

# Annex A. Environment-related SDG targets, indicators, and relevant sub-indicators in the SDG Global Indicator Framework

**Table A.1 List of the 92 environment-related indicators in the SDG Global Indicator Framework**

**Note:** Indicators for which UNEP is Custodian Agency are marked in blue font

Goal	Target	Indicator	Sub-Indicator
<b>Goal 1.</b> End poverty in all its forms everywhere	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	1.4.2 Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure	Proportion of people with secure tenure rights to land out of total adult population, by sex (%)
	1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Number of directly affected persons attributed to disasters per 100,000 population (number)
		1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)	Direct economic loss attributed to disasters relative to GDP (%)
		1.5.3 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030	Number of countries that reported having a National DRR Strategy which is aligned to the Sendai Framework
		1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies (%)

Goal	Target	Indicator	Sub-Indicator
<b>Goal 2.</b> End hunger achieve food security and improved nutrition and promote sustainable agriculture	2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	2.4.1 Proportion of agricultural area under productive and sustainable agriculture	
	2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities	Plant breeds for which sufficient genetic resources are stored (number)
		2.5.2 Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction	Proportion of local breeds classified as being at risk as a share of local breeds with known level of extinction risk (%)
<b>Goal 3.</b> Ensure healthy lives and promote well-being for all at all ages	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9.1 Mortality rate attributed to household and ambient air pollution	Age-standardized mortality rate attributed to household and ambient air pollution (deaths per 100,000 population)
		3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene from diarrhoea, intestinal nematode infections, malnutrition and acute respiratory infections (deaths per 100,000 population)
		3.9.3 Mortality rate attributed to unintentional poisoning	Mortality rate attributed to unintentional poisonings, by sex (deaths per 100,000 population)
<b>Goal 4.</b> Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment	Extent to which global citizenship education and education for sustainable development are mainstreamed in national education policies



Goal	Target	Indicator	Sub-Indicator
<b>Goal 5.</b> Achieve gender equality and empower all women and girls	5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure	Proportion of people with ownership or secure rights over agricultural land, both sexes (%)
<b>Goal 6.</b> Ensure availability and sustainable management of water and sanitation for all	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Proportion of population using safely managed drinking water services	Proportion of population using safely managed drinking water services, by urban/rural (%)
	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water	Proportion of population using safely managed sanitation services, All areas (%)
	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1 Proportion of wastewater safely treated	Proportion of safely treated domestic wastewater flows (%)
		<b>6.3.2 Proportion of bodies of water with good ambient water quality</b>	<b>Proportion of bodies of water with good ambient water quality (%)</b>
	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	6.4.1 Change in water-use efficiency over time	Water Use Efficiency (United States dollars per cubic meter)
		6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (%)
	6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	<b>6.5.1 Degree of integrated water resources management implementation (0-100)</b>	<b>Degree of integrated water resources management implementation (%)</b>
		6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation	Proportion of transboundary basins (river and lake basins and aquifers) with an operational arrangement for water cooperation (%)
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	<b>6.6.1 Change in the extent of water-related ecosystems over time</b>	<b>Lakes and Rivers permanent water area (% of total land area)</b>	

Goal	Target	Indicator	Sub-Indicator
	6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan	Total official development assistance (gross disbursement) for water supply and sanitation, by recipient countries (millions of constant 2020 United States dollars)
	6.b Support and strengthen the participation of local communities in improving water and sanitation management	6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	Proportion of countries with clearly defined procedures in law or policy for participation by service users/communities in planning program in water resources planning and management (%)
<b>Goal 7.</b> Ensure access to affordable, reliable, sustainable and modern energy for all	7.1.2 Proportion of population with primary reliance on clean fuels and technology	7.1.2 Proportion of population with primary reliance on clean fuels and technology	Proportion of population with primary reliance on clean fuels and technology (%)
	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	7.2.1 Renewable energy share in the total final energy consumption	Renewable energy share in the total final energy consumption (%)
	7.3 By 2030, double the global rate of improvement in energy efficiency	7.3.1 Energy intensity measured in terms of primary energy and GDP	Energy intensity level of primary energy (megajoules per constant 2011 purchasing power parity GDP)
	7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	7.a.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems	International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems (millions of constant 2016 United States dollars)
	7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support	7.b.1 Installed renewable energy-generating capacity in developing countries (in watts per capita)	Installed renewable electricity-generating capacity (watts per capita)



Goal	Target	Indicator	Sub-Indicator
<b>Goal 8.</b> Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10 Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead	<b>8.4.1</b> Material footprint, material footprint per capita, and material footprint per GDP	Material footprint per unit of GDP, by type of raw material (kilograms per constant 2015 United States dollar)
		<b>8.4.2</b> Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Domestic material consumption per capita, by type of raw material (tonnes)
<b>Goal 9.</b> Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	9.4.1 CO <sub>2</sub> emission per unit of value added	Carbon dioxide emissions per unit of manufacturing value added (kilogrammes of CO <sub>2</sub> per constant 2010 United States dollars)
<b>Goal 11.</b> Make cities and human settlements inclusive, safe, resilient and sustainable	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Proportion of population that has convenient access to public transport (%)
	11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	11.3.1 Ratio of land consumption rate to population growth rate	
		11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically	
	11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	11.4.1 Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)	Total expenditure per capita spent on cultural and natural heritage, public and private (PPP, constant 2017 United States dollars)

Goal	Target	Indicator	Sub-Indicator
	11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Number of directly affected persons attributed to disasters per 100,000 population (number)
		11.5.2 Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters	Direct economic loss attributed to disasters relative to GDP (%)
	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities	Municipal Solid Waste collection coverage, by cities (%)
		11.6.2 Annual mean levels of fine particulate matter (e.g. PM <sub>2.5</sub> and PM <sub>10</sub> ) in cities (population weighted)	Annual mean levels of fine particulate matter (population-weighted), by location (micrograms per cubic meter)
	11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	Average share of the built-up area of cities that is open space for public use for all (%)
	11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels	11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030	Score of adoption and implementation of national DRR strategies in line with the Sendai Framework
		11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies (%)



Goal	Target	Indicator	Sub-Indicator
<b>Goal 12.</b> Ensure sustainable consumption and production patterns	12.1 Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries	<b>12.1.1</b> Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies	Countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or target into national policies (1 = YES; 0 = NO)
	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	<b>12.2.1</b> Material footprint, material footprint per capita, and material footprint per GDP	Material footprint per unit of GDP, by type of raw material (kilograms per constant 2010 United States dollar)
		<b>12.2.2</b> Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Domestic material consumption per capita, by type of raw material (tonnes)
	12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses	<b>12.3.1</b> (a) Food loss Index and (b) Food waste Index	Food loss percentage (%) and Food Waste
	12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	<b>12.4.1</b> Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement	Parties meeting their commitments and obligations in transmitting information as required by MEA's on hazardous waste, and other chemicals
		<b>12.4.2</b> (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment	Electronic waste generated, per capita (KG)
	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	<b>12.5.1</b> National recycling rate, tons of material recycled	Electronic waste recycling rate (%)
	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	<b>12.6.1</b> Number of companies publishing sustainability reports	Number of companies publishing sustainability reports with disclosure by dimension, by level of requirement (Number)

Goal	Target	Indicator	Sub-Indicator
	12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities	<b>12.7.1</b> Degree of sustainable public procurement policies and action plan implementation	Number of countries implementing sustainable public procurement policies and action plans
	12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Extent to which global citizenship education and education for sustainable development are mainstreamed in national education policies
	12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production	12.a.1 Installed renewable energy-generating capacity in developing countries (in watts per capita)	Installed renewable electricity-generating capacity (watts per capita)
	12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products	12.b.1 Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism (number of tables)
	12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities	<b>12.c.1</b> Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels	Fossil-fuel pre-tax subsidies (consumption and production) (billions of current United States dollars)





Goal	Target	Indicator	Sub-Indicator
<b>Goal 13.</b> Take urgent action to combat climate change and its impacts	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Number of directly affected persons attributed to disasters per 100,000 population (number)
		13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030	Score of adoption and implementation of national DRR strategies in line with the Sendai Framework
		13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies (%)
	13.2 Integrate climate change measures into national policies, strategies and planning	13.2.1 Number of countries with nationally determined contributions, long-term strategies, national adaptation plans, strategies as reported in adaptation communications and national communications	Number of countries with nationally determined contributions (Number)
		13.2.2 Total greenhouse gas emissions per year	Greenhouse gas emissions per year (SDG 13.2.2)
	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	13.3.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Extent to which global citizenship education and education for sustainable development are mainstreamed in national education policies
	13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	13.a.1 Mobilized amount of United States dollars per year between 2020 and 2025 accountable towards the \$100 billion commitment	Total financial support provided (Billions of current United States dollars)

Goal	Target	Indicator	Sub-Indicator
	13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	13.b.1 Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities	Number of least developed countries and small island developing States with nationally determined contributions (Number)
<b>Goal 14.</b> Conserve and sustainably use the oceans, seas and marine resources for sustainable development	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	<b>14.1.1 (a)</b> Index of coastal eutrophication; and (b) plastic debris density	Chlorophyll-a deviations, remote sensing (%)
	14.2 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	<b>14.2.1</b> Number of countries using ecosystem-based approaches to managing marine areas	Number of countries using ecosystem-based approaches to managing marine areas (1 = YES; 0 = NO)
	14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations	Average marine acidity (pH) measured at agreed suite of representative sampling stations
	14.4 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	14.4.1 Proportion of fish stocks within biologically sustainable levels	Proportion of fish stocks within biologically sustainable levels (not overexploited) (%)
	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	<b>14.5.1</b> Coverage of protected areas in relation to marine areas	Average proportion of Marine Key Biodiversity Areas (KBAs) covered by protected areas (%)



Goal	Target	Indicator	Sub-Indicator
	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	14.6.1 Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing	Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing (level of implementation: 1 lowest to 5 highest)
	14.7 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	14.7.1 Sustainable fisheries as a proportion of GDP in small island developing States, least developed countries and all countries	Sustainable fisheries as a proportion of GDP
	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	14.a.1 Proportion of total research budget allocated to research in the field of marine technology	National ocean science expenditure as a share of total research and development funding (%)
	14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of “The future we want”	14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nation Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	Score for the implementation of UNCLOS and its two implementing agreements (%)

Goal	Target	Indicator	Sub-Indicator
<b>Goal 15.</b> Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	15.1.1 Forest area as a proportion of total land area	Forest area as a proportion of total land area (%)
		15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	Average proportion of Terrestrial Key Biodiversity Areas (KBAs) covered by protected areas (%)
	15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	15.2.1 Progress towards sustainable forest management	Proportion of forest area with a long-term management plan (%)
	15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	15.3.1 Proportion of land that is degraded over total land area	Proportion of land that is degraded over total land area
	15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	15.4.1 Coverage by protected areas of important sites for mountain biodiversity	Average proportion of Mountain Key Biodiversity Areas (KBAs) covered by protected areas (%)
		15.4.2 Mountain Green Cover Index	Mountain Green Cover Index
	15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	15.5.1 Red List Index	Red List Index
	15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed	15.6.1 Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits	Countries that have legislative, administrative and policy framework or measures reported to the Access and Benefit-Sharing Clearing-House (1 = YES; 0 = NO)
15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products	15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked		
15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species	15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species	Legislation, Regulation, Act related to the prevention of introduction and management of Invasive Alien Species (1 = YES, 0 = NO)	



Goal	Target	Indicator	Sub-Indicator
	15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	<b>15.9.1 (a)</b> Number of countries that have established national targets in accordance with or similar to Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020 in their national biodiversity strategy and action plans and the progress reported towards these targets; and (b) integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting	Countries that established national targets in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020 in their National Biodiversity Strategy and Action Plans (1 = YES; 0 = NO)
	15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems	<b>15.a.1</b> Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems	Total official development assistance for biodiversity, by donor countries (millions of constant 2017 United States dollars)
	15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation	<b>15.b.1</b> Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems	Total official development assistance for biodiversity, by recipient countries (millions of constant 2017 United States dollars)
	15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities	15.c.1 Proportion of traded wildlife that was poached or illicitly trafficked	

Goal	Target	Indicator	Sub-Indicator
Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed	<b>17.7.1</b> Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies	Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies
	17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation	17.9.1 Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries	Total official development assistance (gross disbursement) for technical cooperation (millions of 2017 United States dollars)
	17.14 Enhance policy coherence for sustainable development	<b>17.14.1</b> Number of countries with mechanisms in place to enhance policy coherence of sustainable development	Mechanisms in place to enhance policy coherence for sustainable development (%)
	17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries	17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals	Progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals (1 = YES; 0 = NO)
	17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	17.18.1 Statistical capacity indicator for Sustainable Development Goal monitoring	
<b>Total</b>	<b>71</b>	<b>92</b>	<b>92</b>



# Annex B. The SDG Regional Groupings

## Central & Southern Asia

**Central Asia:** Kazakhstan; Kyrgyzstan; Tajikistan; Turkmenistan; Uzbekistan

**Southern Asia:** Afghanistan; Bangladesh; Bhutan; India; Iran (Islamic Republic of); Maldives; Nepal; Pakistan; Sri Lanka

## Eastern and South-eastern Asia

**Eastern Asia:** China; Hong Kong, China; Macao, China; Democratic People's Republic of Korea; Japan; Mongolia; Republic of Korea

**South-eastern Asia:** Brunei Darussalam; Cambodia; Indonesia; Lao People's Democratic Republic; Malaysia; Myanmar; Philippines; Singapore; Thailand; Timor-Leste; Viet Nam

## Europe and Northern America

**Northern America:** Bermuda; Canada; Greenland; United States of America

**Eastern Europe:** Belarus; Bulgaria; Czech Republic; Hungary; Poland; Moldova; Romania; Russian Federation; Slovakia; Ukraine

**Northern Europe:** Åland Islands; Channel Islands; Denmark; Estonia; Faroe Islands; Finland; Iceland; Ireland; Isle of Man; Latvia; Lithuania; Norway; Sweden; United Kingdom of Great Britain and Northern Ireland;

**Southern Europe:** Albania; Andorra; Bosnia and Herzegovina; Croatia; Greece; Italy; Malta; Montenegro; Portugal; San Marino; Serbia; Slovenia; Spain; North Macedonia

**Western Europe:** Austria; Belgium; France; Germany; Liechtenstein; Luxembourg; Monaco; Netherlands; Switzerland

## Latin America & the Caribbean

**Caribbean:** Anguilla; Antigua and Barbuda; Aruba; Bahamas; Barbados; Bonaire, Sint Eustatius (Neth.); Saba (Neth.); British Virgin Islands; Cayman Islands; Cuba; Curaçao; Dominica; Dominican Republic; Grenada; Guadeloupe; Haiti; Jamaica; Martinique; Montserrat; Puerto Rico; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Sint Maarten (Neth.); Suriname; Trinidad and Tobago; Turks and Caicos Islands; United States Virgin Islands

**Central America:** Costa Rica; El Salvador; Guatemala; Honduras; Mexico; Nicaragua; Panama

**South America:** Argentina; Belize; Bolivia (Plurinational State of); Brazil; Chile; Colombia; Ecuador; Falkland Islands (Malvinas); French Guiana; Guyana; Paraguay; Peru; South Georgia & the South Sandwich Islands; Uruguay; Venezuela

## Northern Africa and Western Asia

**Northern Africa:** Algeria; Egypt; Libya; Morocco; Sudan; Tunisia; Western Sahara

**Western Asia:** Armenia; Azerbaijan; Bahrain; Cyprus; Georgia; Iraq; Israel; Jordan; Kuwait; Lebanon; Oman; Qatar; Saudi Arabia; State of Palestine; Syrian Arab Republic; Türkiye; United Arab Emirates; Yemen

## Oceania

**Australia and New Zealand:** Australia; Christmas Island; Cocos (Keeling) Islands; Heard Island & McDonald Islands; New Zealand; Norfolk Island

**Oceania** excluding Australia and New Zealand

**Melanesia:** Fiji; New Caledonia; Papua New Guinea; Solomon Islands; Vanuatu

**Micronesia:** Guam; Kiribati; Marshall Islands; Micronesia (Federated States of); Nauru; Northern Mariana Islands; Palau

**Polynesia:** American Samoa; Cook Islands; French Polynesia; Niue; Pitcairn; Samoa; Tokelau; Tonga; Tuvalu; Wallis and Futuna Island

## Sub-Saharan Africa

**Sub-Saharan Africa:** Angola; Benin; Botswana; Burkina Faso; Burundi; Cabo Verde; Cameroon; Central African Republic; Chad; Comoros; Congo; Côte d'Ivoire; Democratic Republic of the Congo; Djibouti; Equatorial Guinea; Eritrea; Ethiopia; Gabon; Gambia; Ghana; Guinea; Guinea-Bissau; Kenya; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Mauritius; Mayotte; Mozambique; Namibia; Niger; Nigeria; Réunion; Rwanda; Sao Tome and Principe; Senegal; Seychelles; Sierra Leone; Somalia; South Africa; South Sudan





# Annex C. Socio-economic and environmental factors compilation

## Annex C.1 Identified socio-economic and environmental factors for freshwater-related ecosystems

Goal	Target
<b>Economic and social</b>	Gross national income per capita, purchasing power parity (PPP)
	Urban population as a percentage of the total population
	2.a.1.3 Agriculture value added share of GDP (%)
	5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments.
	5.5.2 Proportion of individuals who own a mobile telephone, by sex
	8.3.1 Proportion of informal employment in non-agriculture employment, by sex
	8.7.1 Proportion and number of children aged 5-17 years engaged in child labor, by sex and age
	9.2.1 Manufacturing value added as a proportion of GDP and per capita
	17.7.1 Total government revenue as a proportion of GDP, by source
<b>Physical infrastructure</b>	7.1.1 Proportion of population with access to electricity
	7.3.1 Energy intensity measured in terms of primary energy and GDP
	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities
	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities
	12.a.1 Installed renewable energy-generating capacity in developing countries (in watts per capita)
	17.8.1 Proportion of individuals using the internet
<b>Human infrastructure</b>	1.4.2 Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure.
	4.1.2 Completion rate of upper secondary education
	4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill
	12.6.1 Number of companies publishing sustainability reports
	12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessments
	16.5.2 Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official or were asked for a bribe by those public officials during the previous 12 months

Goal	Target
<b>Environment conditions</b>	9.4.1 CO <sub>2</sub> emission per unit of value added
	11.6.2 Annual mean levels of fine particulate matter (e.g. PM <sub>2.5</sub> and PM <sub>10</sub> ) in cities (population weighted)
	13.2.2 Total greenhouse gas emissions per year
	15.4.2 Mountain Green Cover Index
	15.5.1 Red List Index
<b>Natural resources</b>	15.1.1 Forest area as a proportion of total land area
	15.3.1 Proportion of land that is degraded over total land area

## Annex C.2 Identified socio-economic and environmental factors for marine-related ecosystems

Goal	Target
<b>Economic and social</b>	Gross national income per capita, purchasing power parity (PPP)
	Urban population as percentage of total population
	2.1.1 Prevalence of undernourishment
	5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments.
	8.3.1 Proportion of informal employment in non-agriculture employment, by sex
	8.7.1 Proportion and number of children aged 5-17 years engaged in child labour, by sex and age
	17.7.1 Total government revenue as a proportion of GDP, by source
<b>Physical infrastructure</b>	1.4.1 Proportion of population living in households with access to basic services
	4.a.1 Proportion of schools with access to (a) electricity; (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapter infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions).
	6.1.1 Proportion of population using safely managed drinking water services
	6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water
	7.1.1 Proportion of population with access to electricity
	7.3.1 Energy intensity measured in terms of primary energy and GDP
	11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing
	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities
	11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities
	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities.
	17.8.1 Proportion of individuals using the internet



Goal	Target
<b>Human infrastructure</b>	1.4.2 Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure.
	4.1.2 Completion rate of education (upper secondary education)
	4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill
	11.3.2 Number of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically
	12.6.1 Number of companies publishing sustainability reports
	16.5.2 Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months
<b>Environment conditions</b>	11.6.2 Annual mean levels of fine particulate matter (e.g. PM <sub>2.5</sub> and PM <sub>10</sub> ) in cities (population weighted)
	13.2.2 Total greenhouse gas emissions per year
	15.2.1 Progress towards sustainable forest management
	15.5.1 Red List Index
<b>Natural resources</b>	6.3.2 Proportion of bodies of water with good ambient water quality
	15.1.1 Forest area as a proportion of total land area
	15.3.1 Proportion of land that is degraded over total land area

## Annex D. Indicators considered for the statistical analyses

**Note:** Annex D provides an overview of the indicators that were considered for the statistical analyses of the report (Table D.1 and Table D.3), and an overview of indicators that were eventually used because of sufficient data for the statistical analyses for global and national level (Table D.2 and Table D.4).

### Annex D.1 Indicators considered for freshwater-related ecosystems

#### State of freshwater-related ecosystem indicators

6.3.2 Proportion of bodies of water with good ambient water quality

6.6.1 Change in the extent of water-related ecosystems over time

#### Drivers of change indicators for freshwater-related ecosystems

1.4.1 Proportion of population living in households with access to basic services

2.4.1 Proportion of agricultural area under productive and sustainable agriculture

6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water

6.3.1 Proportion of domestic and industrial wastewater flows safely treated

6.4.1 Change in water-use efficiency over time

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

6.5.1 Degree of integrated water resources management

6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation

6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan

6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

7.2.1 Renewable energy share in the total final energy consumption

8.4.1 Material footprint, material footprint per capita, and material footprint per GDP

8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP

9.1.2 Passenger and freight volumes, by mode of transport

11.1.1 Proportion of urban population living in slums, informal settlements, or inadequate housing

11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically

11.5.3 (a) Damage to critical infrastructure and (b) number of disruptors to basic services, attributed to disasters



- 
- 11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities
- 
- 12.1.1 Number of countries developing, adopting or implementing policy instruments aimed at supporting the shift to sustainable consumption and production
- 
- 12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment
- 
- 12.5.1 National recycling rate, tons of material recycled
- 
- 12.7.1 Degree of sustainable public procurement policies and action plan implementation
- 
- 15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type
- 
- 15.2.1 Forest area certified under an independently verified certification scheme (thousands of hectares)
- 
- 15.4.1 Coverage by protected areas of important sites for mountain biodiversity
- 

### State of human well-being indicators related to freshwater-related ecosystems

- 
- 1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)
- 
- 1.2.1 Proportion of population living below the national poverty line, by sex and age.
- 
- 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
- 
- 1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
- 
- 1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)
- 
- 2.1.1 Prevalence of undernourishment (%)
- 
- 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
- 
- 2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type
- 
- 2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)
- 
- 2.3.2 Average income of small-scale food producers
- 
- 3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene
- 
- 4.a.1 Proportion of schools with access to (a) electricity; (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions).
- 
- 6.1.1 Proportion of population using safely managed drinking water services
- 
- 8.5.2 Unemployment rate, by sex, age and persons with disabilities
- 
- 10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population
- 
- 10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities
- 
- 11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
- 
- 11.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)
- 
- 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
-

## Annex D.2 Indicators with available data for freshwater-related ecosystems for Global, Mongolia and Colombia

### Freshwater-related ecosystems indicators with available data, global level

1.1.1 Employed population below international poverty line (%)

2.1.1 Prevalence of undernourishment (%)

2.1.2 Proportion of children moderately or severely stunted (%)

2.2.2 Proportion of children moderately or severely overweight (%)

6.1.1 Proportion of population using safely managed drinking water services (%)

6.2.1 Proportion of population using basic sanitation water services (%)

6.6.1 Lakes and rivers permanent water area (% of total land area)

6.6.1 Lakes and rivers seasonal water area (% of total land area)

6.6.1 Reservoir minimum water area (% of total land area)

6.6.1 Reservoir maximum water area (% of total land area)

7.1.1 Proportion of population with access to electricity (%)

7.2.1 Renewable energy share in the total final energy consumption (%)

7.3.1 Energy intensity level of primary energy (megajoules per constant 2017 PPP)

8.4.1 Material footprint per unit of GDP (kilograms per constant 2015 USD)

8.4.2 Domestic material consumption per unit of GDP (kilograms per constant 2015 USD)

8.5.2 Unemployment rate (%)

9.2.1 Manufacturing value added (current United States dollars) as a proportion of GDP (%)

9.4.1 Carbon dioxide emissions per unit of GDP PPP (kilograms of CO<sub>2</sub> per constant 2017 USD)

12.a.1 Installed renewable electricity-generating capacity (watts per capita)

12.4.2 Electronic waste generated, per capita (KG)

15.1.2 Average proportion of terrestrial Key Biodiversity Areas (KBAS) covered (%)

15.1.2 Average proportion of freshwater Key Biodiversity Areas (KBAs) covered (%)

15.4.1 Average proportion of mountain Key Biodiversity Areas (KBAS) covered (%)

15.5.1 Red List Index

Urban population as a percentage of total population

GNI per capita, Atlas method (current USD)

Completion rate of upper secondary education (%)



**Freshwater-related ecosystems indicators with available data, Colombia**

6.1.1 Proportion of population using safely managed drinking water services (%)
6.2.1 Proportion of population using basic sanitation water services (%)
6.4.1 Water-use efficiency (USD per cubic meter)
6.4.2 Levels of water stress: freshwater withdrawal as a proportion of available freshwater resources (%)
6.6.1 Lakes and rivers permanent water area (% of total land area)
6.6.1 Lakes and rivers seasonal water area (% of total land area)
6.6.1 Reservoir minimum water area (% of total land area)
6.6.1 Reservoir maximum water area (% of total land area)
7.2.1 Renewable energy share in the total final energy consumption (%)
7.3.1 Energy intensity level of primary energy (megajoules per constant 2017 PPP)
8.4.2 Domestic material consumption per unit of GDP (kilograms per constant 2015 USD)
9.2.1 Manufacturing value added (current United States dollars) as a proportion of GDP (%)
9.4.1 Carbon dioxide emissions per unit of GDP PPP (kilograms of CO <sub>2</sub> per constant 2017 USD)
15.1.2 Average proportion of freshwater Key Biodiversity Areas (KBAs) covered (%)
15.1.2 Average proportion of terrestrial Key Biodiversity Areas (KBAS) covered (%)
15.4.1 Average proportion of mountain Key Biodiversity Areas (KBAS) covered (%)
15.5.1 Red List Index
Urban population as a percentage of total population
GNI per capita, Atlas method (current USD)

**Freshwater-related ecosystems indicators with available data, Mongolia**

6.1.1 Proportion of population using safely managed drinking water services (%)
6.2.1 Proportion of population using basic sanitation water services (%)
6.4.1 Water-use efficiency (USD per cubic meter)
6.4.2 Levels of water stress: freshwater withdrawal as a proportion of available freshwater resources (%)
6.6.1 Lakes and rivers permanent water area (% of total land area)
6.6.1 Lakes and rivers seasonal water area (% of total land area)
6.6.1 Reservoir minimum water area (% of total land area)
6.6.1 Reservoir maximum water area (% of total land area)
7.2.1 Renewable energy share in the total final energy consumption (%)
7.3.1 Energy intensity level of primary energy (megajoules per constant 2017 PPP)

---

8.4.2 Domestic material consumption per unit of GDP (kilograms per constant 2015 USD)

---

9.2.1 Manufacturing value added (current United States dollars) as a proportion of GDP (%)

---

9.4.1 Carbon dioxide emissions per unit of GDP PPP (kilograms of CO<sub>2</sub> per constant 2017 USD)

---

15.1.2 Average proportion of freshwater KBAs covered (%)

---

15.1.2 Average proportion of terrestrial KBAs covered (%)

---

15.4.1 Average proportion of mountain KBAs covered (%)

---

15.5.1 Red List Index

---

Urban population as a percentage of total population

---

GNI per capita, Atlas method (current USD)

## Annex D.3 Indicators considered for marine-related ecosystems

### State of marine-related ecosystems indicators

---

14.1.1 (a) Index of coastal eutrophication; and (b) plastic debris density

---

14.3.1 Average marine acidity (pH) measured at the agreed suite of representative sampling stations

---

14.4.1 Proportion of fish stocks within biologically sustainable levels

### Drivers of change indicators for marine-related ecosystems

---

6.3.1 Proportion of domestic and industrial wastewater flows safely treated

---

6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

---

6.6.1 Change in the extent of water-related ecosystems over time

---

6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan

---

7.2.1 Renewable energy share in the total final energy consumption

---

8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP

---

9.1.2 Passenger and freight volumes, by mode of transport

---

9.4.1 CO<sub>2</sub> emission per unit of value added

---

12.1.1 Number of countries developing, adopting or implementing policy instruments aimed at supporting the shift to sustainable consumption and production.

---

12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment

---

12.5.1 National recycling rate, tons of material recycled

---

12.7.1 Degree of sustainable public procurement policies and action plan implementation

---

12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment.





---

12.a.1 Installed renewable energy-generating capacity in developing countries (in watts per capita)

---

12.c.1 Amount of fossil-fuel subsidies (production and consumption) per unit of GDP

---

13.a.1 Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the \$100 billion commitment through to 2025

---

13.b.1 Number of least developed countries and small island developing States with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations Framework Convention on Climate Change.

---

14.2.1 Number of countries using ecosystem-based approaches to managing marine areas

---

14.5.1 Coverage of protected areas in relation to marine areas

---

14.6.1 Degree of implementation of international instruments aiming to combat illegal, unreported and unregular fishing

---

14.a.1 Proportion of total research budget allocated to research in the field of marine technology

---

14.c.1 Number of countries making progress in ratifying UN Convention of the law of the sea

---

#### State of human well-being indicators related to marine-related ecosystems

---

1.1.1 Proportion of population below the international poverty line, by sex, age, employment status, and geographical location (urban/rural)

---

1.2.1 Proportion of population living below the national poverty line, by sex and age.

---

1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

---

2.3.2 Average income of small-scale food producers

---

8.5.2 Unemployment rate, by sex, age and persons with disabilities

---

8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training

---

10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population.

---

10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities

---

14.7.1 Sustainable fisheries as a proportion of GDP

---

## Annex D.4 Indicators with available data for marine-related ecosystems for Global and Sri Lanka

### Marine-related ecosystems indicators with available data, global level

1.1.1 Employed population below international poverty line (%)

2.1.1 Prevalence of undernourishment (%)

6.1.1 Proportion of population using safely managed drinking water services (%)

6.1.1 Proportion of population using basic drinking water services (%)

6.2.1 Proportion of population using basic sanitation services (%)

6.2.1 Proportion of population practicing open defecation (%)

6.2.1 Proportion of population using safely managed sanitation services (%)

6.6.1 Lakes and rivers permanent water area (% of total land area)

6.6.1 Lakes and rivers seasonal water area (% of total land area)

6.6.1 Reservoir minimum water area (% of total land area)

6.6.1 Reservoir maximum water area (% of total land area)

7.1.1 Proportion of population with access to electricity (%)

7.2.1 Renewable energy share in the total final energy consumption (%)

7.3.1 Energy intensity level of primary energy (megajoules per constant 2017 PPP)

8.4.2 Domestic material consumption per unit of GDP (kilograms per constant 2015 USD)

8.5.2 Unemployment rate (%)

9.4.1 Carbon dioxide emissions per unit of GDP PPP (kilograms of CO<sub>2</sub> per constant 2017 USD)

12.a.1 Installed renewable electricity-generating capacity (watts per capita)

12.4.2 Electronic waste generated, per capita (KG)

14.1.1 Chlorophyll-a deviations, remote sensing (%)

14.5.1 Coverage protected areas in relation to marine areas

14.5.1 Protected marine areas (square kilometers)

15.1.2 Average proportion of marine KBAs covered (%)

15.5.1 Red List Index

Urban population as a percentage of total population

GNI per capita, Atlas method (current USD)

Completion rate of upper secondary education (%)



**Marine-related ecosystems indicators with available data, Sri Lanka**

1.1.1 Employed population below international poverty line (%)
6.1.1 Proportion of population using basic drinking water services (%)
6.2.1 Proportion of population using basic sanitation services (%)
6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources
6.6.1 Lakes and rivers permanent water area (% of total land area)
6.6.1 Lakes and rivers seasonal water area (% of total land area)
6.6.1 Reservoir minimum water area (% of total land area)
6.6.1 Reservoir maximum water area (% of total land area)
7.1.1 Proportion of population with access to electricity (%)
7.2.1 Renewable energy share in the total final energy consumption (%)
7.3.1 Energy intensity level of primary energy (megajoules per constant 2017 PPP)
8.4.2 Domestic material consumption per unit of GDP (kilograms per constant 2015 USD)
9.4.1 Carbon dioxide emissions per unit of GDP PPP (kilograms of CO <sub>2</sub> per constant 2017 USD)
9.4.1 Carbon dioxide emissions from fuel consumption (millions of tonnes)
14.1.1 Chlorophyll-a deviations, remote sensing (%)
15.1.2 Average proportion of marine KBAs covered (%)
15.5.1 Red List Index
Urban population as a percentage of total population
GNI per capita, Atlas method (current USD)

# Annex E. Potential synergies identified as part of the statistical analysis

## Annex E.1 Identified synergies between the drivers of change and the state of freshwater-related ecosystems and identified synergies between the state of freshwater-related ecosystems and the state of the human well-being

**Note:** Potential synergies are highlighted in blue.

Synergies Freshwater-related Ecosystems		State of Freshwater-related Ecosystems	
		6.3.2 Proportion of bodies of water with good ambient water quality	6.6.1 Change in the extent of water-related ecosystems over time
Drivers of change	1.4.1 Proportion of the population living in households with access to basic services		
	2.4.1 Proportion of agricultural area under productive and sustainable agriculture		
	6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water		
	6.3.1 Proportion of domestic and industrial wastewater flows safely treated		
	6.4.1 Change in water-use efficiency over time		
	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources		
	6.5.1 Degree of integrated water resources management		
	6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation		
	6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan		
	6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management		
	7.2.1 Renewable energy share in the total final energy consumption		
	8.4.1 Material footprint, material footprint per capita, and material footprint per GDP		



Synergies Freshwater-related Ecosystems		State of Freshwater-related Ecosystems	
		6.3.2 Proportion of bodies of water with good ambient water quality	6.6.1 Change in the extent of water-related ecosystems over time
Drivers of change	8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP		
	9.1.2 Passenger and freight volumes, by mode of transport		
	11.1.1 Proportion of urban population living in slums, informal settlements, or inadequate housing		
	11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically		
	11.5.3 (a) Damage to critical infrastructure and (b) number of disruptors to basic services, attributed to disasters		
	11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities		
	12.1.1 Number of countries developing, adopting or implementing policy instruments aimed at supporting the shift to sustainable consumption and production.		
	12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment		
	12.5.1 National recycling rate, tons of material recycled		
	12.7.1 Degree of sustainable public procurement policies and action plan implementation		
	15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type		
	15.2.1 Forest area certified under an independently verified certification scheme (thousands of hectares)		
	15.4.1 Coverage by protected areas of important sites for mountain biodiversity		

Synergies Freshwater-related Ecosystems		State of Freshwater-related Ecosystems	
		6.3.2 Proportion of bodies of water with good ambient water quality	6.6.1 Change in the extent of water-related ecosystems over time
State of human well-being	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)		
	1.2.1 Proportion of population living below the national poverty line, by sex and age.		
	1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions		
	1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population		
	1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)		
	2.1.1 Prevalence of undernourishment (%)		
	2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)		
	2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type		
	2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)		
	2.3.2 Average income of small-scale food producers		
	3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene		
	4.a.1 Proportion of schools with access to (a) electricity; (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions).		
	6.1.1 Proportion of population using safely managed drinking water services		
	8.5.2 Unemployment rate, by sex, age and persons with disabilities		
	10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population		
	10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities		
	11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population		
	11.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)		
	13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population		



## Annex E.2 Identified synergies between the drivers of change and the state of marine-related ecosystems, and identified synergies between the state of marine-related ecosystems and the state of the human well-being

Synergies Marine-related Ecosystems		State of Marine-related Ecosystems		
		14.1.1 (a) Index of coastal eutrophication; and (b) plastic debris density	14.2.1 Average marine acidity (pH) measured at the agreed suite of representative sampling stations	14.3.1 Proportion of fish stocks within biologically sustainable levels
Drivers of change	6.3.1 Proportion of domestic and industrial wastewater flows safely treated			
	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources			
	6.6.1 Change in the extent of water-related ecosystems over time			
	6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan			
	7.2.1 Renewable energy share in the total final energy consumption			
	8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP			
	9.1.2 Passenger and freight volumes, by mode of transport			
	9.4.1 CO <sub>2</sub> emission per unit of value added			
	12.1.1 Number of countries developing, adopting or implementing policy instruments aimed at supporting the shift to sustainable consumption and production.			
	12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment			
	12.5.1 National recycling rate, tons of material recycled			
	12.7.1 Degree of sustainable public procurement policies and action plan implementation			
	12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment.			
	12.a.1 Installed renewable energy-generating capacity in developing countries (in watts per capita)			
	12.c.1 Amount of fossil-fuel subsidies (production and consumption) per unit of GDP			

Synergies Marine-related Ecosystems		State of Marine-related Ecosystems		
		14.1.1 (a) Index of coastal eutrophication; and (b) plastic debris density	14.2.1 Average marine acidity (pH) measured at the agreed suite of representative sampling stations	14.3.1 Proportion of fish stocks within biologically sustainable levels
Drivers of change	13.a.1 Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the \$100 billion commitment through to 2025			
	13.b.1 Number of least developed countries and small island developing States with nationally determined contributions, long-terms strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations Framework Convention on Climate Change			
	14.2.1 Number of countries using ecosystem-based approaches to managing marine areas			
	14.5.1 Coverage protected areas in relation to marine areas			
	14.6.1 Degree of implementation of international instruments aiming to combat illegal, unreported and unregular fishing			
	14.a.1 Proportion of total research budget allocated to research in the field of marine technology			
	14.c.1 Number of countries making progress in ratifying UN Convention of the law of the sea			





Synergies Marine-related Ecosystems		State of Marine-related Ecosystems		
		14.1.1 (a) Index of coastal eutrophication; and (b) plastic debris density	14.2.1 Average marine acidity (pH) measured at the agreed suite of representative sampling stations	14.3.1 Proportion of fish stocks within biologically sustainable levels
State of human well-being	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status, and geographical location (urban/rural)			
	1.2.1 Proportion of population living below the national poverty line, by sex and age.			
	1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions			
	2.3.2 Average income of small-scale food producers			
	8.5.2 Unemployment rate, by sex, age and persons with disabilities			
	8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training			
	10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population.			
	10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities			
	14.7.1 Sustainable fisheries as a proportion of GDP			

## Annex F. Instrumental models

### Annex F.1 Instrumental statistical models for the state of freshwater-related ecosystems at global level

		LAKES AND RIVERS SEASONAL WATER AREA									
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10
Divers of change	Proportion of population using basic drinking water services	0.72	0.67								0.68
	Electronic waste generated, per capita			-2.32	-2.97	-3.71	-1.6	-3.96	-4.47	-4.92	
	Average proportion of freshwater KBAs covered			0.9				0.62			1.69
	Average proportion of terrestrial KBAs covered				1.28				0.85		
	Average proportion of mountain KBAs covered					1.79	1.65			1.14	
	Renewable energy share in the total final energy consumption										
	Material footprint per unit of GDP	-0.27									
	Domestic material consumption per unit of GDP		-0.28								
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP	-0.22	-0.24								
	Red List Index			-2.26	-2.54	-2.78					
	Carbon dioxide emissions per unit of GDP PPP						-0.83				
	GNI per capita, Atlas method										-1.59
	Completion rate of upper secondary education										
	Installed renewable electricity-generating capacity										
	Proportion of population with access to electricity										
	Energy intensity level of primary energy										
Urban population as percentage of total population							4.18	4.46	4.62		



LAKES AND RIVERS SEASONAL WATER AREA															
Type	Description	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	
Divers of change	Proportion of population using basic drinking water services														
	Electronic waste generated, per capita						-1.8	-4.23							
	Average proportion of freshwater KBAs covered	2.19							1.59	1.68	1.86	1.88	1.57	1.72	
	Average proportion of terrestrial KBAs covered		1.9	1.87											
	Average proportion of mountain KBAs covered				1.82	1.78									
	Renewable energy share in the total final energy consumption	0.27													
	Material footprint per unit of GDP		-0.19		-0.2										
	Domestic material consumption per unit of GDP			-0.2		-0.2									
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP						-0.31	-0.26							
	Red List Index						-2.45		-0.74						
	Carbon dioxide emissions per unit of GDP PPP									-0.44					
	GNI per capita, Atlas method	-1.51	-1.11	-1.1	-1.02	-1.01			-1.55	-1.3	-1.74	-1.83	-1.34	-1.46	
	Completion rate of upper secondary education										0.65				
	Installed renewable electricity-generating capacity											0.7			
	Proportion of population with access to electricity												0.57		
	Energy intensity level of primary energy														-0.53
	Urban population as percentage of total population								4.93						

LAKES AND RIVERS SEASONAL WATER AREA															
Type	Description	M24	M25	M26	M27	M28	M29	M30	M31	M32	M33	M34	M35		
Divers of change	Proportion of population using basic drinking water services														
	Electronic waste generated, per capita														
	Average proportion of freshwater KBAs covered	1.52													
	Average proportion of terrestrial KBAs covered		1.97	2.09	1.99	2.13	1.89								
	Average proportion of mountain KBAs covered														
	Renewable energy share in the total final energy consumption														
	Material footprint per unit of GDP								-0.24	-0.3	-0.3	-0.17	-0.19	-0.27	
	Domestic material consumption per unit of GDP														
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP								-0.23	-0.27	-0.27	-0.26	-0.29	-0.2	
	Red List Index		-0.47						-0.71						
	Carbon dioxide emissions per unit of GDP PPP			-0.27											
	GNI per capita, Atlas method	-1.65	-1.68	-1.58	-1.6	-1.67	-1.72								
	Completion rate of upper secondary education									0.69					
	Installed renewable electricity-generating capacity										0.68				
	Proportion of population with access to electricity					0.39							0.69		
	Energy intensity level of primary energy						-0.3							-0.67	
	Urban population as percentage of total population	0.9							0.57						0.73



LAKES AND RIVERS SEASONAL WATER AREA												
Type	Description	M36	M37	M38	M39	M40	M41	M42	M43	M44	M45	M46
Divers of change	Proportion of population using basic drinking water services								0.83	0.79		
	Electronic waste generated, per capita											
	Average proportion of freshwater KBAs covered										0.84	0.81
	Average proportion of terrestrial KBAs covered											
	Average proportion of mountain KBAs covered											
	Renewable energy share in the total final energy consumption											
	Material footprint per unit of GDP								-0.21		-0.29	
	Domestic material consumption per unit of GDP	-0.25	-0.3	-0.31	-0.18	-0.2	-0.27	-0.41		-0.2		-0.3
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP	-0.25	-0.29	-0.28	-0.27	-0.3	-0.22	-0.2				
	Red List Index	-0.67										
	Carbon dioxide emissions per unit of GDP PPP											
	GNI per capita, Atlas method							0.69				
	Completion rate of upper secondary education		0.64									
	Installed renewable electricity-generating capacity			0.63								
	Proportion of population with access to electricity				0.66							
	Energy intensity level of primary energy					-0.63						
	Urban population as percentage of total population						0.69					

LAKES AND RIVERS SEASONAL WATER AREA											
Type	Description	M47	M48	M49	M50	M51	M52	M53	M54	M55	M56
Divers of change	Proportion of population using basic drinking water services										
	Electronic waste generated, per capita						-2.84				
	Average proportion of freshwater KBAs covered							0.45	1.84		
	Average proportion of terrestrial KBAs covered	0.84	0.81							0.45	2.47
	Average proportion of mountain KBAs covered			0.85	0.81						
	Renewable energy share in the total final energy consumption										
	Material footprint per unit of GDP	-0.3		-0.3		3.55					
	Domestic material consumption per unit of GDP		-0.3		-0.3	-3.71					
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP										
	Red List Index										
	Carbon dioxide emissions per unit of GDP PPP							-0.38		-0.37	
	GNI per capita, Atlas method								-1.13		-1.76
	Completion rate of upper secondary education										
	Installed renewable electricity-generating capacity										
	Proportion of population with access to electricity										
	Energy intensity level of primary energy										
Urban population as percentage of total population						3.66					



LAKES AND RIVERS SEASONAL WATER AREA														
Type	Description	M57	M58	M59	M60	M61	M62	M63	M64	M65	M66	M67	Average Impact	
Divers of change	Proportion of population using basic drinking water services												0.74	
	Electronic waste generated, per capita												-3.28	
	Average proportion of freshwater KBAs covered												1.41	
	Average proportion of terrestrial KBAs covered												1.58	
	Average proportion of mountain KBAs covered	2.36											1.52	
	Renewable energy share in the total final energy consumption		0.43											0.35
	Material footprint per unit of GDP			-0.17	-0.22	-0.23	-0.21	-0.37						-0.05
	Domestic material consumption per unit of GDP								-0.2	-0.22	-0.2	-0.37		-0.44
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP		-0.57										-0.27	
	Red List Index			-0.82									-1.49	
	Carbon dioxide emissions per unit of GDP PPP												-0.46	
	GNI per capita, Atlas method	-1.64						0.85				0.8	-1.19	
	Completion rate of upper secondary education				0.81				0.77				0.71	
	Installed renewable electricity-generating capacity					0.8				0.76			0.71	
	Proportion of population with access to electricity												0.58	
	Energy intensity level of primary energy												-0.53	
Urban population as percentage of total population						0.83				0.8		2.4		

LAKES AND RIVERS PERMANENT WATER AREA						
Type	Description	M01	M02	M03	M04	Average Impact
Divers of change	Proportion of population using basic drinking water services					
	Electronic waste generated, per capita					
	Average proportion of freshwater KBAs covered	2.93	2.39			2.66
	Average proportion of terrestrial KBAs covered			2.56		2.56
	Average proportion of mountain KBAs covered				2.1	2.1
	Renewable energy share in the total final energy consumption					
	Material footprint per unit of GDP	0.24				0.24
	Domestic material consumption per unit of GDP					
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP					
	Red List Index					
	Carbon dioxide emissions per unit of GDP PPP					
	GNI per capita, Atlas method	-2.64	-2.01	-2.18	-1.72	-2.14
	Completion rate of upper secondary education					
	Installed renewable electricity-generating capacity					
	Proportion of population with access to electricity					
	Energy intensity level of primary energy					
	Urban population as percentage of total population					





RESERVOIR MAXIMUM WATER AREA											
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10
Divers of change	Proportion of population using basic drinking water services	-0.88	-1.33							-0.63	-0.82
	Electronic waste generated, per capita			-1.07	-1.86						
	Average proportion of freshwater KBAs covered					2.89				1.17	
	Average proportion of terrestrial KBAs covered	3.26		3.23			1.74	3.34			1.34
	Average proportion of mountain KBAs covered		3.57		3.84				3.79		
	Renewable energy share in the total final energy consumption										
	Material footprint per unit of GDP					0.24					
	Domestic material consumption per unit of GDP										
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP						-0.26				
	Red List Index										
	Carbon dioxide emissions per unit of GDP PPP										
	GNI per capita, Atlas method	-1.89	-1.77	-1.64	-1.46	-2.41	-1.35	-1.87	-1.75		
	Completion rate of upper secondary education										
	Installed renewable electricity-generating capacity										
	Proportion of population with access to electricity										
	Energy intensity level of primary energy										
	Urban population as percentage of total population							-0.96	-1.55		

RESERVOIR MAXIMUM WATER AREA														
Type	Description	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	Average Impact	
Divers of change	Proportion of population using basic drinking water services	-1.01											-0.93	
	Electronic waste generated, per capita		-0.83	-1.19	-1.68								-1.33	
	Average proportion of freshwater KBAs covered		1.4			0.39	1.27	2.36					1.58	
	Average proportion of terrestrial KBAs covered			1.73					0.35	2.36			2.17	
	Average proportion of mountain KBAs covered	1.52			2.22						0.34	1.68	2.42	
	Renewable energy share in the total final energy consumption													
	Material footprint per unit of GDP													0.24
	Domestic material consumption per unit of GDP													
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP					-0.32			-0.35		-0.36		-0.32	
	Red List Index													
	Carbon dioxide emissions per unit of GDP PPP													
	GNI per capita, Atlas method							-1.79		-1.8			-1.77	
	Completion rate of upper secondary education													
	Installed renewable electricity-generating capacity													
	Proportion of population with access to electricity													
	Energy intensity level of primary energy													
Urban population as percentage of total population						-0.72						-1.16	-1.1	



RESERVOIR MINIMUM WATER AREA															
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10	M11	M12	Average Impact	
Divers of change	Proportion of population using basic drinking water services	-0.81	-1.24											-1.02	
	Electronic waste generated, per capita			-1.6				-1.42						-1.51	
	Average proportion of freshwater KBAs covered				2.95				0.37	2.34				1.89	
	Average proportion of terrestrial KBAs covered	3.16				3.2					0.33	2.33		2.26	
	Average proportion of mountain KBAs covered		3.47	3.56			3.56	1.95					0.32	2.57	
	Renewable energy share in the total final energy consumption														
	Material footprint per unit of GDP				0.28	0.29									0.29
	Domestic material consumption per unit of GDP														
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP								-0.32		-0.35		-0.36	-0.34	
	Red List Index														
	Carbon dioxide emissions per unit of GDP PPP														
	GNI per capita, Atlas method	-1.88	-1.77	-1.46	-2.5	-2.77	-1.72				-1.78		-1.79	-1.96	
	Completion rate of upper secondary education														
	Installed renewable electricity-generating capacity														
	Proportion of population with access to electricity														
	Energy intensity level of primary energy														
Urban population as percentage of total population							-1.37							-1.37	

## Annex F.2 Instrumental statistical models for the state of the freshwater-related ecosystems' impact on the state of human well-being at global level

EMPLOYED POPULATION BELOW INTERNATIONAL POVERTY LINE							
Type	Description	M01	M02	M03	M04	M05	Average Impact
State of ecosystem	Lakes and rivers permanent water area		-0.05				-0.05
	Lakes and rivers seasonal water area					-0.27	-0.27
	Reservoir minimum water area	-0.05		-0.21			-0.13
	Reservoir maximum water area				-0.21		-0.21
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP						
	Red List Index	-0.46	-0.45				
	Carbon dioxide emissions per unit of GDP PPP			0.87	0.87	0.78	0.84
	GNI per capita, Atlas method						
	Completion rate of upper secondary education	-1.41	-1.42				-1.42
	Installed renewable electricity-generating capacity						
	Proportion of population with access to electricity						
	Energy intensity level of primary energy						
	Urban population as percentage of total population						

UNEMPLOYMENT RATE						
Type	Description	M01	M02	M03	Average Impact	
State of ecosystem	Lakes and rivers permanent water area					
	Lakes and rivers seasonal water area				-1.08	-1.08
	Reservoir minimum water area	-1.01				-1.01
	Reservoir maximum water area			-1.03		-1.03
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP	-0.56	-0.6	-0.52		-0.56
	Red List Index					
	Carbon dioxide emissions per unit of GDP PPP					
	GNI per capita, Atlas method					
	Completion rate of upper secondary education					
	Installed renewable electricity-generating capacity					
	Proportion of population with access to electricity					
	Energy intensity level of primary energy					
	Urban population as percentage of total population					



PROPORTION OF CHILDREN MODERATELY OR SEVERELY OVERWEIGHT							
Type	Description	M01	M02	M03	M04	M05	Average Impact
State of ecosystem	Lakes and rivers permanent water area			0.82			0.82
	Lakes and rivers seasonal water area				1.37	0.97	1.17
	Reservoir minimum water area	0.86					0.86
	Reservoir maximum water area		0.82				0.82
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP						
	Red List Index	2.56	2.43	2.28	2.6	0.77	2.13
	Carbon dioxide emissions per unit of GDP PPP	-2.15	-2.04	-1.98	-1.61		-1.95
	GNI per capita, Atlas method						
	Completion rate of upper secondary education						
	Installed renewable electricity-generating capacity						
	Proportion of population with access to electricity						
	Energy intensity level of primary energy						
	Urban population as percentage of total population						

PROPORTION OF CHILDREN MODERATELY OR SEVERELY STUNTED						
Type	Description	M01	M02	M03		Average Impact
State of ecosystem	Lakes and rivers permanent water area					
	Lakes and rivers seasonal water area				-0.23	-0.23
	Reservoir minimum water area	-0.16				-0.16
	Reservoir maximum water area		-0.16			-0.16
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP					
	Red List Index					
	Carbon dioxide emissions per unit of GDP PPP	0.93	0.93	0.84		0.9
	GNI per capita, Atlas method					
	Completion rate of upper secondary education					
	Installed renewable electricity-generating capacity					
	Proportion of population with access to electricity					
	Energy intensity level of primary energy					
	Urban population as percentage of total population					

PREVALENCE OF UNDERNOURISHMENT											
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	M09	Average Impact
State of ecosystem	Lakes and rivers permanent water area			-0.18							-0.18
	Lakes and rivers seasonal water area				-0.42					-0.47	-0.44
	Reservoir minimum water area	-0.22				-0.35	-0.25				-0.27
	Reservoir maximum water area		-0.23					-0.37	-0.26		-0.29
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP										
	Red List Index	-1.79	-1.79	-1.91	-2.54						-2.01
	Carbon dioxide emissions per unit of GDP PPP					0.7		0.69		0.54	0.64
	GNI per capita, Atlas method										
	Completion rate of upper secondary education										
	Installed renewable electricity-generating capacity	-2.55	-2.54	-2.71	-3.1						-2.72
	Proportion of population with access to electricity										
	Energy intensity level of primary energy							0.79		0.77	0.78
Urban population as percentage of total population											



## Annex F.3 Instrumental statistical models for the state of freshwater-related ecosystems, Colombia

		LAKES AND RIVERS PERMANENT WATER AREA				
Type	Description	M01	M02	M03	M04	Average Impact
State of ecosystem	Proportion of population using basic drinking water services					
	Average proportion of freshwater KBAs covered					
	Average proportion of terrestrial KBAs covered	1.5				1.5
	Average proportion of mountain KBAs covered		1.5			1.5
	Water-use efficiency			1.15		1.15
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources				-1.73	-1.73
	Renewable energy share in the total final energy consumption					
	Domestic material consumption per unit of GDP					
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP	1.5	1.49			1.5
	Red List Index					
	Carbon dioxide emissions per unit of GDP PPP					
	GNI per capita, Atlas method			1.31	1.88	1.59
	Energy intensity level of primary energy					
	Urban population as percentage of total population					

LAKES AND RIVERS SEASONAL WATER AREA						
Type	Description	M01	M02	M03	M04	Average Impact
State of ecosystem	Proportion of population using basic drinking water services	-0.4	-0.72	-0.68	-1.16	-0.74
	Average proportion of freshwater KBAs covered	1.24				1.24
	Average proportion of terrestrial KBAs covered		1.51			1.51
	Average proportion of mountain KBAs covered			1.48		1.48
	Water-use efficiency					
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources					
	Renewable energy share in the total final energy consumption					
	Domestic material consumption per unit of GDP					
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP					
	Red List Index				-1.95	-1.95
	Carbon dioxide emissions per unit of GDP PPP					
	GNI per capita, Atlas method					
	Energy intensity level of primary energy					
	Urban population as percentage of total population					

RESERVOIR MAXIMUM WATER AREA					
Type	Description	M01	Average Impact		
State of ecosystem	Proportion of population using basic drinking water services				
	Average proportion of freshwater KBAs covered				
	Average proportion of terrestrial KBAs covered				
	Average proportion of mountain KBAs covered				
	Water-use efficiency				
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources				
	Renewable energy share in the total final energy consumption	0.4	0.4		
	Domestic material consumption per unit of GDP				
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP				
	Red List Index				
	Carbon dioxide emissions per unit of GDP PPP				
	GNI per capita, Atlas method				
	Energy intensity level of primary energy	-0.32	-0.32		
	Urban population as percentage of total population				





RESERVOIR MINIMUM WATER AREA																				
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10	M11	M12	M13	M14	M15	M16	M17	Average Impact	
Divers of change	Proportion of population using basic drinking water services	0.7	0.39	0.6	0.81			0.92	0.48										0.65	
	Average proportion of freshwater KBAs covered					0.22				0.22	0.36								0.27	
	Average proportion of terrestrial KBAs covered																			
	Average proportion of mountain KBAs covered						0.24					0.22	0.4						0.29	
	Water-use efficiency													0.38					0.38	
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	-0.47		-0.85	-0.34				-0.36							-1.06	-0.78			-0.64
	Renewable energy share in the total final energy consumption					0.18	0.17											0.28		0.21
	Domestic material consumption per unit of GDP	-0.34	-0.45																-0.83	-0.54
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP		0.29															0.3	0.3	
	Red List Index			-0.83										-0.95	-1.65				-1.14	
	Carbon dioxide emissions per unit of GDP PPP									-0.38		-0.36							-0.37	
	GNI per capita, Atlas method																			
	Energy intensity level of primary energy				-0.13	-0.26	-0.24		-0.14		-0.23		-0.19					-0.36		-0.22
	Urban population as percentage of total population															1.35			1.35	

## Annex F.4 Instrumental statistical models for the state of the freshwater-related ecosystems' impact on the state of human well-being, Colombia

PROPORTION OF POPULATION USING SAFELY MANAGED DRINKING WATER SERVICES												
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10	Average Impact
State of ecosystem	Lakes and rivers permanent water area											
	Lakes and rivers seasonal water area	0.43							0.44	0.6	0.36	0.46
	Reservoir minimum water area	0.48	0.25	0.2	0.43							0.34
	Reservoir maximum water area					0.28	0.54	0.56				0.46
	Manufacturing value added as a proportion of GDP											
	Red List Index		-0.73			-0.7						-0.72
	Carbon dioxide emissions per unit of GDP PPP						-0.39		-0.54			-0.47
	GNI per capita, Atlas method				0.5			0.44				0.52
Socioeconomic and environmental factors	Energy intensity level of primary energy									-0.34		-0.34
	Urban population as percentage of total population			0.76								0.76
	Carbon dioxide emissions per unit of GDP PPP											
	GNI per capita, Atlas method	-1.88	-1.77	-1.46	-2.5	-2.77	-1.72			-1.78		-1.96
	Completion rate of upper secondary education											
	Installed renewable electricity-generating capacity											
	Proportion of population with access to electricity											
	Energy intensity level of primary energy											
Urban population as percentage of total population						-1.37					-1.37	



## Annex F.5 Instrumental statistical models for the state of freshwater-related ecosystems, Mongolia

		LAKES AND RIVERS PERMANENT WATER AREA							
Type	Description	M01	M02	M03	M04	M05	M06	M07	Average Impact
Drivers of change	Proportion of population using basic drinking water services	0.57			0.95				0.76
	Average proportion of freshwater KBAs covered								
	Average proportion of terrestrial KBAs covered								
	Average proportion of mountain KBAs covered								
	Water-use efficiency		0.55						0.55
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources								
	Renewable energy share in the total final energy consumption	0.76	0.87	0.8	0.66	0.36	0.61	0.95	0.72
	Domestic material consumption per unit of GDP	-0.54	-0.69	-0.56		-0.68			-0.62
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP								
	Red List Index			-0.6					-0.6
	Carbon dioxide emissions per unit of GDP PPP								
	GNI per capita, Atlas method							1.19	1.19
	Energy intensity level of primary energy								
	Urban population as percentage of total population						0.89		0.89

LAKES AND RIVERS SEASONAL WATER AREA										
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	Average Impact
Drivers of change	Proportion of population using basic drinking water services	1.04					1.3			1.17
	Average proportion of freshwater KBAs covered									
	Average proportion of terrestrial KBAs covered									
	Average proportion of mountain KBAs covered									
	Water-use efficiency		0.9							0.9
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources									
Socioeconomic and environmental factors	Renewable energy share in the total final energy consumption	0.88	0.98	0.94	0.6	0.57	0.81	0.84	0.5	0.76
	Domestic material consumption per unit of GDP	-0.38	-0.65	-0.41	-0.64	-0.66				-0.55
	Manufacturing value added as a proportion of GDP									
	Red List Index			-1.08				-1.33		-1.21
	Carbon dioxide emissions per unit of GDP PPP				-0.52					
	GNI per capita, Atlas method									
	Energy intensity level of primary energy					-0.47				-0.47
	Urban population as percentage of total population								0.96	0.96



RESERVOIR MAXIMUM WATER AREA												
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10	M11
Drivers of change	Proportion of population using basic drinking water services	0.51			0.43							
	Average proportion of freshwater KBAs covered					0.52				0.33		
	Average proportion of terrestrial KBAs covered										0.56	0.64
	Average proportion of mountain KBAs covered						0.57					
	Water-use efficiency		0.99					0.67				
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	-0.21		-0.18						-0.4		
	Renewable energy share in the total final energy consumption		0.41									
	Domestic material consumption per unit of GDP	-0.31	-0.36	-0.3	-0.21	-0.5	-0.41	-0.27	-0.69			
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP											
	Red List Index			-0.53								
	Carbon dioxide emissions per unit of GDP PPP										-0.41	
	GNI per capita, Atlas method											
	Energy intensity level of primary energy				-0.28							-0.32
	Urban population as percentage of total population									0.64		

RESERVOIR MAXIMUM WATER AREA												
Type	Description	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	Average Impact
Drivers of change	Proportion of population using basic drinking water services											0.47
	Average proportion of freshwater KBAs covered											0.43
	Average proportion of terrestrial KBAs covered	0.53	0.49									0.56
	Average proportion of mountain KBAs covered			0.35	0.42	0.36						0.42
	Water-use efficiency						0.58					0.75
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources							-0.26				-0.26
	Renewable energy share in the total final energy consumption											0.41
	Domestic material consumption per unit of GDP								-0.68	-0.36	-0.4	-0.41
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP								0.29			0.29
	Red List Index											-0.53
	Carbon dioxide emissions per unit of GDP PPP			-0.58						-0.58		-0.52
	GNI per capita, Atlas method		0.46									0.46
	Energy intensity level of primary energy				-0.51						-0.54	-0.41
	Urban population as percentage of total population	0.42				0.58	0.32	0.74				0.54



RESERVOIR MINIMUM WATER AREA											
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10
Drivers of change	Proportion of population using basic drinking water services	0.7	0.6						0.44		
	Average proportion of freshwater KBAs covered									0.28	
	Average proportion of terrestrial KBAs covered			0.44							
	Average proportion of mountain KBAs covered	0.23			0.21		0.25		0.36		0.4
	Water-use efficiency				0.73	0.69					
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	-0.15	-0.3	-0.36		-0.14	-0.12	-0.28			
	Renewable energy share in the total final energy consumption										
	Domestic material consumption per unit of GDP		-0.22	-0.4	-0.1	-0.24		-0.22		-0.24	-0.17
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP										
	Red List Index						-0.71	-0.62			
	Carbon dioxide emissions per unit of GDP PPP								-0.26	-0.56	-0.5
	GNI per capita, Atlas method										
	Energy intensity level of primary energy										
	Urban population as percentage of total population										

RESERVOIR MINIMUM WATER AREA											
Type	Description	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
Drivers of change	Proportion of population using basic drinking water services		0.48								
	Average proportion of freshwater KBAs covered					0.25			0.29	0.27	0.26
	Average proportion of terrestrial KBAs covered						0.38				
	Average proportion of mountain KBAs covered		0.36	0.43							
	Water-use efficiency										
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	-0.27			-0.3	-0.15	-0.17	-0.32			
	Renewable energy share in the total final energy consumption										
	Domestic material consumption per unit of GDP	-0.44		-0.19	-0.48			-0.24			
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP										
	Red List Index										
	Carbon dioxide emissions per unit of GDP PPP	-0.41							-0.42	-0.3	
	GNI per capita, Atlas method					0.69	0.54	0.54		0.49	
	Energy intensity level of primary energy		-0.22	-0.46	-0.35						-0.37
	Urban population as percentage of total population								0.36		0.42

RESERVOIR MINIMUM WATER AREA											
Type	Description	M21	M22	M23	M24	M25	M26	M27	M28	M29	M30
Drivers of change	Proportion of population using basic drinking water services										
	Average proportion of freshwater KBAs covered	0.24									
	Average proportion of terrestrial KBAs covered		0.5	0.36	0.38	0.33					
	Average proportion of mountain KBAs covered						0.44	0.35	0.34	0.4	0.35
	Water-use efficiency										
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources										
	Renewable energy share in the total final energy consumption										
	Domestic material consumption per unit of GDP										
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP		0.18				0.16				
	Red List Index							-0.5	-0.53		
	Carbon dioxide emissions per unit of GDP PPP			-0.31				-0.21		-0.4	-0.35
	GNI per capita, Atlas method	0.54		0.36		0.42					0.35
	Energy intensity level of primary energy	-0.26			-0.37	-0.28			-0.18		
	Urban population as percentage of total population		0.42		0.29		0.51			0.26	

RESERVOIR MINIMUM WATER AREA											
Type	Description	M31	M32	M33	M34	M35	M36	M37	M38	M39	M40
Drivers of change	Proportion of population using basic drinking water services					0.65	0.84				
	Average proportion of freshwater KBAs covered							0.71			
	Average proportion of terrestrial KBAs covered										
	Average proportion of mountain KBAs covered	0.39	0.32			0.4			0.25	0.82	
	Water-use efficiency								0.78		0.87
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources						-0.22				
	Renewable energy share in the total final energy consumption										
	Domestic material consumption per unit of GDP			-0.32	-0.35			-0.41		-0.25	-0.13
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP			0.18	0.19						
	Red List Index										
	Carbon dioxide emissions per unit of GDP PPP			-0.59							
	GNI per capita, Atlas method		0.4								
	Energy intensity level of primary energy	-0.37	-0.31		-0.55						
	Urban population as percentage of total population	0.31									





RESERVOIR MINIMUM WATER AREA											
Type	Description	M41	M42	M43	M44	M45	M46	M47	M48	M49	M50
Drivers of change	Proportion of population using basic drinking water services		0.88	0.63	0.67						
	Average proportion of freshwater KBAs covered					0.35	0.5	0.37			
	Average proportion of terrestrial KBAs covered								0.58	0.64	0.72
	Average proportion of mountain KBAs covered										
	Water-use efficiency										
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	-0.53									
	Renewable energy share in the total final energy consumption										
	Domestic material consumption per unit of GDP	-0.67									
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP		0.14								
	Red List Index										
	Carbon dioxide emissions per unit of GDP PPP			-0.34		-0.68			-0.46		
	GNI per capita, Atlas method							0.69			
	Energy intensity level of primary energy				-0.3					-0.4	
	Urban population as percentage of total population						0.59				0.33

RESERVOIR MINIMUM WATER AREA															
Type	Description	M51	M52	M53	M54	M55	M56	M57	M58	M59	M60	M61	M62	Average Impact	
Drivers of change	Proportion of population using basic drinking water services													0.65	
	Average proportion of freshwater KBAs covered													0.35	
	Average proportion of terrestrial KBAs covered	0.51												0.48	
	Average proportion of mountain KBAs covered		0.37	0.51	0.55	0.6	0.43							0.4	
	Water-use efficiency													0.77	
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources								-0.18	-0.38	-0.23				-0.26
	Renewable energy share in the total final energy consumption														
	Domestic material consumption per unit of GDP											-0.65	-0.28	-0.31	-0.32
Socioeconomic and environmental factors	Manufacturing value added as a proportion of GDP										0.44			0.22	
	Red List Index		-0.69					-0.86						-0.65	
	Carbon dioxide emissions per unit of GDP PPP			-0.55								-0.71		-0.44	
	GNI per capita, Atlas method	0.52					0.6			0.8				0.53	
	Energy intensity level of primary energy				-0.5								-0.67	-0.37	
	Urban population as percentage of total population					0.46			0.74					0.43	





## Annex F.7 Instrumental statistical models for the state of freshwater-related ecosystems, Poyang river, China

		EMPLOYED POPULATION BELOW INTERNATIONAL POVERTY LINE			
Type	Description	M01	M02	M03	Average Impact
Drivers of change	Freight volume				
	Passenger traffic				
	Rail freight volume				
	Railway passenger traffic				
	Road freight volume				
	Road passenger traffic	-0.18			-0.18
	Water freight volume				
	Waterway passenger traffic	-0.45	-0.31		
	Agricultural water consumption				
	Groundwater supply				
	Harmless treatment rate of domestic waste			0.23	0.23
	Hazardous waste disposal volume				
	Hazardous waste generation				
	Hazardous waste storage				
	General industrial solid waste disposal volume				
	General industrial solid waste storage				
	Industrial water consumption				
	General industrial solid waste dumping amount				
	General industrial solid waste generation				
	Industrial wastewater discharge	-0.25	-0.26	-0.16	-0.22
	Surface water supply				
	Comprehensive utilization of hazardous waste				
	Comprehensive utilization of general industrial solid waste				



		EMPLOYED POPULATION BELOW INTERNATIONAL POVERTY LINE			
Type	Description	M01	M02	M03	Average Impact
Socioeconomic and environmental factors	Total CO <sub>2</sub> emissions				
	Average level of PM				
	GDP per capita				
	Industrial sulfur dioxide emissions				
	Industrial soot emissions				
	Industrial waste gas treatment facilities				
	Forest cover rate				
	Operating cost of industrial waste gas treatment facilities				
	Urban population as percentage of total population				
	Comprehensive utilization rate of industrial solid waste				
	Freight volume				

**Annex F.8 Instrumental statistical models for the state of marine-related ecosystems at global level**

		CHLOROPHYLL-A DEVIATIONS, REMOTE SENSING									
Type	Description	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10
Drivers of change	Electronic waste generated, per capita	5.13	7.69	7.45	1.84	10.89	7.22	11.47	7.34	7.9	9.97
	Installed renewable electricity-generating capacity	-5.68	-8.43	-7.33		-8.74	-5.27	-8.43	-6.85	-6.99	-6.98
	Coverage of protected areas in relation to marine areas										
	Protected marine area										
	Average proportion of marine KBAs covered										
	Lakes and rivers permanent water area										
	Lakes and rivers seasonal water area										
	Reservoir minimum water area										
	Reservoir maximum water area										
	Renewable energy share in the total final energy consumption	-0.41									
	Domestic material consumption per unit of GDP		0.32								
	Carbon dioxide emissions from fuel combustion										
	Carbon dioxide emissions per unit of GDP PPP			0.94	1.08						
	Socioeconomic and environmental factors	Prevalence of undernourishment				1.61					
Red List Index						2.92					
GNI per capita, Atlas method											
Completion rate of upper secondary education							-2.69				
Proportion of population using basic drinking water services											
Proportion of population using basic sanitation services								-3.78			
Proportion of population using safely managed drinking water services									-1.32		
Proportion of population practicing open defecation										1.76	
Proportion of population using safely managed sanitation services											-3.76
Proportion of population with access to electricity											
Energy intensity level of primary energy											
Urban population as percentage of total population											



CHLOROPHYLL-A DEVIATIONS, REMOTE SENSING															
Type	Description	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	
Drivers of change	Electronic waste generated, per capita	10.03	14.44		4.99	3.9	2.48	2.72	4.7	7.86					
	Installed renewable electricity-generating capacity	-9.51	-9.79	-3.54							-3.37	-2.74	-2.69		
	Coverage of protected areas in relation to marine areas														
	Protected marine area														
	Average proportion of marine KBAs covered														
	Lakes and rivers permanent water area														
	Lakes and rivers seasonal water area														
	Reservoir minimum water area														
	Reservoir maximum water area														
	Renewable energy share in the total final energy consumption														
	Domestic material consumption per unit of GDP														
	Carbon dioxide emissions from fuel combustion														
	Carbon dioxide emissions per unit of GDP PPP			1.6											4.8
	Socioeconomic and environmental factors	Prevalence of undernourishment				2.22	1.34	1.75	1.58	1.41	2.38				1.77
Red List Index					3.57						6.64				
GNI per capita, Atlas method															
Completion rate of upper secondary education						-3.32									
Proportion of population using basic drinking water services															
Proportion of population using basic sanitation services															
Proportion of population using safely managed drinking water services							-1.6					-1.94			
Proportion of population practicing open defecation								2.02					2.86		
Proportion of population using safely managed sanitation services									-4.07						
Proportion of population with access to electricity		-1.29													
Energy intensity level of primary energy														-5.57	
Urban population as percentage of total population			-5.43	4.3							-6.29	9.27	3.85	4.67	

		CHLOROPHYLL-A DEVIATIONS, REMOTE SENSING											
Type	Description	M24	M25	M26	M27	M28	M29	M30	M31	M32	M33	M34	
Drivers of change	Electronic waste generated, per capita		6.46										
	Installed renewable electricity-generating capacity		-7.15	-0.56	-2.35								
	Coverage of protected areas in relation to marine areas					-0.55							
	Protected marine area						-0.55						
	Average proportion of marine KBAs covered							-0.52					
	Lakes and rivers permanent water area												
	Lakes and rivers seasonal water area								-0.4				
	Reservoir minimum water area									-0.35			
	Reservoir maximum water area										-0.36		
	Renewable energy share in the total final energy consumption			-0.47		-0.47	-0.47	-0.54	-0.66	-0.79	-0.8	-0.58	
	Domestic material consumption per unit of GDP												
	Carbon dioxide emissions from fuel combustion				1.65								-0.52
	Carbon dioxide emissions per unit of GDP PPP	1.31											
	Socioeconomic and environmental factors	Prevalence of undernourishment	1.29										
Red List Index													
GNI per capita, Atlas method													
Completion rate of upper secondary education													
Proportion of population using basic drinking water services													
Proportion of population using basic sanitation services													
Proportion of population using safely managed drinking water services													
Proportion of population practicing open defecation													
Proportion of population using safely managed sanitation services													
Proportion of population with access to electricity													
Energy intensity level of primary energy													
Urban population as percentage of total population		1.75											





		CHLOROPHYLL-A DEVIATIONS, REMOTE SENSING													
Type	Description	M35	M36	M37	M38	M39	M40	M41	M42	M43	M44	M45	M46	Average Impact	
Drivers of change	Electronic waste generated, per capita	2.45	3.05											6.67	
	Installed renewable electricity-generating capacity			-1.93										-5.7	
	Coverage of protected areas in relation to marine areas													-0.55	
	Protected marine area													-0.55	
	Average proportion of marine KBAs covered													-0.52	
	Lakes and rivers permanent water area														
	Lakes and rivers seasonal water area														-0.4
	Reservoir minimum water area														-0.35
	Reservoir maximum water area														-0.36
	Renewable energy share in the total final energy consumption				-0.48	-0.42	-0.4	-0.45	-0.45	-0.42	-0.46	-0.61			-0.52
	Domestic material consumption per unit of GDP														0.32
	Carbon dioxide emissions from fuel combustion												1.21		0.78
	Carbon dioxide emissions per unit of GDP PPP														1.95
	Socioeconomic and environmental factors	Prevalence of undernourishment				0.57									1.59
Red List Index						0.58								3.43	
GNI per capita, Atlas method				1.25								-0.51		0.37	
Completion rate of upper secondary education		-3.22					-0.59							-2.46	
Proportion of population using basic drinking water services								-0.57						-0.57	
Proportion of population using basic sanitation services									-0.56					-2.17	
Proportion of population using safely managed drinking water services														-1.62	
Proportion of population practicing open defecation														2.21	
Proportion of population using safely managed sanitation services			-3.84							-0.58			-1.96	-2.84	
Proportion of population with access to electricity														-1.29	
Energy intensity level of primary energy														-5.57	
Urban population as percentage of total population											-0.56			1.44	