



State of Oceans and Coasts JAPAN



Japan's National SOC Brief provides information on the status of seas and coasts of Japan, including the marine water quality; quantity and quality of resources in 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 Japan, and related national laws and policies on oceans and coasts.

Japan's Ocean Economy in Context

Indicator	Available Information (as of 2017)
Land area ¹ (square kilometres or km ²)	364,560 square kilometres or km ²
Coastline ³	35,306 km
Sea area ²	13,430 km ²
Population ¹	126,785,797
Coastal population ⁴	80%
Ocean economy ⁴ (Gross value added or GVA, in constant prices)	1.48% of GDP in 2000
Employment in ocean economy ⁴	1 million (in 2000)
Estimated value of coastal and marine ecosystem services	n.a.
Percentage of coastline with ICM ²	1.4%
Marine protected area (percentage of territorial waters) ¹	8.23%
Ocean health index (OHI) ⁵	71 – Japan ranks #64 among 221 countries and territories.
Gross domestic product ¹ (GDP, in constant 2010 US\$ prices)	US\$6.16 trillion
Human development index (HDI) ⁶	0.909 – very high human development category—positioning Japan at 19 out of 189 countries and territories.
Gross national income (GNI) per capita ⁶ (at 2011 PPP prices)	US\$38,986
Access to safely managed water supply ¹	97.2%
Access to safely managed sanitation ¹	100%

¹ World Bank. World Development Indicators. Accessed from: <https://data.worldbank.org/country/japan>.

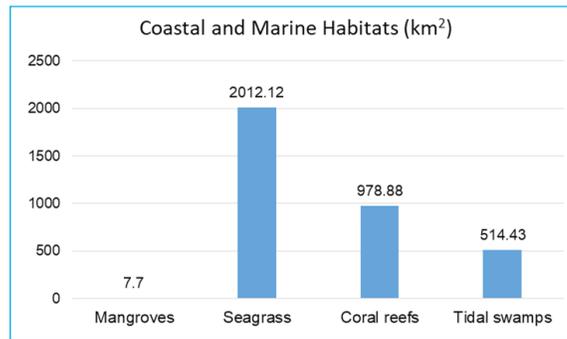
² <https://www.cia.gov/library/publications/the-world-factbook/geos/ja.html>

³ SOC Report 2017 (draft)

⁴ Hiroyuki Nakahara. 2009. "Economic Contribution of Marine Sector to Japanese Economy" Powerpoint presentation at the EAS Congress 2009, Manila, 23 November 2009.

⁵ <http://www.oceanhealthindex.org/region-scores/scores/japan>

⁶ http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/JPN.pdf



Transitioning to Blue Economy

Ocean economy	Blue Economy Initiatives
Fisheries and aquaculture	Sustainable fisheries and aquaculture <ul style="list-style-type: none"> Total Allowable Catch (TAC) system and Total Allowable Effort (TAE) system for target fish species Resource management plan, and collaboration among fishery, test research institutions and government Sustainable tuna fisheries Sustainable aquaculture: research and development, and use of technology to produce and supply a stable and large quantity of artificial seedlings for culturing at low cost and high quality. Minami-sanriku in Miyagi Prefecture: 37 oyster farmers took an innovative approach to reduce oyster farming density by reducing the number of gears from 1000 units to 300 units, and merged individual fishing rights into a cooperative. With better nutrient distribution, oysters mature in one year and sold at a better price. Production value grew by 7% for each farmer. Sea water quality and marine biodiversity also improved.
Coastal and marine tourism <ul style="list-style-type: none"> Includes seaside bathing, seafood, landscape viewing by the seaside, marine leisure and trip by boat 	Sustainable tourism <ul style="list-style-type: none"> The Basic Plan on Ocean Policy decided by the Cabinet in April 2013: includes the promotion of marine tourism MPAs and ecotourism Taketomi-cho in Okinawa: adopted the Fourth Comprehensive Plan, which listed tourism as one of the key sector, and the Taketomi Basic Plan on Ocean Policy in 2011, which stipulated 10 priority actions, (such as marine debris; ecotourism; safe use of ocean areas; biomass; wildlife protection; safe and environmentally-sound port). Taketomi has seen substantial increase in tourists by 13.1% in 2012, and 20% in 2013, exceeding the average growth rate of tourism in Okinawa.
Ports and shipping	Sustainable ports <ul style="list-style-type: none"> With respect to International Container Strategy Port Policies, Hanshin Port and Keihin Port were selected as international container strategic ports in August 2010
Energy	Marine renewable energy <ul style="list-style-type: none"> In 2016, under a project of Japan's New Energy and Industrial Technology Development (NEDO), an ocean tidal current project has been undertaken by IHI Corporation, Tokyo University, Mitsui & Co. A consortium consisting of Kyuden Mirai Energy Co., Inc., Nippon Steel & Sumikin Engineering Co., Ltd., NPO Nagasaki Marine Industry Cluster Promotion Association and Open Hydro Technology has been selected by the Ministry of Environment of Japan to supply a 2-megawatt (MW) tidal turbine system for installation in the Okinawase Seto area of Goshima City, Nagasaki. This demonstration project aims to establish technologies conforming to domestic environments and technical standards. Kumejima, Okinawa: experimental project on ocean thermal energy conversion (OTEC). It generated 100 kilowatts (kW), equivalent to power use of 250 households.
Water	Deep sea water use <ul style="list-style-type: none"> Kumejima, Okinawa: After OTEC power generation, deep sea water is distributed to experimental agriculture and aquaculture farms (e.g., prawns, sea grapes, spinach, oysters). Deep sea water is used by entrepreneurs, such as a cosmetics company, and spa (thalassotherapy).
Pressures: Urbanization and heavy industrialization in the past resulted in pollution and habitat loss in the coastal areas.	Pollution reduction <ul style="list-style-type: none"> Wastewater and storm water management, and clean-up of rivers and bays Wastewater and energy nexus: Wastewater treatment and methane recovery allow the use of biogas as alternative fuel to power buses, trains and garbage trucks in Kobe. Kitakyushu: Green Growth policy; household and community-based waste management (composting; recycling paper, used oil, pruned grass and branches); waste-to-energy (incineration plant); sanitary landfill for residual waste Supporting policies: Water Pollution Prevention Act; Basic Policy for Total Emission Reduction; Act on Special Measures concerning Conservation of the Environment of the Seto Inland Sea; Act on Prevention of Marine Pollution and Maritime Disaster; Basic Plan on Ocean Policy Habitat restoration and management <ul style="list-style-type: none"> Basic Plan on Ocean Policy Action Plans and Nature Restoration projects (mangroves, coral reefs, seagrass, tidal swamps) Shima City, Mie, Japan: <i>Sato-umi</i>, balance between utilization according to the current social situation and conservation of the natural environment Hinase in Okayama: Seagrass restoration – increased seagrass cover to 250 ha by 2016; brought back fish; enhanced fish catch; strengthened community unity. Fishermen also established an enterprise to promote artificial reef called <i>Shellnurse</i> to reinforce spawning areas by using abandoned oyster shells.