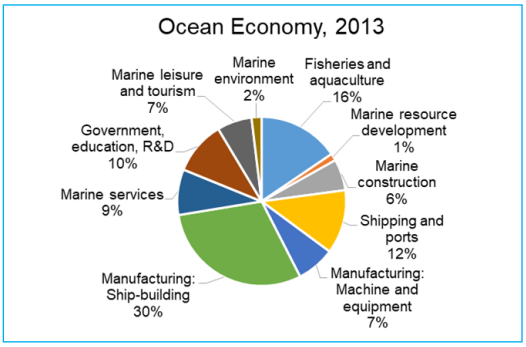
State of Oceans and Coasts
RO KOREA

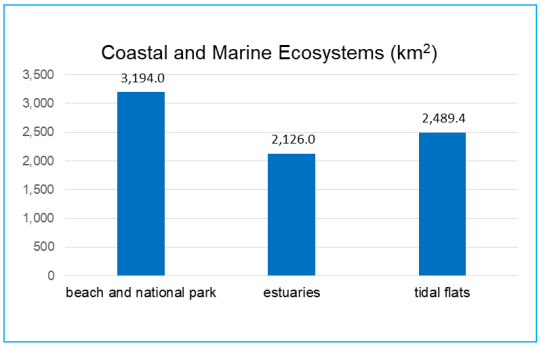
RO Korea's National SOC Report (publication pending) provides information on the status of seas and coasts of RO Korea, including the national ocean economy; quantity and quality of resources the coastal areas; and the existing and potential uses of such resources. The report also aims to contribute to the blue economy assessment and monitoring progress on the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), the UN Sustainable Development Goals (SDGs), other international agreements subscribed to by RO Korea, and related national laws and policies on oceans and coasts.

RO Korea's Ocean Economy in Context

Indicator	Available Information (as of 2017)
Land area [1] (square kilometres or km^2)	**97,480 square kilometers or km^2**
Coastline [2]	**13,509 km**
Sea area [2]	**86,891 km^2**
Population [1]	**51,466,201**
Coastal population [2]	**13,983,000 = 27.2% of the total population** (as of 2015)
Ocean economy [3] (Gross value added or GVA, in constant prices)	**US$43.53 billion or 3.3% of GDP** (as of 2013)
Employment in ocean economy [3]	**656,303** (as of 2013)
Estimated value of coastal and marine ecosystem services [3]	**US$42.4 billion – 44.5 billion**
Percentage of coastline with ICM [2]	**100%**
Marine protected area [1] (percentage of territorial waters)	**1.6%**
Ocean health index (OHI) [4]	**74** – RO Korea ranks #41 among 221 countries and territories.
Gross domestic product [1] (GDP, in constant 2010 US$ prices)	**US$1.35 trillion**
Human development index (HDI) [5]	**0.903** – very high human development category—positioning RO Korea at 22 out of 189 countries and territories.
Gross national income (GNI) **per capita** [5] (at 2011 PPP prices)	**US$35,945**
Access to safely managed water supply [1]	**98%** (as of 2015)
Access to safely managed sanitation [1]	**98.5%** (as of 2015)

[1] World Bank. World Development Indicators. Accessed from: https://data.worldbank.org/country/korea-rep.
[2] SOC Report 2017 (draft)
[3] Chang, Jeong-In. 2017. "Measuring Ocean Economy in Korea" Presentation made at the 3rd Symposium on Oceans in National Income Accounts, OECD, Paris, 22 Nov 2017.
[4] http://www.oceanhealthindex.org/region-scores/scores/south-korea
[5] http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/KOR.pdf





Transitioning to Blue Economy

Ocean economy	Blue Economy Initiatives
Fisheries and aquaculture • Domestic fisheries production has continuously decreased since 1980s. It stabilized at an annual average of 3 million tonnes for the past ten years. • ***Pressures:*** Depleting fisheries resources, Foreign illegal fishing, High labor cost in fishing	**Sustainable fisheries** • Community-based fisheries: resulted in: increase of fisheries production, improvement of selling system and making brands of the fishing products, continuous increase of average fishermen's income • Enactment for offshore aquaculture • Marine ranching as a new system for fisheries production: involves installing artificial reefs and placing rubble and rocks on the seabed to form a foundation for ecosystems to develop; release of fish seeds to build up marine resources; improvement of habitats to maximize the value of fishing grounds; and establishment of systematic water management and valid user system to improve production • Total allowable catch (TAC) program as an output control, which regulates annual total amount of catch per species • Fishing permit, fishing license • Vessel buy-back program (to reduce fishing vessels and address overfishing)
Coastal and marine tourism • ***Pressures:*** seasonality; low priority of government; dual leading agencies	**Sustainable tourism** • Ecotourism: Suncheon Bay Eco-Park • MPAs and ecotourism: Cheongsando Island • Recreational sea fishing
Ports and shipping • RO Korea's economic system is based on importing raw materials and exporting finished goods, and about 99% of the cargo has been imported and exported by marine transportation. • ***Pressures:*** port development; sand mining; shipping accidents; oil spills; ballast water	**Sustainable ports** • Green port: Busan - 92 units of Diesel-RTGC converted to e-RTGC (energy and expenses reduced by 90%, GHG reduced by 74%) - 150 units of Diesel-Y/T being replaced by LNG-Y/T by 2020 (reducing greenhouse gas (GHG) emissions by 38%) - 23,568 indoor lighting devices changed to LED (reduced GHG by 1,203 tons) and commitment to change 100% of indoor lighting system to LED by 2020 - In 2014, Environment Ship Index (ESI) was introduced, providing 15% reduction in entry/departure charges to ecofriendly vessels (In 2014, 423 eco-friendly vessels called,and KRW 603 million (approximately US$ 600,000) in reduced entry/departure charges was achieved.) • Waterfront program • National Oil Spill Response Plan • Supporting policies: Framework Act on Low Carbon Green Growth; Harbor Act; Marine Environment Management Act; Sustainable Transportation Logistics Development Act; Clean Air Conservation Act
Energy	**Marine Renewable Energy** • Technology Development Project for Commercialization of Offshore Energy established by the Ministry of Ocean and Fisheries (tidal power energy, tidal current energy, wave power energy, and ocean thermal energy conversion) and Ministry of Trade, Industry and Energy (offshore wind energy). • The 254-megawatt (MW) Sihwa Lake Tidal Power Plant is the largest in the world. It also enhanced the economy by forming waterfront and tourist attraction. The annual power production of 552 GW has reduced CO_2 emission of 315,000 tons annually, and has oil import substitution effects of 862,000 barrels a year, which improves the energy self-sufficiency • Feed-in-tariff (FiT) supports the tidal barrage power; Renewable Energy Certificate (REC)
Manufacturing of chemicals and pharmaceuticals	**Marine biotechnology – for food, chemicals, and medicines** • In 2013, MOF established the National Marine Biodiversity Institute of Korea (MABIK). • The domestic marine biotechnology market is expected to grow more than 14% annually from $70 million in 2012 to $360 million in 2020, which will share 5% of the world marine biotechnology market.
Pressures: pollution, marine debris	**Pollution reduction** • Complete prohibition of ocean dumping • Coastal Total Pollutant Control System • Coastal Enhancement Program to address coastal erosion and sedimentation • Special Area Management Plan (SAMP) • Solid waste management: Implementation of waste separation and collection system • National Marine Debris Management Plan • National Oil Spill Response Plan
Pressures: Fisheries habitats, such as wetland and coastal waters have been greatly lost due to the coastal development.	**Habitat restoration and management** • ICM and coastal zone management programs • Designation of wetlands conservation sites • MPAs and ecotourism