probable that data can only be found at the producer level, if any.</p>	<ul style="list-style-type: none"> • Import dependency (%) (e.g. fuels) • Coastal/offshore wind electricity production • Submarine geothermal electricity/heat production • Waves, tidal and current electricity production • Algae-based and other marine biomass biofuel production (litres) • Oceans-sourced electricity as a percentage of total electricity consumption • Incentives for investing and produce oceans-based energy enacted? (Yes/No - if yes please detail)

- Related services (transport, construction, consulting and distribution and engineering)
- Services incidental to energy distribution (CPC 887)

Data Sources:

UNCTAD-WTO ITC annual trade in services dataset

https://www.wto.org/english/res_e/statis_e/trade_datasets_e.htm

IRENA data and country profiles:

<http://resourceirena.irena.org/gateway/dashboard/>

<http://resourceirena.irena.org/gateway/dashboard/?topic=18&subTopic=45>

IEA statistics:

<https://www.iea.org/statistics/>