

State of Oceans and Coasts: The Philippines

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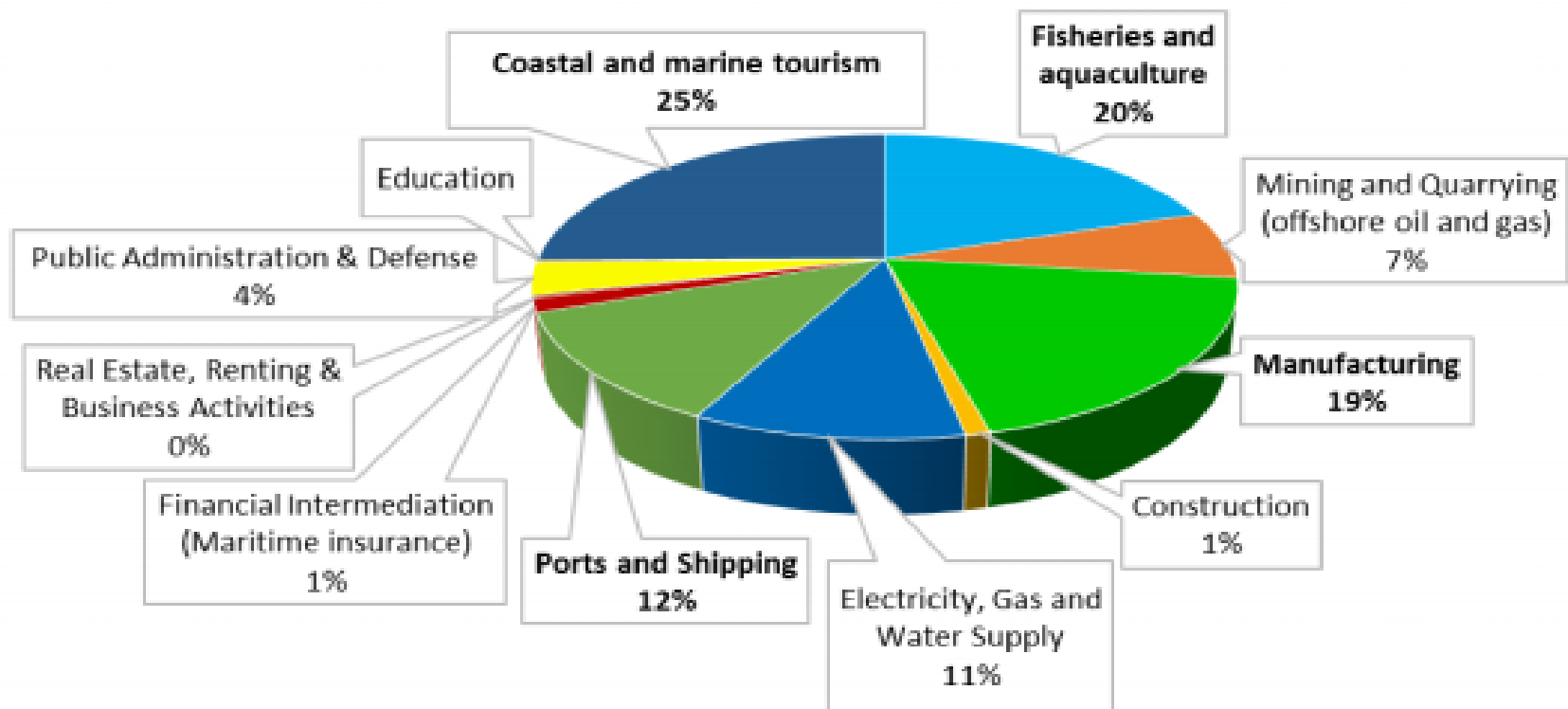
Ocean economy

Share of ocean economy
to GDP: (7%)

Est. employment in ocean
economy: 2.2 million in 2016
(5.3% of total employment)

\$11.9B

Ocean Economy, 2016



**>400,000 deployed Filipino seafarers,
contributing around \$5.6 B in remittances.**

Ocean health

Coastal and marine ecosystems

Habitat	Area (hectares)	Condition
Mangroves	303,373	increasing area
Seagrass	489,006	decreasing area
Coral reefs	797,719 <small>(Source: NAMRIA Coastal Resource Map, 2017)</small>	decreasing cover; decline in reef condition

Marine water quality

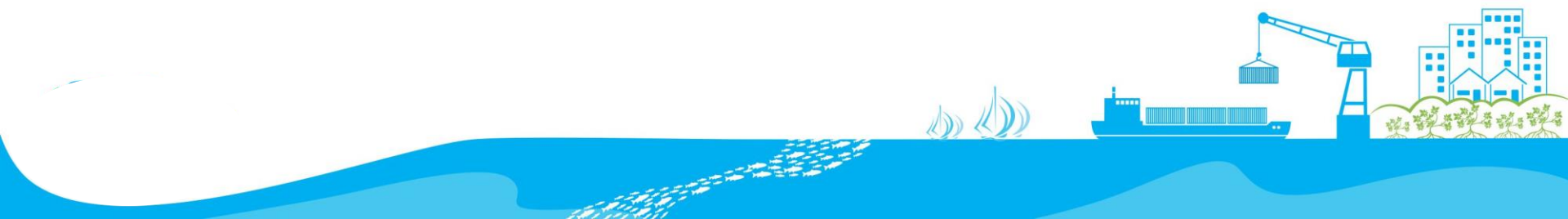
Parameters	
fecal coliform	Passed: 39% of monitoring stations
pH	Passed: 100%

Marine protected areas (% of territorial waters)	6%
ICM (% of coastline)	>20%



Blue economy initiatives

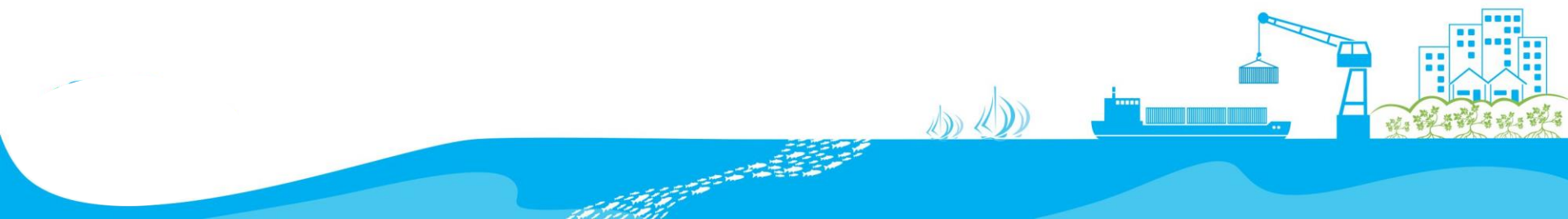
- Sustainable Fisheries and Aquaculture
- Sustainable Tourism
- Sustainable/Green Ports
- Marine Renewable Energy
- Marine Biotechnology
- Climate Resiliency
- Pollution Reduction
- Habitat Restoration and Management



Blue economy initiatives: Marine biotechnology

Philippine Marine Drug Discovery and Resources Facility (PHARMASEAS)

- to extract bioactive compounds, specifically from sponges, sponge-associated organisms, and conoideans (sea snails) with the aim of producing potential high-value pharmaceutical products.



Blue economy initiatives: Marine biotechnology

Activities

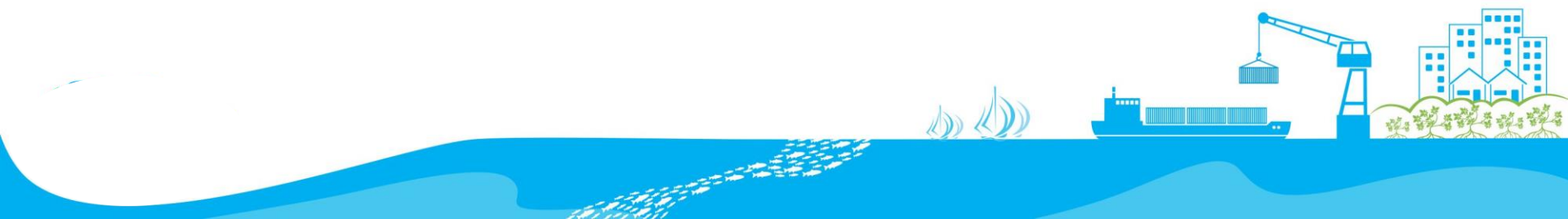
- Discovery of bioactive marine compounds and establishment of a marine chemical library and informatics facility
- Discovery and development
 - Anti-pain and anti-neurodegeneration drugs
 - Anti-infective and anti-cancer drugs
 - Cytotoxicity, antioxidant potential and antimicrobial assessments of secondary metabolites from marine sponges



Blue economy initiatives: Marine biotechnology

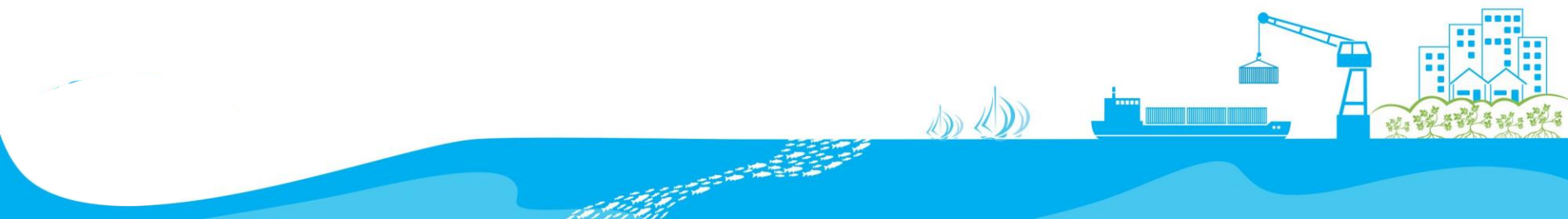
Tuklas Lunas Centers

- to develop standardized herbal drugs from natural sources
- to identify and characterize high-value purified active compounds derived from marine and terrestrial sources for specific therapeutic indications



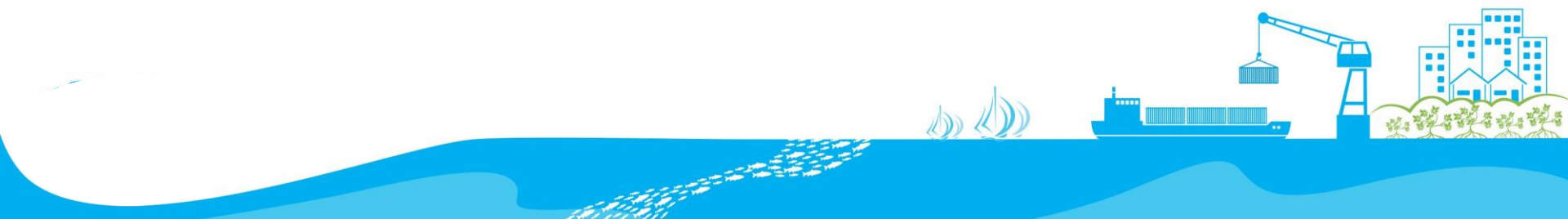
Recommendations

- **promoting blue economy** - improve ocean accounts (including valuation of ecosystem services, blue carbon, waste accounts), promote/awarding of sustainable ocean economic activities, foster growth of innovative industries - include blue economy opportunities in investment priority plan, support for commercialization of R&D products/outputs
- **Knowledge management** - improving monitoring and information management system, including online system, networking of database of agencies, etc.



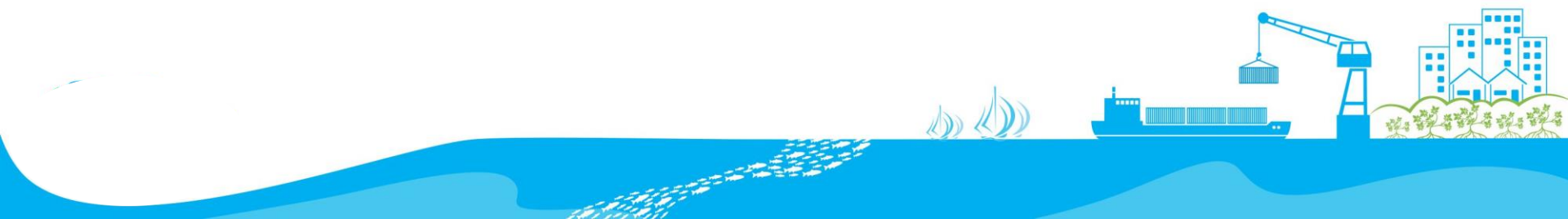
Recommendations

- **targeted research** to support policy, planning and management, including timely access to data, monitoring of research outcomes (after the end of the project)
- **strengthen implementation of laws/policies** (national and local) including mix of penalties, subsidies and awards/incentive system
- **public awareness campaign** (plastic waste, wastewater/septage, sustainable fishing, protection of different habitats, endangered species, etc.)



Recommendations

- working with real estate and tourism developers on Marine Spatial Planning, uncontrolled development and urbanization, solid waste and wastewater management, encroachment on different habitats, impacts on endangered species, restoration and protection of habitats, support for local livelihood (biodiversity-friendly enterprise),



Thank You

