Sectoral perspectives and objective-based approaches to EGS:
Biodiversity-based products

WTO Trade and Environmental Sustainability Structured Discussions (TESSD)

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Challenges for Biodiversity conservation and sustainable use

- **Biodiversity loss (genetic, species & ecosystems):** The world has seen an average 68% drop in mammal, bird, fish, reptile, and amphibian populations since 1970

- **Land change (expansion of agriculture, aquaculture and urbanization):** Increased demand for more agricultural land is one of the main drivers of habitat loss and degradation

- **Negative incentives:** fuel, unsustainable agriculture and harmful fisheries subsidies.

- **Over-exploitation of wild species: poor implementation of CITES and lack of regulation and traceability**. Between 2016 and 2020, direct global exports of CITES-listed animal and plan species is estimated at $11.3 billion annually (forthcoming CITES, 2022).

- **Ecosystem pollution:** plastics, chemicals, heavy metals, garbage, and sound, etc.

How can trade in biodiversity assist in responding to these challenges?

- **Implementing positive incentives providing benefits for nature and human livelihoods** (ABS, BioTrade, non-intrusive economic activities in protected areas, REDD+, etc)

- **Phasing out negative incentives** (e.g., certain forms of subsidies)

- **Enable sustainable, legal and traceable trade:**

  - By reducing tariffs & non-tariff measures on sustainable harvested/produced biodiversity-based goods (being the later the most relevant one – e.g., novel foods case). Food, marine and natural products face more tariff peaks & face 2.5 times more NTMs than industrial products.
  - Liberalizing organic agricultural products.
  - In both cases a PPM issue.

How can trade in biodiversity assist in responding to these challenges?

- **Make use of voluntary sustainability standards if there is business buy-in, positive consumer and market signals** (we may need harmonization to many modalities = consumer confusion)

- **Price, benefits sharing with sustainability requirements depends on the type of value chain:**
  - Low for food and handicrafts
  - High in inputs for the cosmetics and design
  - Resistance by pharmaceutical companies to apply & comply with ABS (Nagoya Protocol).

Possible approaches for mainstreaming biodiversity-based products

- A basket approach (cumulative):
  - **Wild biodiversity:** trade in primary products that are legally and sustainably sourced considering CITES
  - **Biological/natural farming**: farmed inputs and outputs (including aquaculture) under sustainable and/or organic criteria
  - **Natural ingredients**: legally, sustainably sourced and no additives.
  - **Genetic resources, parts of species and derivatives**: legally obtained considering CBD and Nagoya Protocol

UNCTAD approach to measure trade in biodiversity as a first step

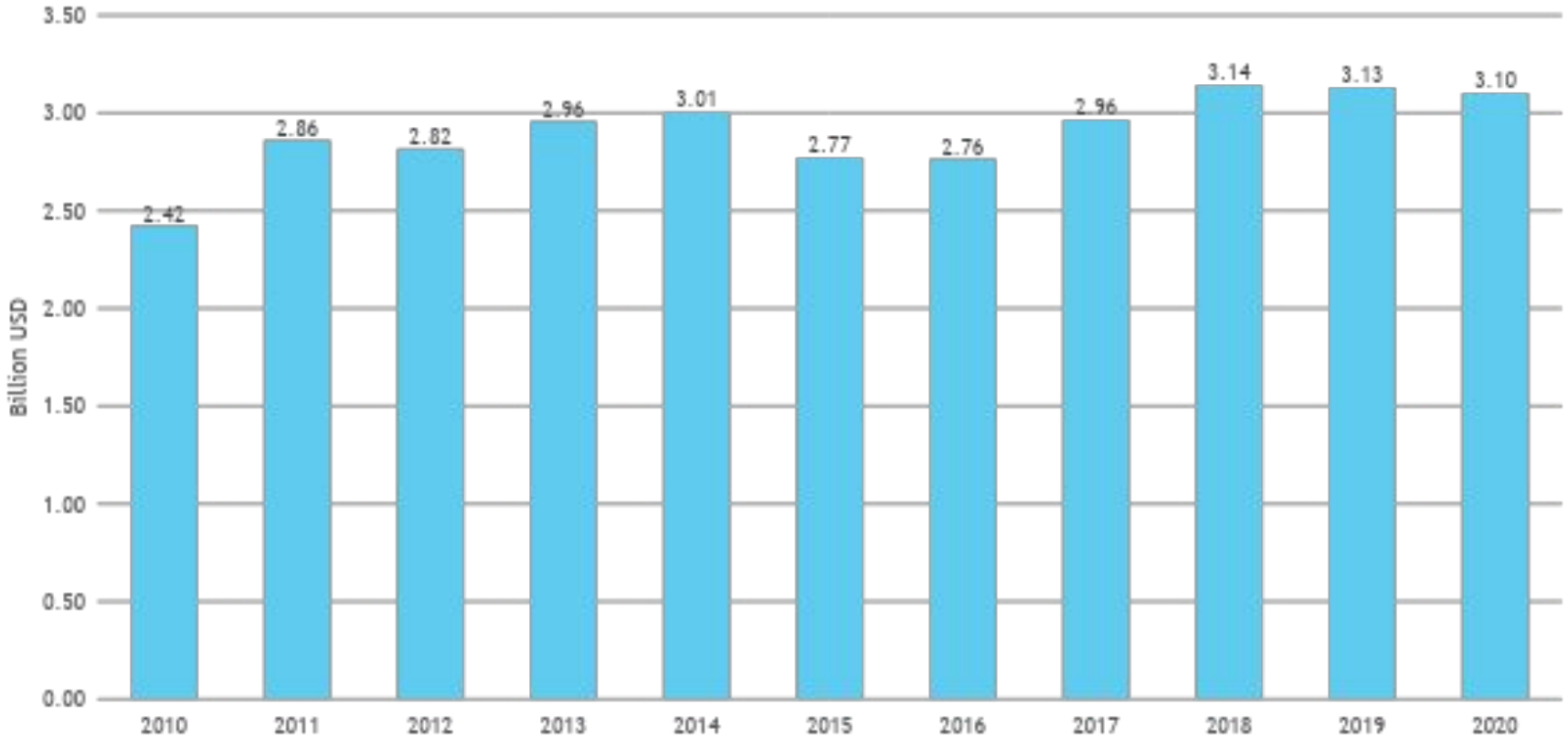
- Trade in biodiversity-based goods
- Trade in ocean-based goods and services

UNCTAD's Trade and Biodiversity (TraBio) product classification

- **Covers trade in biodiversity-based goods with a biological origin ≠ "natural")**
- Based on HS codes at the 6 digit level but a different classification:
- Tree structure, similar to HS classification:
  - 13 broad ***groups*** (e.g. live animals and plants, food and beverages, agricultural inputs, etc.)
  - 86 ***subgroups*** (e.g. for agricultural inputs: seeds, straw and husks, feed)

A	Live animals and plants
B	Food and beverages
C	Agricultural inputs
D	Natural ingredients
E	Perfumery, cosmetics, personal care, and room care preparations
F	Pharmaceutical products
G	Hides, skins, leather, furskins, and products thereof
H	Natural fibres and articles thereof
I	Wood and derived products
J	Vegetable plaiting materials and articles thereof
K	Other products of animal origin
L	Other products of plant origin
M	Miscellaneous

Biodiversity-based products: export trends 2010 - 2020 ($): $3.14 Trillion in total trade at peaks



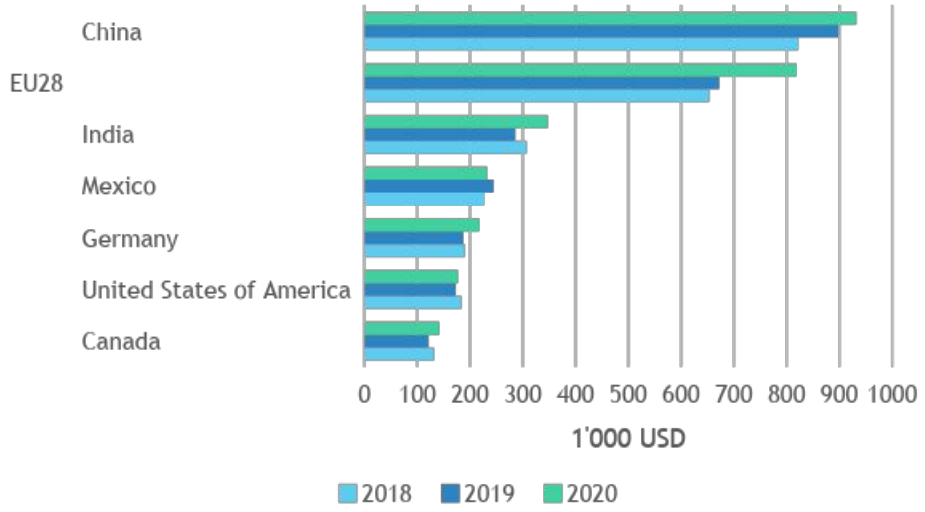
Source: UNCTADstat

Note: Figures for 2020 could be larger as several economies did not report their exports for that period yet

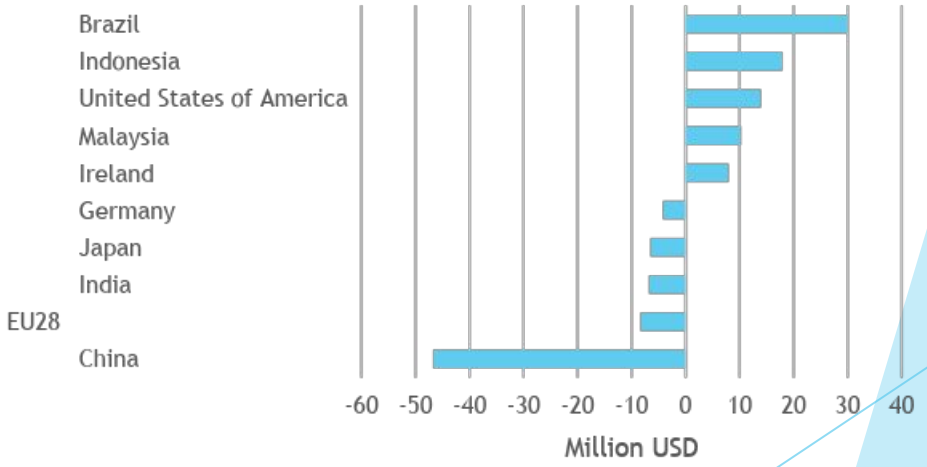
Main biodiversity-based products exporters:

- Leading exporters in medicinal plants (2018-20) are China, EU and India, followed by individual EU countries and Brazil
- The countries with the most outstanding trade balance in natural ingredients, both positive and negative are presented on the right. Brazil and Indonesia are the largest net exporters while China and the EU the largest net importers of natural ingredients
- Thanks to the database's built-in RCA metric, it is possible to identify the products in which economies have a comparative advantage. E.g., SIDS have a very strong comparative advantage in fish & fish preparations, poultry, spices and coffee.

Leading exporters, Medicinal plants Subgroup, 2018-20

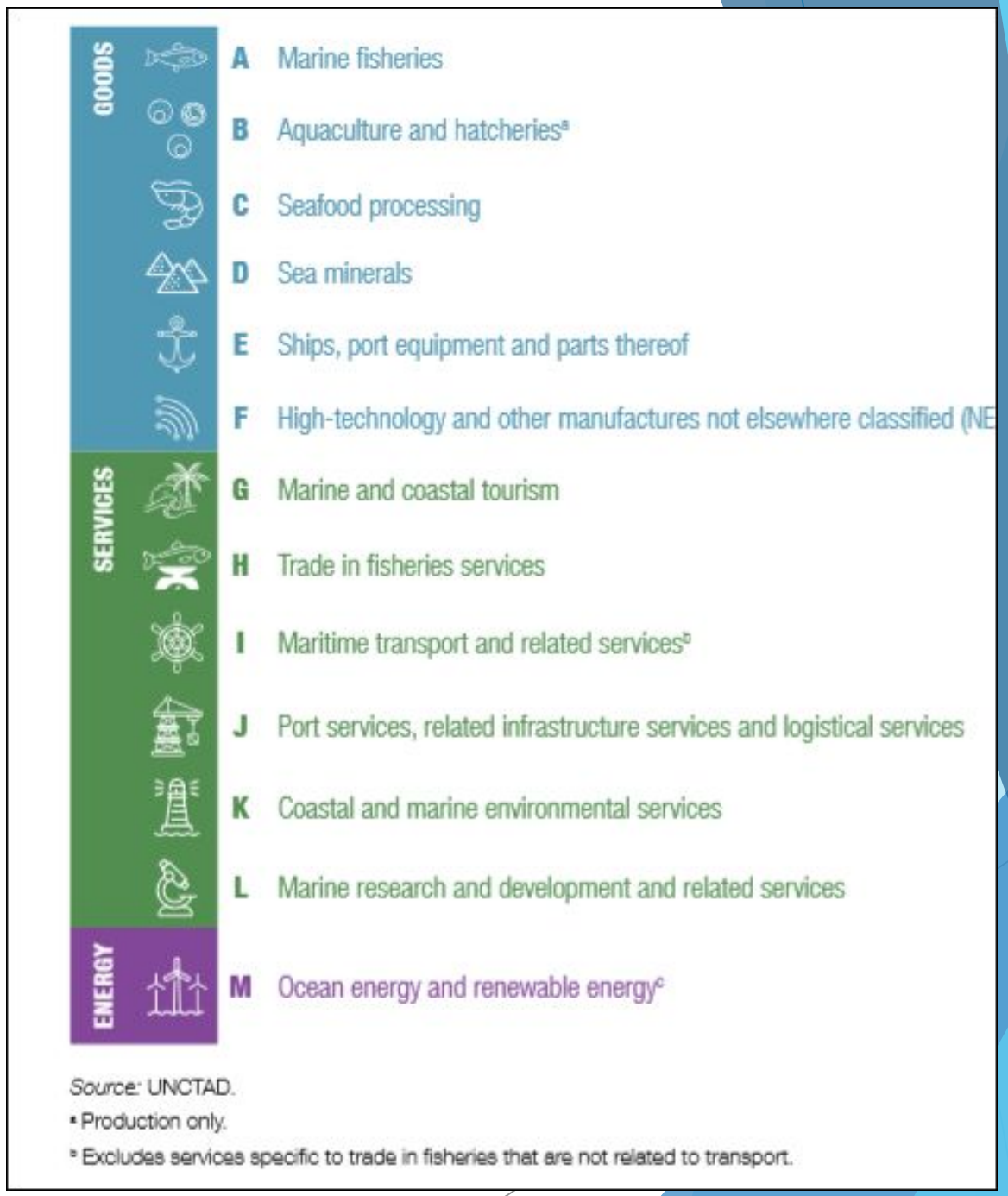


Largest positive and negative trade balance, Natural ingredients Group, 2018-20 average



What are ocean-based goods and services in UNCTAD 2020 Classification?

- **Marine or coastal origin**, harvested, or sourced form the oceans - even if processed in boats or in land
- Includes **marine living organisms in *lato sensu*** (e.g., genetic recourses, species, their parts & derivatives)
- It includes **certain minerals** such as sands and salts (but no seabed mining or offshore oil and gas)
- **Tradable goods and services** (it does not include ecosystem services).
  - Subject to measurable flows under HS; W120 and CPC codes.
- **It does not include government services** (e.g., coastguard services)
- How to differentiate form marine and coastal origin from land origin?
    - **Use of coefficients** (e.g., brine salt vs rock salt).
- Problem of single use/impact remains in many ocean-based goods



UNCTAD's 2020 Oceans Economy Classification

The classification is structured around three categories: Goods, Services and Energy.

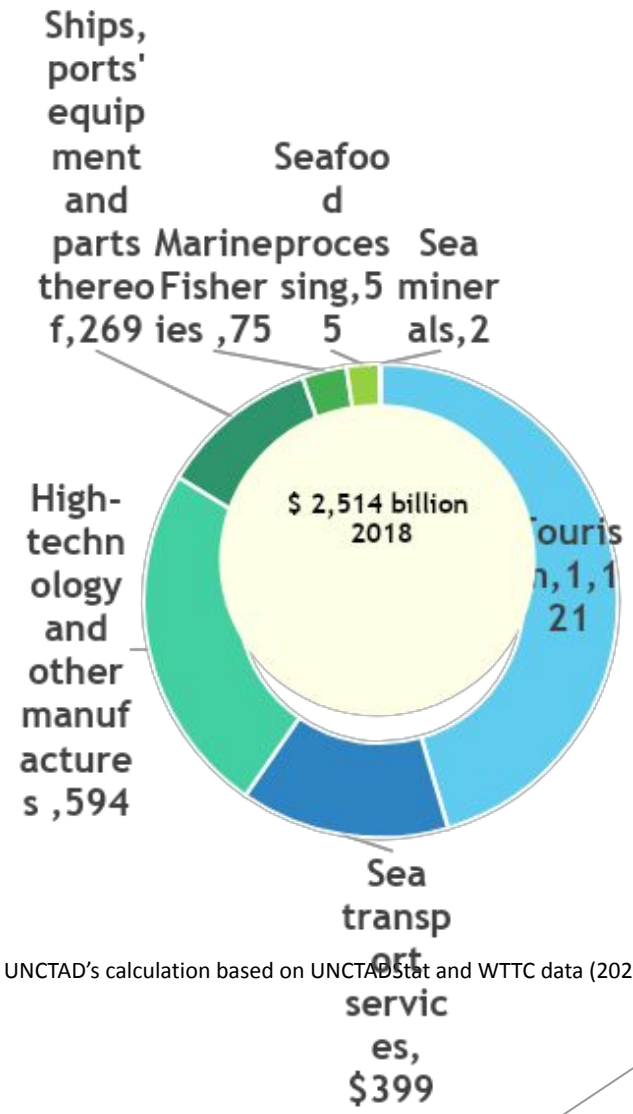
Each category is divided into chapters (A-M) and each chapter is further sub-divided into a three-digit level of detail covering a total of 52 subsectors.

The classification is reflected in Harmonized tariff System (HS) codes at 6-digit level.

This system measures flows, value and volumes but not sustainability

Sustainability is assessed by using several criteria:

- UNCTAD Ocean's pillars
- UN COMPACT Sustainable Oceans Principles
- BioTrade Principles and criteria
- Diverse Voluntary Sustainability Standards



Source: UNCTAD's calculation based on UNCTADStat and WTTC data (2020).

Results of the application of the classification globally

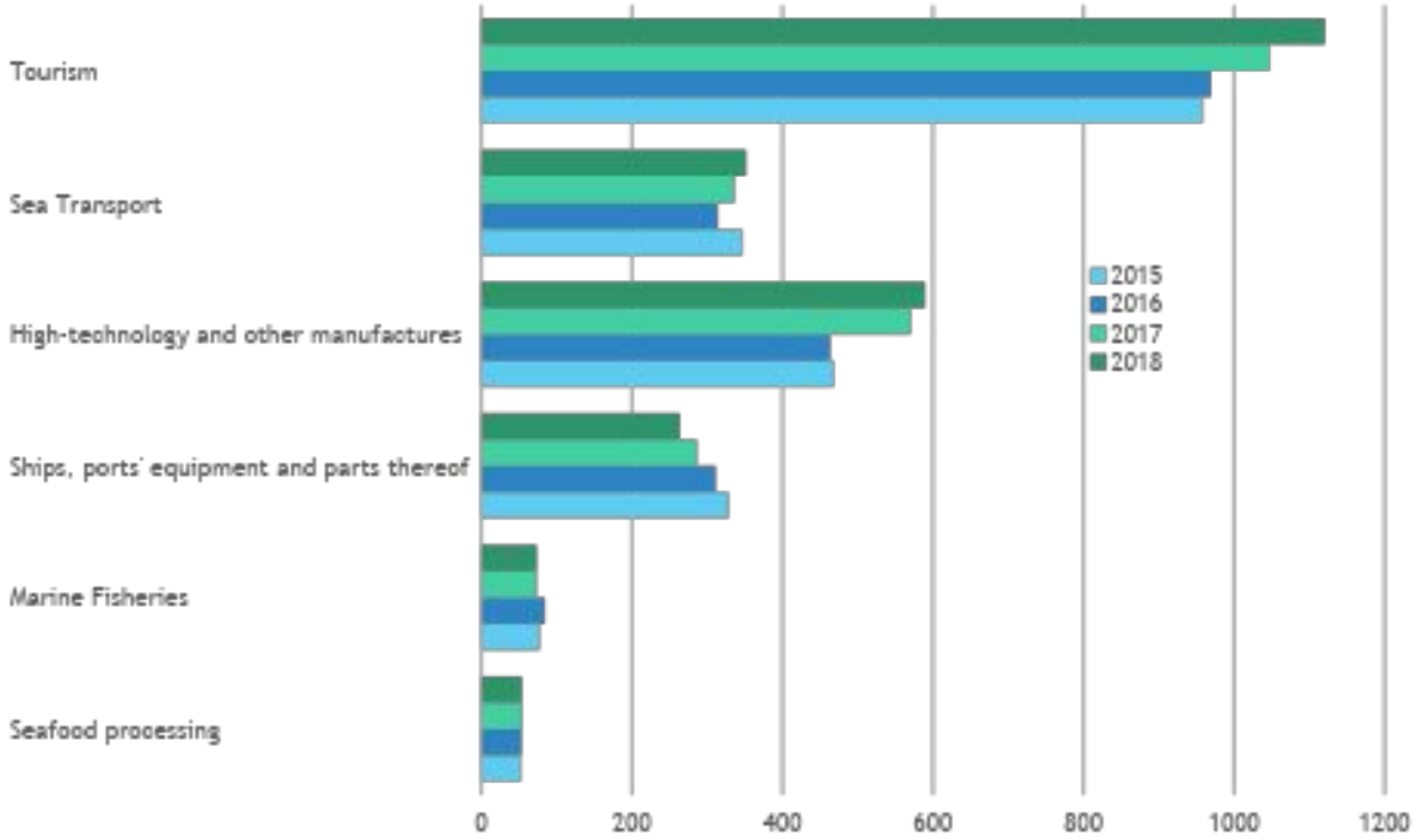
Available data shows that in 2018 the export value of the **61 industry ocean-based clusters** was **$2,467 Billion ($2.5 Trillion).**

The export value of oceans-based goods in 2018 is estimated at $995 Billion, and oceans-based services at $1,472 Billion.

These values are very conservative not only because of the data gap, but because the available data does not include all products part of the 61 industry clusters.

It does not include either oceans assets and ecosystem services

Oceans-based sector export trends, 2015 - 2018 ($)



Source: UNCTAD's calculation based on UNCTADStat and WTTC data (2020).

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Conclusions

YOU CANNOT PROTECT WHAT YOU CANNOT MEASURE…

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https://unctad.org/topic/trade-and-environment/oceans-economy

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