Introduction and basic information

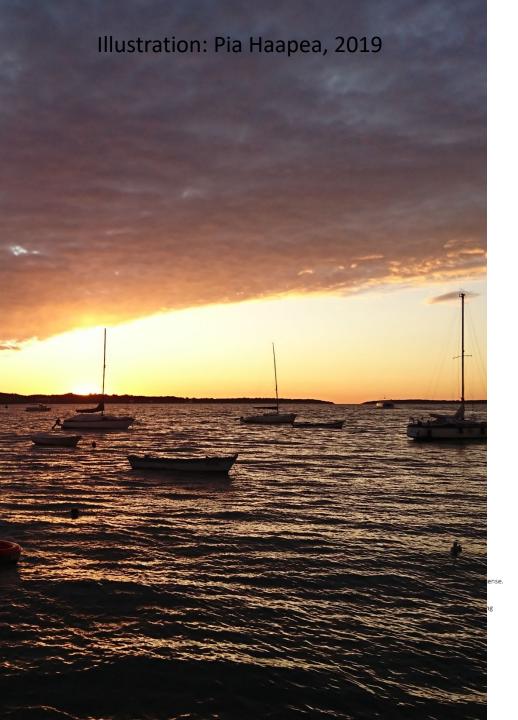
BLUE ECONOMY



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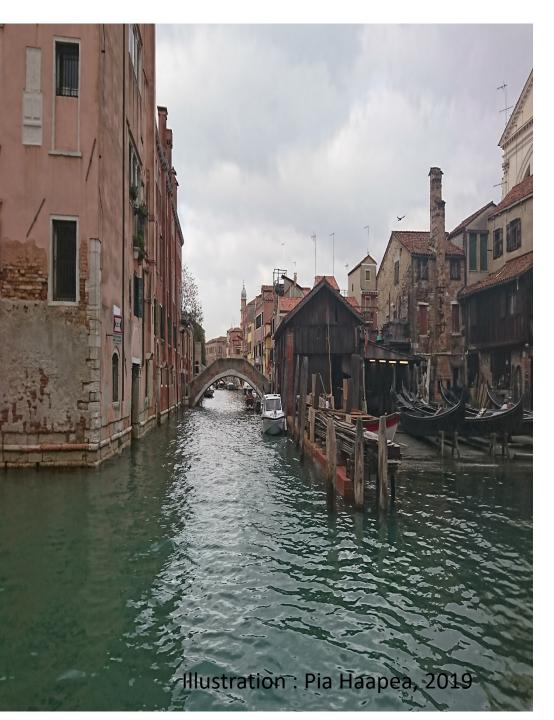




What is blue economy?

- Blue economy is emerging concept to take care of our ocean or 'blue' resources.
- The blue economy or bioeconomy means business that is based on the sustainable use of renewable aquatic resources and water expertise.
- Maintaining clear waters supports the development and marketing of blue bioeconomy products and services.
- Key business activities which rely on blue economy are:
 - water expertise and technology,
 - water-based tourism,
 - making use of aquatic biomass
 - and the value chain of fisheries.
- Also immaterial value (like well-being, recreation and health) of aquatic natural resources is also very high.







The worldwide ocean economy has the value of around US\$1.5 trillion per year.



80 % of global trade by volume is carried by sea.



350 million jobs world-wide are linked to fisheries.



By 2025 it is estimated that 34% of crude oil production will come from offshore fields.



Aquaculture is the fastest growing food sector and provides about 50% of fish for human consumption.

Marine pollution



- Main source is man-made: plastics and other residential waste, pesticides and industrial chemicals. Also shipping accidents and oil spills.
- 80 % of marine pollution originates on land: agricultural run-off and nutrients from sewage outflows, cities
- There is about 500 dead zones around the world, which are lack of oxygen → no life
- Plastics are one of the biggest man-made pollutants in the marine environment: eight million tonnes of plastic waste is wasted to oceans every year → microplastics
 - the amount of discarded plastics will outweigh the amount of fish in our oceans by 2050
- About one million sea birds and an unknown number of sea turtles die each year as a result of plastic debris clogging their digestive tracts,

SUSTAINABLE DEVELOPMENT GOAL 14

Conserve and sustainably use the oceans, seas and marine resources for

sustainable development

14.2

14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information



- 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
 - By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- **14.3** Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
 - By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

- 14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation
- By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
- 14.A Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries

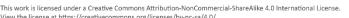
Circular economy for water- Blue economy

1 ECTS (Introdution lecture)

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