参考資料 4

UN environment programme

Global Framework on Chemicals

7th meeting of the open-ended ad hoc group on measurability and indicators

19 November 2025

Online

2:00 pm to 4:00 pm (CET)

OVERVIEW OF INDICATORS TO BE PROPOSED AT 7th OEAHGMI BY THE SMALL GROUP OF EXPERTS FOCUSING ON SOA

Targets	Indicators proposed by workstream 1 of OEAHGMI	Proposed indicators from Small Group of Experts for SOA
A1 - By 2030, Governments have adopted and are implementing and enforcing legal frameworks, and have established appropriate institutional capacity to prevent or, where prevention is not feasible, minimize adverse effects from chemicals and waste as appropriate for their national circumstances.	(a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment	
	Number of countries with a PRTR (implement international standards for PRTRs, including parties to the Kyiv Protocol on PRTRs, countries that implement OECD standards for PRTRs, or equivalent.)	
	Countries with controls for lead in decorative paint	
	Number of countries that have achieved core capacities for chemicals under the International Health Regulations	
	GHS Implementation	**Rephrase:** Number of countries who have partially and fully implemented the GHS
	Number of countries with legislation in place to manage industrial and consumer chemicals	
	The number of Parties (Stockholm) with regulatory and assessment schemes for new pesticides and/or new industrial chemicals	**Proposal to rephrase and remove “new”** The number of Parties (Stockholm) with regulatory and assessment schemes for ~~**new**~~ pesticides and/or industrial chemicals
A2 – By 2030, intergovernmental stakeholders develop guidelines to support the needs of interested Governments and relevant stakeholders to implement effective chemicals and waste management strategies, building on, among other things, updates of the Inter-Organization Programme for the Sound Management of Chemicals toolbox for decision-making in chemicals management.	Number of countries using the Toolbox and its content to draft and adopt policies for the sound management of chemicals.	**Group proposes to consider how to capture the availability of further guidance actually used and providing support to achieve SMC.** **Ideas for further thinking:** -Number of guidelines, Codes of Conduct and online training developed by UN IGOs for GFC implementation. -Number of countries accessed documents and training per IGO or integrated the guidelines into law, strategies or action plans.
A3 - By 2030, companies implement measures identified to prevent or, where prevention is not feasible, minimize adverse effects from chemicals throughout their life cycle.	None found	Percentage of Countries or Sub-regions with national legislation requiring companies to conduct chemical risk assessments for hazardous substances to minimize adverse effects, covering the workplace, market entry, and environmental release.
A4 - By 2030, stakeholders have effectively prevented all illegal trade and traffic of chemicals and waste.	Parties to the Basel Convention have reached an adequate level of administrative and technical capacity (in the form of Customs, police, environmental enforcement and port authorities, among others) to prevent and combat illegal traffic and judicial capacity to deal with cases of illegal traffic	**Proposal to rephrase and remove “reached an adequate level”** Parties to the Basel Convention have ~~**reached an adequate level of**~~ administrative and technical capacity (in the form of Customs, police, environmental enforcement and port authorities, among others) to prevent and combat illegal traffic and judicial capacity to deal with cases of illegal traffic
A5 - By 2030, Governments work towards notifying, regulating or prohibiting the export of chemicals they have prohibited nationally, in line with their international obligations.	None found	Number of countries providing export notifications in line with Article 12 of the Rotterdam Convention. **Or spelling out art 12 of Rotterdam Convention:** Number of countries that when a chemical that is banned or severely restricted is exported, provide an export notification to the importing country.
A6 - By 2030, all countries have access to poison centers equipped with essential capabilities to prevent and respond to poisonings, as well as access to training in chemical risk prevention and clinical toxicology.	Number of countries with poisons centres	**Proposal to rephrase and add “access to”** Number of countries with **access to** poisons centres
A7 - By 2035, stakeholders have taken effective measures to phase out highly hazardous pesticides in agriculture where the risks have not been managed and where safer and affordable alternatives are available, and to promote transition to and make available those alternatives.	**Consider deletion** ~~The number of Parties (Stockholm) with regulatory and assessment schemes for new pesticides and/or new industrial chemicals~~	**Different indicator to be developed:** Possible process: FAO expert group to lead process.
	Consider deletion ~~Proportion of agricultural area under productive and sustainable agriculture~~	

The following experts were invited to participate to the small group of experts focusing on strategic objective A: Emiko Hase, Jowitt Li, John Tzilivakis, Andrea Rother, Jing Zhao, Maria Delvin, Aleksandra Malyska, Dina Haingonirina Rakotoarisoa, Jago Wadley, Laura Nazef, Xenia Trier, Kateřina Šebková, Monica Brown and Arturo Gavilan.

OVERVIEW OF INDICATORS TO BE PROPOSED AT 7th OEAHGMI BY THE SMALL GROUP OF EXPERTS FOCUSING ON SOB

Targets	Indicators proposed by workstream 1 of OEAHGMI	Proposed indicators from Small Group of Experts for SOB
B1 - By 2035, comprehensive data and information on the properties of chemicals are generated and made available and accessible.	None found	Number [Percentage] of chemical substances with available data and information on the characteristics (physico-chemical, hazard, exposure data) from recognized chemical information platforms (e.g., eChemPortal, QSAR Toolbox, IUCLID, or equivalent)
		Number of countries actively using and/or contributing to globally recognized chemical information platforms (e.g., eChemPortal, QSAR Toolbox, IUCLID, or equivalent)
B2 - By 2030, stakeholders make available, to the extent possible, reliable information on chemicals in materials and products throughout the value chain.	None found	Number of countries with legislation mandating globally harmonized digital products and materials information systems across sectors.
		Number of stakeholders, including industry and the private sector, that use/implement a globally harmonised standard/tool/platform for sharing information about chemicals in materials and products along the full value chain (e.g., Digital Product Information System).
B3 - By 2035, stakeholders generate data on the production of chemicals, including the use of chemicals in materials and products, in addition to data on emissions and releases of chemicals and waste to the environment, making these data available and publicly accessible.	Number of countries with a PRTR (implement international standards for PRTRs, including parties to the Kyiv Protocol on PRTRs, countries that implement OECD standards for PRTRs, or equivalent.)	No proposal by the group
	Number of countries ratifying Aarhus Convention or the Escazu Agreement	
	(a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment	
B4 – By 2035, stakeholders apply appropriate guidelines, best available practices and standardized tools for hazard and risk assessment and chemical and waste management.	Number of countries with a PRTR (implement international standards for PRTRs, including parties to the Kyiv Protocol on PRTRs, countries that implement OECD standards for PRTRs, or equivalent.)	No proposal by the group
	Number of countries that have achieved core capacities for chemicals under the International Health Regulations	
	GHS Implementation	
	Number of countries using the Toolbox and its content to draft and adopt policies for the sound management of chemicals.	
B5 – By 2030, educational, training and public awareness programmes on chemical safety, sustainability, safer alternatives and the benefits of reducing chemicals and waste risks have been developed and implemented, taking into consideration a gender-responsive approach.	None found	Number of **stakeholders** participating in the GFC capacity building strategy [including the Gender Action Plan]
		Number of **people** trained under the GFC capacity building materials for educational training, public awareness programme on chemical safety sustainability, safer alternatives and benefits of reducing chemical and waste risks (e.g. IOMC Tool Box and others).
		Number of **capacity building materials** developed under the GFC for educational training, public awareness programme on chemical safety, sustainability, safer alternatives and benefits of reducing chemical and waste risks (e.g. IOMC Tool Box and others).
B6 – By 2030, all Governments have implemented the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) in all relevant sectors as appropriate for their national circumstances.	Number of countries implementing the GHS	No proposal by the group
B7 – By 2030, stakeholders generate, to the extent possible, and make available comprehensive and accessible monitoring and surveillance data and information on concentrations and potential exposure sources of chemicals in humans (disaggregated by sex, age, region, other demographic factors, and other relevant health determinants as feasible), other biota and environmental media.	Changes in levels of the listed persistent organic pollutants in humans	No proposal by the group
	Mortality rate attributed to unintentional poisoning (i.e. pollution and chemicals)	

The following experts were invited to participate to the small group of experts focusing on strategic objective B: Rebecca Okello Abongo, María Isabel Cárcamo, Theodros Zekarias Selassie, Peter Fantke, Shane Snyder, Leo Posthuma, Ricardo O. Barra, Innocent Nnorom, Christopher Aghalibe, Kateřina Šebková, Lilian Corra, Sherika Whitelocke-Ballingsingh, Djamel Medjahed, Troy Martin and Veronica Villacis.

OVERVIEW OF INDICATORS TO BE PROPOSED AT 7th OEAHGMI BY THE SMALL GROUP OF EXPERTS FOCUSING ON SOD

Targets	Indicators proposed by workstream 1 of OEAHGMI	Proposed indicators from Small Group of Experts for SOD
D1 - By 2030, companies consistently invest in and achieve innovations towards advancing sustainable chemistry and resource efficiency throughout the life cycle of chemicals.	None found	Percentage of revenue *or* R&D expenditure (of top 100 chemical polluters?) invested in Green and Sustainable Chemistry practices
		Annual number of patent applications related to Green and Sustainable Chemistry practices
		[tbc] Number of documented and verified case studies demonstrating transformative innovations in sustainable chemistry or safer chemical substitutes, compiled at national or global level.
D2 - By 2035, Governments implement policies that encourage production using safer alternatives and sustainable approaches throughout the life cycle, including best available techniques, green procurement and circular economy approaches.	Proportion of domestic and industrial wastewater flows safely treated	*No proposal by the group*
	(a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment	
	National recycling rate, tons of material recycled (i.e. reduce waste)	
D3 – By 2030, the private sector, including the finance sector, incorporates strategies and policies to implement the sound management of chemicals and waste in its finance approaches and business models and applies internationally recognized or equivalent reporting standards.	None found	Number of companies in the textiles sector with formal chemicals management policy based on an international and widely accepted standard. [e.g. ZDHC, GRI Sector Standard for Textiles and Apparel- under development, C2C certified products]
		Number of companies with safer chemical products based on an international and widely accepted standard. [e.g. GHS, C2C certified]
		Number of companies reporting on their sustainability procedures for toxic substances [e.g. SBTNi, TNFD, ESRS E2 Pollution, E5 Resource use and circular economy, GRI Topic Standards GRI 305: emissions 2016/air pollution (under development); Critical incidents (under development), soil pollution (under development), GRI 306: Waste 2020, GRI 403: OHS 2018, GRI 303: Water and effluents 2018].
		Number of companies reporting the weight of their hazardous waste directed to landfill, incineration, other disposal operations, recycling, preparation for reuse, other recovery operations
		Number of companies applying recognized reporting standards in the field of chemicals and waste management – (as basis for annual reporting) [e.g. with reference to GFC guidance on using Chemical Footprint approaches or reference to TCFD and TNFD, etc.]
D4 – By 2030, relevant stakeholders give priority to sustainable solutions and safer alternatives to harmful substances in products and mixtures, including in consumer products, in their research and innovation programmes.	None found	Assessment capacity and methods in place adopted by companies to evaluate alternatives to chemicals of concern [*to be further developed*]
		Number of companies, government or other organizations, that start agreeing on procurement programmes
D5 - By 2030, Governments implement policies and programmes to increase support to safer and more sustainable agricultural practices, including agroecology, integrated pest management and the use of non-chemical alternatives, as appropriate.	Proportion of agricultural area under productive and sustainable agriculture	*The IOMC-proposed indicator seems not to be relevant to the target.* *A FAO-convened group mandated by the OEAHGMI could develop indicators for both Targets D5 and A7*

The following experts were invited to participate to the small group of experts focusing on strategic objective D: Jane Muncke, María Isabel Cárcamo, Steven De Regter, Christopher Blum, Antonio Martins, Jago Wadley, Tadesse Amera, Peter Fantke, Ivan Durickovic, Zubeida Zwavel, Markos Ieridis, Thamar Zijlstra, Llorenç Mila, Scott Echols, Joel Tickner and Emiko Hase.

D6 – By 2030, sustainable chemical and waste management strategies have been developed and implemented for major economic and industry sectors that identify priority chemicals of concern and standards and measures, such as the chemical footprint approach, to reduce their impact and, where feasible, their input along the value chain.	None found	Number of companies and, where possible, their % share of major economic and industry sectors that adopt Chemical Footprint approaches to inform about the reduction of their (1) chemical inputs and (2) related toxicity impacts on human and environmental health. ➔ Indicator to be included later in the framework when foundation for an international standard is ready
		Number of companies and, where possible, their % share of major economic and industry sectors that have developed and are implementing sustainable chemical and waste management strategies aligned with sector-specific GFC Implementation Programmes.
		Number of companies that have assessed their portfolios for chemical hazards and have prioritized developed safer chemicals or chemicals management plans.
D7 – By 2030, stakeholders implement measures and strive to ensure effective occupational health and safety practices as well as environmental protection measures in all relevant sectors and throughout the supply chain.	Number of member States with national Occupational Safety and Health (OSH) profiles	*No proposal by the group*
	Number of ratifications of up-to-date ILO Conventions related to chemical risks	

The following experts were invited to participate to the small group of experts focusing on strategic objective D: Jane Muncke, María Isabel Cárcamo, Steven De Regter, Christopher Blum, Antonio Martins, Jago Wadley, Tadesse Amera, Peter Fantke, Ivan Durickovic, Zubeida Zwavel, Markos Ieridis, Thamar Zijlstra, Llorenç Mila, Scott Echols, Joel Tickner and Emiko Hase.

OVERVIEW OF INDICATORS TO BE PROPOSED AT 7th OEAHGMI BY THE SMALL GROUP OF EXPERTS FOCUSING ON SOE

Targets	Indicators proposed by workstream 1 of OEAHGMI	Proposed indicators from Small Group of Experts for SOE
E1 – By 2035, Governments have mainstreamed the sound management of chemicals and waste through implementation in all relevant sectoral plans, budgets and development plans and development assistance policies and programmes.	**Proposal to replace this indicator** ~~Number of ratifications of up-to-date ILO Conventions related to chemical risks~~	**Policy integration** – number of countries with multisectoral chemicals management systems and approaches in place to protect health and environment
	Proposal to replace this indicator ~~Number of parties to the Basel Convention that have developed and implemented national strategies, plans or programmes for reducing the generation and hazard potential of hazardous and other wastes~~	**Budget integration** – number of countries with funding allocated for chemicals management in national budgets
	Proposal to replace this indicator with proposal of small group of experts ~~Number of parties to the Basel Convention that have developed and implemented national strategies, plans or programmes for hazardous waste minimization~~	**Institutional coordination** – number of countries with mechanisms in place to facilitate inter-ministerial and cross-sectoral coordination
E2 – By 2030, partnerships and networks among sectors and stakeholders are strengthened to achieve the sound management of chemicals and waste.	**Proposal to replace this indicator** ~~Number of programmes, projects or activities carried out by parties to the Basel Convention, jointly with other parties or together with other stakeholders (regional and international organizations, conventions, industry bodies, etc.), aimed at the environmentally sound management of priority waste streams that have been monitored and assessed to achieve this goal~~	Number of countries with multistakeholder/multi-sectoral **network**s **or arrangements** embedded in national chemicals management systems
	Proposal to replace this indicator ~~Number of countries with a PRTR (implement international standards for PRTRs, including parties to the Kyiv Protocol on PRTRs, countries that implement OECD standards for PRTRs, or equivalent.)~~	
E3 – Adequate, predictable and sustainable financial resources from all sources needed to support achieving the sound management of chemicals and waste are identified and mobilized in alignment with the vision, strategic objectives and targets of the Framework in all sectors by and for all stakeholders, including by leveraging private finance and promoting innovative and blended-finance schemes.	**Proposal to replace this indicator** ~~Total amount of funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies~~	**International level** Number of **multilateral and international development banks/development agencies** that have incorporated criteria on chemicals management in their policies, safeguards, or lending frameworks.
		National level Proportion of GDP / national budget allocated to chemicals-related international assistance (e.g. see Total Official Support for Sustainable Development (TOSSD) reporting for SDGs)
E4 – Funding gaps for the implementation of sound management of chemicals and waste are identified and considered for capacity-building, including through the Global Framework on Chemicals Fund.	None found	Recommendation not to develop an indicator at this stage and wait for the GFC capacity building strategy.
E5 – By 2030, Governments have taken measures to put in place policies to internalize the costs of the sound management of chemicals and waste through different approaches.	None found	Number of countries with extended producer responsibility measures in place to address health and environmental impacts of chemicals, products and waste.
E6 - By 2030, stakeholders identify and strengthen, as appropriate, synergies and linkages between chemicals and waste management and other key environmental, health and labour policies, such as those related to climate change solutions, biodiversity conservation, human rights protection, universal health coverage or primary health care.	Number of countries that have achieved core capacities for chemicals under the International Health Regulations	No recommendations from the group.

The following experts were invited to participate to the small group of experts focusing on strategic objective E: Emiko Hase, Tatiana Tugui, Gilbert Kuepouo, Steven De Regter, Cecilia Bianco, Rakesh Vazirani, Yuyun Ismawati, Kateřina Šebková, Monica Brown, Rory O'Neill, Markos Ieridis, Shanshan Ding.

各指標のファクトシート

（注）作成作業が進行中なため、一部指標のみ公開

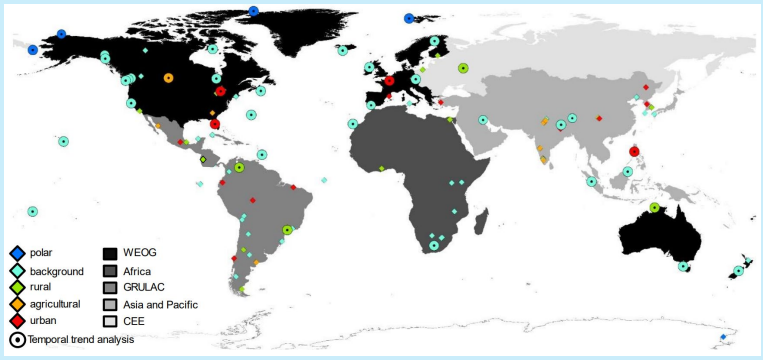
Name of indicator	**levels and trends of persistent organic pollutants in humans and the environment**
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator demonstrates the concentrations, changes in levels and trends of monitored POPs in humans and the environment. The global monitoring plan (GMP) for persistent organic pollutants (POPs) stands as a vital cornerstone in evaluating the effectiveness of the Stockholm Convention. It establishes a framework to systematically collect comparable monitoring data concerning the presence of POPs across all regions. This concerted effort aims to identify changes in POPs concentrations over time and to elucidate their regional and global environmental transport. POPs are measured in core media: ambient air, human tissues and water, and in other media such as soils and biota. Different POPs will be expected to be found in different matrices. The **Third Global Monitoring Report** was published in March 2023 and contributed to the second evaluation of the effectiveness of the Convention https://chm.pops.int/Portals/0/download.aspx?d=UNEP-POPS-COP.11-INF-38.English.pdf
Group	Impact Indicator
Rationale/Relevance to the Framework/ Target relevance	B7 – By 2030, stakeholders generate, to the extent possible, and make available comprehensive and accessible monitoring and surveillance data and information on concentrations and potential exposure sources of chemicals in humans (disaggregated by sex, age, region, other demographic factors, and other relevant health determinants as feasible), other biota and environmental media. • Directly measures the concentration and trends of specific chemicals in humans and the environment.
Existing Uses and Linkages	The GMP report is used to evaluate the effectiveness of the Stockholm Convention. Reports information from health global studies, existing monitoring networks and adhoc monitoring supported by projects.
Scale of application	Global scale of application
Reporting period	GMP reports are developed every 6 years. Specific global studies and monitoring networks may report on different periodicities.
Ownership/custodian	BRS Secretariat
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	For monitoring POPs in humans, they are measured in picograms (pg) or nanograms (ng) per gram lipid or micrograms (µg) per kilogram lipid via globally monitoring the presence of POPs in human matrices, being blood and/or milk. Primarily human milk is monitored because it provides

information on the cumulative exposure of the mother as well as the current exposure of the infant.

The global survey of human milk for POPs is led by WHO in cooperation with UNEP. Generally, the concept of the WHO/UNEP-coordinated exposure study has four basic elements:

- Collection of individual samples from mothers fulfilling protocol criteria
- From equal aliquots of individual samples, preparation of pooled (physically averaged) samples that are considered to represent the average levels of POPs in human milk for a country or a subpopulation of that country at the time of sampling
- Analysis of these pooled samples in Reference Laboratories to ensure the reliability of the exposure data and to improve the comparability of analytical results
- Repeated participation of countries allowing conclusions on temporal trends

Monitoring data for POPs (in human matrices) are reported by different with global geographical coverage, spanning five different arbitrary regions, being: the continent of Africa, Asia and Pacific, Central and Eastern Europe (CEE), the “Group of Latin America and the Caribbean” (GLURAC) and “Western European and Other Group” (WEOG).



For **more information on methodology**, see: https://unitar.org/sites/default/files/media/file/13._human_milk_surveys_and_the_role_of_unep-ho_reference_lab_r._lippold.pdf

For air, combination of passive and active sampling techniques are used and collaboration with existing air monitoring programmes is encouraged. On the other hand, measurements in water focus on hydrophilic POPs including PFOs.
A significant body of data on POPs in non-core-media such as snow, ice, sediment, soil and biota are available for some parts of the world. Nevertheless, given the wide spread of media and methodologies, more standardized data reporting would improve comparability.

All this information is collected and processed in the GMP data warehouse and is utilized by the regional organization groups to prepare regional

	monitoring reports which are then compiled by the global coordination group to prepare the Global Monitoring Plan.
Assessment against criteria • Relevance and/or meaningfulness to the Framework • Availability of data to create a baseline and to assess progress: • Have a designated custodian • Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data comparability	Although indexed data-tables are difficult to find within UN databases, data can be traced back as far as 1987. The summary and conclusions of all studies done in the past have been compiled in a **697 page Open-Access document**, see: https://link.springer.com/chapter/10.1007/978-3-031-34087-1_2 **Other more recent global and regional reports** can be found on the Stockholm Convention's global reports webpage: https://chm.pops.int/Implementation/GlobalMonitoringPlan/MonitoringReports/tabid/525/Default.aspx and https://www.unep.org/topics/chemicals-and-pollution-action/pollution-and-health/persistent-organic-pollutants-pops/pops Assessing Relevance to GFC: • The indicator is relevant regarding knowledge and information transparency. • Data for several countries readily available and accessible see references. • Already has designated custodians • Allows for regular updates • Data accessible but difficult to manipulate • Data comparability possible with limitations
Robustness	Sample data is obtained using standardised methods collected from various geographical locations and undergoes statistical (uncertainty) analysis using proper robust methods. See "**Guidance on the global monitoring plan** for persistent organic pollutants" document:

	https://chm.pops.int/Portals/0/download.aspx?d=UNEP-POPS-COP.10-INF-42.English.pdf
Limitations	Requires updates through global assessments; some countries and regions are lacking of sustainable monitoring programmes.
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	
Data availability, accessibility and compatibility	All data concerning POPs can be found on the **Stockholm Convention's global reports webpage**: https://chm.pops.int/Implementation/GlobalMonitoringPlan/MonitoringReports/tabid/525/Default.aspx All data is stored and available at the GMP data warehouse: https://www.pops.int/Implementation/GlobalMonitoringPlan/GMPdatawarehouse/tabid/181/Default.aspx The latest **Third Global Monitoring Report** shows data of POPs in varying matrices from as early as 1982 until 2019. https://chm.pops.int/Portals/0/download.aspx?d=UNEP-POPS-COP.11-INF-38.English.pdf For human milk samples, data availability is sparse as not all aforementioned regions share the same data on POPs. For example, adequate baseline data is available on chlordane in GRULAC but limited in Africa. Data on temporal trends is even less available.
Sustainability of the data collection	A fourth round of the GMP has initiated and will support the elaboration of a new report. Moreover, monitoring activities will be funded through a GEF global programme with regional projects. Reports related to POPs in human tissues show infrequent but regular data collection and publication. These reports need to be continued for the provision of data relevant to the indicator.
Reporting mechanism	The task of data and information collection, including capacity-enhancement activities and the development of regional monitoring reports, lies with regional organization groups within each of the five UN Regions. A global coordination group oversees the implementation of the global monitoring plan across the regions and the development of the GMP report.
Data disaggregation / aggregation	Data disaggregation is possible on national and regional scales in multiple matrices
METHODOLOGY	
Methodology for indicator calculation	Relevant summary information from the regional and global Monitoring Report will be extracted. Conclusions from this study and recommendations from the effectiveness evaluation process will be considered.
REFERENCES	Stockholm Convention's global reports webpage: https://chm.pops.int/Implementation/GlobalMonitoringPlan/MonitoringReports/tabid/525/Default.aspx

GMP data warehouse:
https://www.pops.int/Implementation/GlobalMonitoringPlan/GMPdatawarehouse/tabid/181/Default.aspx

UNEP Webpage Why POPs Matter
https://www.unep.org/topics/chemicals-and-pollution-action/pollution-and-health/persistent-organic-pollutants-pops/why

UNEP Some chemical pollutants reducing in humans and the new environment, but new ones keep popping up
https://www.unep.org/news-and-stories/press-release/some-chemical-pollutants-reducing-humans-and-environment-new-ones

UNITAR Human milk surveys: the role of the UNEP/WHO reference laboratory
https://unitar.org/sites/default/files/media/file/13._human_milk_surveys_and_the_role_of_unep-ho_reference_lab_r._lippold.pdf

UNEP Topics on Pollution and Health Global Monitoring of POPs
https://www.unep.org/topics/pollution-and-health/persistent-organic-pollutants-pops/global-monitoring-persistent-organic

Overview of WHO- and UNEP-Coordinated Human Milk Studies
https://link.springer.com/chapter/10.1007/978-3-031-34087-1_2

Name of indicator	(a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator measures the national production of hazardous chemicals and waste in kilograms, per capita per year by type. It also demonstrates the proportion of hazardous waste treated by type of treatment. The indicator includes hazardous generated, hazardous waste generated by type (including e-waste as a sub-indicator) and the proportion of hazardous waste treated. Hazardous waste is waste with properties that make it hazardous or capable of having a harmful effect on human health or the environment. Hazardous waste is generated from many sources, ranging from industrial manufacturing process waste to domestic items such as batteries and may come in many forms, including liquids, solids, gases and sludge. Hazardous waste generated refers to the quantity of hazardous waste (as per the definition above) that is generated within the country during the reported year, prior to any activity such as collection, preparation for reuse, treatment, recovery, including recycling, or export, no matter the destination of this waste. For waste that are not covered under the above definition, but are defined as, or are considered to be hazardous waste by national definitions and are included in the "hazardous waste generated" amount, a specific note should be added specifying the additional types/streams of hazardous waste included as well as their quantities.
Group	Impact Indicator
Rationale/Relevance to the Framework/ Target relevance	A1 - By 2030, Governments have adopted and are implementing and enforcing legal frameworks, and have established appropriate institutional capacity to prevent or, where prevention is not feasible, minimize adverse effects from chemicals and waste as appropriate for their national circumstances. • It measures progress in waste management, which is in line with the goal of minimizing adverse effects from chemical waste. B3 - By 2035, Stakeholders generate data on the production of chemicals, including the use of chemicals in materials and products, in addition to data on emissions and releases of chemicals and waste to the environment, making these data available and publicly accessible. • It enables measurement of the amount of waste discharged. D2 - By 2035, Governments implement policies that encourage production using safer alternatives and sustainable approaches throughout the life cycle, including best available techniques, green procurement and circular economy approaches. • Progress in hazardous waste treatment is part of the development of safer alternatives and sustainable approaches throughout the life cycle.
Existing Uses and Linkages	The proposed indicator is consistent with indicator 12.4.2 of the Global indicator framework for the Sustainable Development Goals (SDG) and targets of the 2030 Agenda for Sustainable Development:

	Goal 12. Sustainable consumption and production. **Target 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 **Indicator 12.4.2.** (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment. SDG Indicators related to this indicator: **11.6.1** Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities. **12.5.1** National recycling rate, tons of material recycled. **14.1.1** (a) Index of coastal eutrophication; and (b) plastic debris density
Scale of application	Global, regional, national
Reporting period	Every 2 years
Ownership/custodian	UNSD, UNEP
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	Data validation: The United Nations Statistics Division (UNSD) carries out extensive data validation procedures that include built-in automated procedures, manual checks and cross-references to national sources of data. Communication is carried out with countries for clarification and validation of data. Only data that are considered accurate or those confirmed by countries during the validation process are included in UNSD's environment statistics database and disseminated on its website. The Organization for Economic Co-operation and Development (OECD) and Eurostat carry out extensive data validation procedures on the biennial OECD/Eurostat Joint Questionnaire on the State of the Environment.
Assessment against criteria • Relevance and/or meaningfulness to the Framework	Assessing Relevance to the GFC: • The indicator is relevant regarding knowledge and information transparency. • Data per country readily available and accessible on the Global SDG Database. • Already has a designated custodian. • Allows for regular updates. • Data easily accessible. • Data comparability possible with limitations exists between countries.

• Availability of data to create a baseline and to assess progress: • Have a designated custodian • Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data comparability	
Robustness	The robustness of this indicator is achieved through comprehensive data collection, standardized methodologies, rigorous quality control, long-term monitoring, and peer review. These elements work together to provide a reliable and accurate measure of hazardous waste generation and treatment, which is essential for informing policy and regulatory decisions.
Limitations	Differences in understanding of the terminology used in the indicator or differences between these definitions and those included in national legislation can lead to differences in reported values and difficulties in crosschecking of reported data.

	Some countries may have the data and monitoring systems needed to report, while for others there is a need for training and capacity development to enhance data collection, validation and reporting capacity. Data on illegal waste collection, illegal trade, and illegal dumping or deliberate leakage into the environment are difficult to capture. Lack of a globally agreed statistical classification on waste and pollution.
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	
Data availability, accessibility and compatibility	For hazardous waste generated, per capita (kg): In 2020, data was available for 43 countries, while it dropped to 8 countries in 2021, and no data was available for 2022. The proportion of hazardous waste treated, by type of treatment (%) is not directly found. The indicator is available in the Global SDG Indicators Database with relevant datasets: https://unstats.un.org/sdgs/dataportal/database ➢ **Data series:** 12.4.2 ➢ **Countries, areas or regions:** all groupings ➢ **Period:** years (2000-now) UNSD **Environmental Indicators list.** https://unstats.un.org/unsd/envstats/qindicators
Sustainability of the data collection	National data collection through the UNSD/UNEP Questionnaire on Environment Statistics (waste section) every two years.
Reporting mechanism	Statistical survey by email.
Data disaggregation / aggregation	Disaggregation by ISIC codes. Disaggregation by type of landfilling, treatment and recycling operation. Disaggregation by territorial division.
METHODOLOGY	
Methodology for indicator calculation	Hazardous waste generated should include hazardous waste collected by municipal services or specialised companies, hazardous waste given by the generator directly to the treatment or disposal facility, and an estimation of the unaccounted hazardous waste. The latter is the most difficult aspect of the methodology as it requires local-level knowledge, this waste typically is untreated and therefore has a high impact on the environment. The amount of hazardous waste (HW) generated is calculated as follows: $$\textbf{HW generated [kg]} =$$ $$\textbf{HW collected through municipal services or private companies [kg]}$$ $$+ \textbf{HW given by generator to treatment or disposal facilities [kg]}$$

	+ **Estimation of HW unaccounted for [kg]** The total quantity of hazardous waste treated during the reported year in the reporting country is calculated by adding quantities of hazardous waste treated, per type of treatment (recycling, incineration, landfilling, etc.), including exports and excluding imports. The proportion of hazardous waste (HW) treated is calculated as follows: $$\textbf{Hazardous Waste}\ (\%) = \frac{\textbf{Quantity of HW treated during reporting year [kg]}^{*} \times \mathbf{100}}{\textbf{Total quantity of HW generated during the reporting year [kg]}}$$ *Hazardous waste treated in the country plus materials exported for treatment minus the materials imported for treatment.
REFERENCES	UNEP SDG Indicator 12.4.2 overview https://sdgs.unep.org/article/indicator-1242 UN Statistics SDG 12.4.2 Metadata https://unstats.un.org/sdgs/metadata/files/Metadata-12-04-02.pdf UNEP (2021). Global Chemicals and Waste Indicator Review Document https://www.unep.org/resources/publication/global-chemicals-and-waste-indicator-review-document#:~:text=The%20Global%20Chemicals%20and%20Waste,related%20SDG%20indicators%20across%20sectors. ICCROM on SDG 12.4 https://ocm.iccrom.org/sdgs/sdg-12-responsible-consumption-and-production/sdg-124-responsible-management-chemicals-and Basel Convention Ratifications https://www.basel.int/Countries/StatusofRatifications/PartiesSignatories/tabid/4499/Default.aspx

Name of indicator	National recycling rate, tons of material recycled (i.e. reduce waste)
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator measures the recycling rate of countries. National Recycling Rate is defined as the quantity of material recycled in the country plus quantities exported for recycling minus material imported intended for recycling out of total waste generated in the country. National recycling rate can be presented by type of waste, including e-waste, plastic waste, municipal waste, and others. *Material recycled* expressed in tons, reported at the last entity in the recycling chain, preferably when tons of material is bought as secondary resource to be used in production facilities during the course of the reporting year; Secondary mineral materials used in the construction sector are excluded; composting is considered recycling for the purposes of this indicator. *Recycling* is defined under the UNSD/UNEP Questionnaire on Environment Statistics and further for the purpose of these indicators as "Any reprocessing of waste material [...] that diverts it from the waste stream, except reuse as fuel. Both reprocessing as the same type of product, and for different purposes should be included. Recycling within industrial plants i.e., at the place of generation should be excluded."
Group	Impact Indicator
Rationale/Relevance to the Framework/ Target relevance	D2 - By 2035, Governments implement policies that encourage production using safer alternatives and sustainable approaches throughout the life cycle, including best available techniques, green procurement and circular economy approaches. • Progress in recycling is part of the development of safer alternatives and sustainable approaches throughout the life cycle.
Existing Uses and Linkages	The proposed indicator is consistent with indicator 12.5.1 of the Global indicator framework for the Sustainable Development Goals (SDG) and targets of the 2030 Agenda for Sustainable Development: **Goal 12.** Ensure sustainable consumption and production patterns **Target 12.5.** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse **Indicator 12.5.1.** National recycling rate, tons of material recycled SDG Indicators related to this indicator: **11.6.1** Make cities and human settlements inclusive, safe, resilient and sustainable **12.4.2** (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment

	12.3.1 (a) Food loss index and (b) food waste index **14.1.1** (a) Index of coastal eutrophication; and (b) plastic debris density
Scale of application	Global, regional, national
Reporting period	Every 2 years
Ownership/custodian	UNSD, UNEP
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	Data validation: The United Nations Statistics Division (UNSD) carries out extensive data validation procedures that include built-in automated procedures, manual checks and cross-references to national sources of data. Communication is carried out with countries for clarification and validation of data. Only data that are considered accurate or those confirmed by countries during the validation process are included in UNSD's environment statistics database and disseminated on its website. The Organization for Economic Co-operation and Development (OECD) and Eurostat carry out extensive data validation procedures on the biennial OECD/Eurostat Joint Questionnaire on the State of the Environment.
Assessment against criteria	Assessing Relevance to the GFC: • The indicator is relevant regarding knowledge and information transparency. • Data for several countries readily available and accessible see references. • Already has designated custodians • Allows for regular updates • Data accessible • Disaggregation possible by ISIC codes. • Disaggregation possible by type of waste
Robustness	The robustness of this indicator is achieved through comprehensive data collection, standardized methodologies, rigorous quality control, long-term monitoring, and peer review.
Limitations	Most countries control large end-of-chain recycling facilities and export of recyclable materials, so data from these entities are feasible to collect. There may be recycling carried out in the informal sector that never enters the formal channels, in this case, countries can estimate the size of the informal recycling sector to properly account for all the recycling in the country. National recycling rate is part of measuring progress towards sustainable consumption and production, but it does not capture prevention, reduction, reuse and repair. Calculating additional intensity indicators against the Domestic Material Consumption and the Material Flow gives proxies and helps connect this indicator to resource efficiency in consumption and production.

	Additional research is needed to understand typical losses (due to transformation of materials, loss of humidity, percent of rejects) along the recycling chain for various recyclable materials. The losses would need to be known as percentages from the point of entry in the recycling value chain (i.e., Collection of source segregated material, or input to sorting facility) to the point of exit (i.e., when the material leaves the last recyclable processing unit to enter a facility as secondary raw material). This would allow connecting indicator 11.6.1. which will measure among other things the municipal recycling rate, to the national recycling rate. Municipal recycling rate is likely going to be measured at the beginning of the chain, while indicator 12.5.1 will likely be measured at the point of exit from the chain. Such studies may be done using the process flow and material mass balance approach. Another approach could be to follow transactions in the waste management process and introducing so called "system of boundaries" defining points of reporting of waste quantities. Lack of a globally agreed statistical classification on waste and pollution.
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	
Data availability, accessibility and compatibility	The indicator is available in the Global SDG Indicators Database with relevant datasets: https://unstats.un.org/sdgs/dataportal ➢ **Data series:** 12.5.1 ➢ **Countries, areas or regions:** all groupings ➢ **Period:** years (2000-now) UNSD **Environmental Indicators list.** https://unstats.un.org/unsd/envstats/qindicators
Sustainability of the data collection	National data is collected through the UNSD/UNEP Questionnaire on Environment Statistics (waste section) every two years.
Reporting mechanism	Statistical survey by email.
Data disaggregation / aggregation	Disaggregated by ISIC codes. Disaggregated by type of waste.
METHODOLOGY	
Methodology for indicator calculation	The National Recycling Rate is defined as the quantity of material recycled in the country plus quantities exported for recycling minus material imported intended for recycling out of total waste generated in the country. The National Recycling Rate is calculated as follows:

$$\text{National Recycling Rate} = \frac{(\text{Material recycled} + \text{Material exported intended for recycling} - \text{Material imported intended for recycling}) \times 100}{\text{Total waste generated}}$$

Note that recycling includes codigestion/anaerobic digestion and composting/ aerobic process, but not controlled combustion (incineration) or land application.

Total waste generated is "the total amount of waste (both hazardous and non-hazardous) generated in the country during the year".

The Total Waste Generated, the denominator for calculating the National Recycling Rate, is calculated as follows:

$$\text{Total waste generated} = \text{Waste from manufacturing (ISIC 10-33)} + \text{Waste from electricity, gas, steam and air conditioning supply (ISIC 35)} + \text{Waste from other economic activities (excluding ISIC38)} + \text{Municipal waste (excluding construction and demolition)}$$

Total Waste Generated
= Waste From Manufacturing
+ Waste From Electricity, Gas, Steam and Aircondictioning Supply
+ Waste From Other Economic Activities
+Municipal Waste (Excluding Construction and Mining)

REFERENCES

UNEP SDG Indicator 12.5.1 Overview
https://sdgs.unep.org/article/indicator-1251

UNStats SDG Indicator 12.5.1 Metadata
https://unstats.un.org/sdgs/metadata/files/Metadata-12-05-01.pdf

UNEP (2021). Global Chemicals and Waste Indicator Review Document
https://www.unep.org/resources/publication/global-chemicals-and-waste-indicator-review-document#:~:text=The%20Global%20Chemicals%20and%20Waste,related%20SDG%20indicators%20across%20sectors.

UNSD/UNEP Data Collection on Environment Statistics
https://unstats.un.org/unsd/envstats/country_files

Name of indicator	Number of countries with legislation in place to manage industrial and consumer chemicals
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator tracks the number of countries that have legislation in place to regulate industrial and consumer chemicals, i.e. chemicals which are not covered by specific legislation such as pesticides or pharmaceuticals. The **number of countries along with details of their legislation to manage industrial and consumer chemicals** can be found here: https://www.compareyourcountry.org/chemical-legislation
Group	Process Indicator
Rationale/Relevance to the Framework/ Target relevance	A1 - By 2030, Governments have adopted and are implementing and enforcing legal frameworks, and have established appropriate institutional capacity to prevent or, where prevention is not feasible, minimise adverse effects from chemicals and waste as appropriate for their national circumstances. • Measures progress in establishing appropriate capacity to prevent and minimise adverse effects from chemicals.
Existing Uses and Linkages	Specifically developed to track progress with SAICM/GFC
Scale of application	Global scale of application
Reporting period	Continuous
Ownership/custodian	OECD
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	Tracking countries with legislation in place to manage industrial and consumer chemicals.
Assessment against criteria • Relevance and/or meaningfulness to the Framework • Availability of data to create a baseline and to assess progress • Have a designated custodian • Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data comparability	Data on the progress of countries in setting up management systems specifically for managing the risks of industrial and consumer chemicals is available. • Data per country readily available and accessible on OECD webpage, see references. • Data source already has a designated custodian • Allows for regular updates • Data easily accessible and downloadable (PDF) • Data comparability possible
Robustness	Not Applicable
Limitations	Not Applicable
DATA SPECIFICATIONS	

This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.	
Data availability, accessibility and compatibility	The data for this indicator is available on an OECD Webpage, see below It covers 95 countries, including those with established legislation, those without and those currently developing legal frameworks. The data can be downloaded for further analysis and use. The data are gathered via an annual survey and formally communicated by national authorities. OECD Compare your country: Chemical Legislation (**Table**) https://www.compareyourcountry.org/chemical-legislation/en/1 OECD Compare your country: Chemical Legislation (**Map**) https://www.compareyourcountry.org/chemical-legislation
Sustainability of the data collection	Not Applicable
Reporting mechanism	National reporting mechanism
Data disaggregation / aggregation	Not Applicable
METHODOLOGY	
Methodology for indicator calculation	Tracking both the number of countries and the legislative measures in place for managing industrial and consumer chemicals.
REFERENCES	OECD Compare your country: Chemical Legislation by Country (**Table**) https://www.compareyourcountry.org/chemical-legislation/en/1 OECD Compare your country: Chemical Legislation (**Map**) https://www.compareyourcountry.org/chemical-legislation IOMC Indicators of progress in implementing SAICM https://partnership.who.int/iomc/iomc-indicators-of-progress-in-implementing-saicm

Name of indicator	Number of ratifications of up-to-date ILO Conventions related to chemical risks
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator counts the number of ratifications of up-to-date ILO conventions related to The two main ILO Conventions that provide the basis for the sound management of all typ • **Chemicals Convention, 1990 (No. 170)** More information on the "C170 – Chemicals Convention, 1990" can be found on ILO's wel https://normlex.ilo.org/dyn/nrmlx_en/f?p=NORMLEXPUB: 12100:0::NO::P12100_INSTRUMENT_ID:312315 The **list of countries ratifying** the C170 convention can be found on the same page. See I https://normlex.ilo.org/dyn/nrmlx_en/f?p=1000:11300 :0::NO:11300:P11300_INSTRUMENT_ID:312315 • **Prevention of Major Industrial Accidents Convention, 1993 (No. 174)** More information on the "C174 - Prevention of Major Industrial Accidents Convention, 19 https://normlex.ilo.org/dyn/nrmlx_en/f?p=1000:12100:0:: NO:12100:P12100_INSTRUMENT_ID:312319 The **list of countries ratifying** the C174 convention can be found on the same web. See IL https://normlex.ilo.org/dyn/nrmlx_en/f?p=1000:11300 :0::NO:11300:P11300_INSTRUMENT_ID:312319 See ILO's webpage **on ILO indicators of progress** in implementing SAICM: https://www.ilo.org/resource/ilo-indicators-progress-implementing-saicm
Group	Process Indicator.
Rationale/Relevance to the Framework/ Target relevance	Target A1: By 2030, Governments have adopted and are implementing and enforcing legal capacity to prevent or, where prevention is not feasible, minimize adverse effects from ch circumstances. D7 – By 2030, stakeholders implement measures and strive to ensure effective occupatio protection measures in all relevant sectors and throughout the supply chain. • Ratification of conventions binds governments to implement prescribed measure E1 – By 2035, Governments have mainstreamed the sound management of chemicals an plans, budgets and development plans and development assistance policies and progra • Reflects a commitment to managing chemical risks in the workplace, as part of globa
Linkages with development agendas	As of 2022, a ""a safe and healthy working environment" has been considered one of the I Conventions 170 and 174 are listed under "protection against specific risks" as part of the SDG 8; Target 8.8. In addition, SDG3.9 and SDG12.4
Scale of application	Global scale of application
Reporting period	Not Specified.
Ownership/custodian	ILO
ASSESSMENT *Evaluation of the indicator.*	
Methodology	Counting the number of ratifications of up-to-date ILO Conventions related to chemical ri
Assessment against criteria	The indicator meets the criteria

• Relevance and/or meaningfulness to the Framework • Availability of data to create a baseline and to assess progress: • Have a designated custodian • Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data comparability	
Robustness	Not Applicable
Limitations	Beyond ratification to assess implementation, a gap analysis is often conducted before ra the national legislation. A country cannot ratify until they can show their legislation is in li In addition, the Committee of Experts on the application of Conventions is a supervisory r implementation (page 12 https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40ed_protect/%40protra
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data*	
Data availability, accessibility and compatibility	There is a centralised database for counting the number of ratifications for this indicator. ILO's NORMLEX Information System webpage, see: https://normlex.ilo.org/dyn/nrmlx_en/f?p=1000:12001 In total for the **Chemicals Convention (C170), 24 countries** have ratified the convention. https://normlex.ilo.org/dyn/nrmlx_en/f?p=1000:11300 :0::NO:11300:P11300_INSTRUMENT_ID:312315 Additionally, **19 countries have ratified the Prevention of Major Industrial Accidents C** https://normlex.ilo.org/dyn/nrmlx_en/f?p=1000:11300 :0::NO:11300:P11300_INSTRUMENT_ID:312319 Conventions are developed through the agreement of ILO 187 Member States, Employers difficult at the national level, it is important to note that in many cases countries are imple ratifying
Sustainability of the data collection	ILO is notified of new ratifications and maintains the database.
Reporting mechanism	As and when new ratifications are deposited

Data disaggregation / aggregation	Not Applicable
METHODOLOGY	
Methodology for indicator calculation	Counting the number of ratifications of up-to-date ILO Conventions related to chemical ri
REFERENCES	ILO Main Webpage https://www.ilo.org/ ILO NORMLEX Ratification Status Database https://normlex.ilo.org/dyn/nrmlx_en/f?p=NORMLEXPUB:1:6699525730605

Name of indicator	Number of countries implementing the GHS
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator monitors the full (all sectors; agrochemicals, workplace, consumer products) or partial (one or two sectors) implementation of Globally Harmonized System of Classification and Labelling of Chemicals (GHS). For **more information on the implementation at regional/country level**, see: https://unece.org/transportdangerous-goods/regionalcountry-level?accordion=0#accordion_
Group	Process Indicator
Rationale/Relevance to the Framework/ Target relevance	A1 - By 2030, Governments have adopted and are implementing and enforcing legal frameworks, and have established appropriate institutional capacity to prevent or, where prevention is not feasible, minimize adverse effects from chemicals and waste as appropriate for their national circumstances. • The GHS is critical to minimizing the adverse effects of chemicals. B1 - By 2035, comprehensive data and information on the properties of chemicals are generated and made available and accessible. • The GHS harmonizes the chemical classification and labelling, contributing to better understanding and management of some of the properties of the chemicals. B2 - By 2030, stakeholders make available, to the extent possible, reliable information on chemicals in materials and products throughout the value chain. • The GHS ensures standardized communication of chemical information throughout the value chain. B4 – By 2035, stakeholders apply appropriate guidelines, best available practices and standardized tools for hazard and risk assessment and chemical and waste management. B6 – By 2030, all Governments have implemented the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) in all relevant sectors as appropriate for their national circumstances. • Directly relates to the target.
Existing Uses and Linkages	The implementation of the GHS is linked to workplace safety (ILO Conventions 170, 174, 155 and 184). The FAO guidance (2022) states that "Pesticides are thus included in the GHS, and this guidance recommends that their classification and labelling follow its provisions." The WHO chemicals roadmap encourages the inclusion of the GHS in national policy and regulatory frameworks.
Scale of application	Global, national and regional scale of application
Reporting period	Ongoing availability
Ownership/custodian	UNITAR, ILO, UNECE UNITAR holds a database of countries on behalf of the three organizations
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	Upon receipt of information a country has implemented the GHS in legislation, this is added to a database. Thus, the countries are counted continuously.

	Countries that implement the GHS in all sectors (workplace, agrochemicals, consumer products) are considered as "fully implementing". Those that only implement in one or two of those sectors are considered as "partially implementing".
Assessment against criteria • Relevance and/or meaningfulness to the Framework • Availability of data to create a baseline and to assess progress: • Have a designated custodian • Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data comparability	As of 16/9/2025, a total of 76 countries have (partially or fully) implemented GHS. • Data per country readily available and accessible • Already has a designated custodian • Data is readily available for updates • Data easily accessible • Data comparability possible
Robustness	Relies on countries submitting information on the latest status of their legislation
Limitations	Submitting information on new legislation does not always follow a set format, so information may have to be interpreted. UNECE has a submission form to provide updates by countries: https://forms.office.com/Pages/ResponsePage.aspx?id=2zWeD09UYE-9zF6kFubccBOb4jBq6TlFrC8kq9EIPcdUMzA1U1Y2MjZaRzhFTDZUSjhLTlFCN1laVC4u
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	
Data availability, accessibility and compatibility	There are no independent data tables to be found. There exists an annual report about the status of the GHS implementation per country. This report was last updated in November 2023: https://unece.org/sites/default/files/2023-11/GHS%20implementation%20by%20country_2023-11.pdf
Sustainability of the data collection	Ongoing
Reporting mechanism	Information from countries
Data disaggregation / aggregation	By "partial" and "full"
METHODOLOGY	
Methodology for indicator calculation	Upon receipt of information a country has implemented the GHS in legislation, this is added to a database. Thus, the countries are counted continuously.

	Countries that implement the GHS in all sectors (workplace, agrochemicals, consumer products) are considered as “fully implementing”. Those that only implement in or two of those sectors are considered as “partially implementing”.
REFERENCES	UNECE Introduction on GHS https://unece.org/ghs-implementation-0 UNECE GHS implementation for countries and regions https://unece.org/transportdangerous-goods/regionalcountry-level?accordion=0#accordion_

Name of indicator	Countries with controls for lead in paint
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator counts the number of countries with controls for lead in paint. The **number of countries having legally-binding controls on lead paint** can be found on WHO's webpage: https://www.who.int/data/gho/data/themes/topics/indicator-groups/legally-binding-controls-on-lead-paint Lead paint is an important source of childhood lead exposure because it is still being sold in most countries and is in widespread use. Despite the well-known risks, more than 100 countries still lack binding legal limits on lead in paint, as stated in the 2022 Update on the Global Status of Legal Limits on Lead in Paint. See WHO's **Update** (January 2024) **on the global status of legal limits on lead in paint**: https://www.who.int/data/gho/data/themes/topics/indicator-groups/legally-binding-controls-on-lead-paint.
Group	Process Indicator
Rationale/Relevance to the Framework/ Target relevance	A1 - By 2030, Governments have adopted and are implementing and enforcing legal frameworks, and have established appropriate institutional capacity to prevent or, where prevention is not feasible, minimize adverse effects from chemicals and waste as appropriate for their national circumstances. • Measures efforts to minimize the effects of lead in consumer products, in line with the target.
Existing Uses and Linkages	Indicator is already in use at WHO Public Health and Movement's theme under the Chemical Safety topic. The name of the indicator here is "Legally-binding controls on lead paint", see: https://www.who.int/data/gho/data/themes/topics/indicator-groups/legally-binding-controls-on-lead-paint
Scale of application	Global scale of application
Reporting period	Annual reporting period
Ownership/custodian	WHO, UNEP, IPEN
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	Manually counting the number of countries with controls for lead in paint
Assessment against criteria	There is potential evolution; in 2021 a total of 43% of all countries had legally binding controls to limit the production, import and sale of lead paints. The number of countries increased to 48% in 2024. • The indicator is relevant regarding knowledge and information transparency. • Data per country readily available and accessible on WHO website, see references. • Already has a designated custodian

	• Allows for regular updates • Data easily accessible • Data comparability possible
Robustness	Not Applicable
Limitations	Not Applicable
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	
Data availability, accessibility and compatibility	In 2024, 94 countries had legally binding controls for lead in decorative paints. Data is already visualized and downloadable in .CSV format. See WHO Indicator webpage. https://www.who.int/data/gho/data/themes/topics/indicator-groups/legally-binding-controls-on-lead-paint
Sustainability of the data collection	Data are drawn from surveys conducted by WHO and UNEP of national authorities. Global status is regularly monitored and updated in the WHO Global Health Observatory with annual reports on the Global Status of Lead Paint Laws.
Reporting mechanism	*tbc*
Data disaggregation / aggregation	Not Applicable
METHODOLOGY	
Methodology for indicator calculation	Manually counting the number of countries with controls for lead in paints.
REFERENCES	WHO Indicator Legally binding controls on lead paint https://www.who.int/data/gho/data/themes/topics/indicator-groups/legally-binding-controls-on-lead-paint WHO Update (March 2023) on global lead in paint legislature https://iris.who.int/bitstream/handle/10665/373149/9789240078093-eng.pdf https://www.unep.org/resources/report/2022-update-global-status-legal-limits-lead-paint

Name of indicator	Number of countries with a PRTR
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator counts the number of countries with a Pollutant Release and Transfer Register (PRTR) and number of countries that are Parties to the Protocol on PRTRs The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, or Aarhus Convention, and its Protocol on Pollutant Release and Transfer Registers (PRTRs) empower people with the rights to access information, participate in decision-making and seek justice in environmental matters Protocol on PRTRs is the only legally binding international instrument on pollutant release and transfer registers. Its objective is "to enhance public access to information through the establishment of coherent, nationwide pollutant release and transfer registers (PRTRs). PRTRs are inventories of pollution from industrial sites and other sources. All UN Member States can join the Protocol, including those which have not ratified the Aarhus Convention and those which are not members of the United Nations Economic Commission for Europe.
Group	Process Indicator
Rationale/Relevance to the Framework/ Target relevance	A1 - By 2030, Governments have adopted and are implementing and enforcing legal frameworks, and have established appropriate institutional capacity to prevent or, where prevention is not feasible, minimize adverse effects from chemicals and waste as appropriate for their national circumstances. • PRTRs increase transparency and accountability in chemical management, thereby supporting minimizing the adverse effects of chemicals and waste. PRTRs provide immediate support for decision making. B3 - By 2035, stakeholders generate data on the production of chemicals, including the use of chemicals in materials and products, in addition to data on emissions and releases of chemicals and waste to the environment, making these data available and publicly accessible. • Assesses the availability of data on chemicals and waste emissions and releases D1 - By 2030, companies consistently invest in and achieve innovations towards advancing sustainable chemistry and resource efficiency throughout the life cycle of chemicals. • PRTR data supports companies in assessing effectiveness of pollution prevention measures and innovation towards advancing sustainable chemistry and resource efficiency.

	E2 – By 2030, partnerships and networks among sectors and stakeholders are strengthened to achieve the sound management of chemicals and waste. • PRTRs increase transparency and accountability in chemicals management, thereby building trust between stakeholders.
Existing Uses and Linkages	PRTR links to BRS and Minamata Conventions, the UNFCCC and other pollution related processes, including Sustainable Development Goals (i.e. SDG 3, 6, 9 and 12)
Scale of application	Global scale of application
Reporting period	Ad hoc, as required
Ownership/custodian	UNITAR, UNECE, OECD
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	Manually counting the number of countries with a PRTR, including the countries which have ratified the Protocol on PRTRs can be found listed on the UN Treaties webpage, see: https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-13-a&chapter=27&clang=_en
Assessment against criteria • Relevance and/or meaningfulness to the Framework • Availability of data to create a baseline and to assess progress: • Have a designated custodian • Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data comparability	• Data per country readily available and accessible on UNECE webpage • Data source already has a designated custodian • Allows for regular updates • Data easily accessible • Data comparability possible
Robustness	
Limitations	
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	

Data availability, accessibility and compatibility	The data for this indicator is available on an UNECE webpage, see below. The list is non-downloadable, but present and clear showing countries using PRTRs and their corresponding PRTR website. See: https://prtr.unece.org/prtr-global-map
Sustainability of the data collection	Relies on time and resources of custodian to collect data
Reporting mechanism	Reporting under the Protocol on PRTRs; Receipt of reports that PRTR systems have been established
Data disaggregation / aggregation	Not Applicable
METHODOLOGY	
Methodology for indicator calculation	Manually counting the number of countries with a PRTR
REFERENCES	UNITAR PRTR Information Webpage: https://prtr.unitar.org/site/page/about-prtr The countries which have ratified the Protocol on PRTRs can be found listed on the UN Treaties webpage, see: https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-13-a&chapter=27&clang=_en Protocol on PRTRs Homepage https://unece.org/env/pp/protocol-on-prtrs-introduction Protocol on PRTRs Reporting Mechanism https://unece.org/reporting-mechanism-protocol-prtrs PRTR.net - PRTR Country list https://prtr.unece.org/prtr-global-map OECD Report on the implementation of the OECD recommendation on establishing and implementing pollutants release and transfer registers https://one.oecd.org/document/C(2023)57/en/pdf

Name of indicator	Number of member States with national Occupational Safety and Health (OSH) profiles
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator counts the number of member states with national Occupational Safety and Health (OSH) profiles. The current **list on national profiles on occupational safety and health** can be found on the ILO webpage, see: National Occupational Safety and Health Profiles | International Labour Organization The national profile summarizes the existing national situation on occupational safety and health (OSH). It identifies, amongst other matters, relevant legislation, infrastructure, resources and the current national situation with regard to occupational accidents and diseases, including those related to chemical hazards. Part IV of the Promotional Framework for Occupational Safety and Health Recommendation, 2006 (No. 197) includes a detailed list of the elements that should be covered in the national profile.
Group	Process Indicator
Rationale/Relevance to the Framework/ Target relevance	D7 – By 2030, stakeholders implement measures and strive to ensure effective occupational health and safety practices as well as environmental protection measures in all relevant sectors and throughout the supply chain. • National profiles summarize the existing national OSH situation. This indicator captures efforts to implement measures to ensure effective OSH.
Existing Uses and Linkages	The national profile summarizes the existing national situation on occupational safety and health (OSH). It identifies, amongst other matters, relevant legislation, infrastructure, resources and the current national situation with regard to occupational accidents and diseases, including those related to chemical hazards. Analyzing this information identifies strengths and weaknesses that can be addressed by well-designed national programmes on OSH, thereby progressively and continually improving health and safety at the workplace. The OSH profile is an essential step in the process of building effective risk management policies that encompasses safe chemicals management at the national and workplace level.
Scale of application	Global scale of application
Reporting period	Not specified
Ownership/custodian	ILO
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	Counting member states that have national Occupational Safety and Health (OSH) profiles.
Assessment against criteria	Indicator meets criteria

• Relevance and/or meaningfulness to the Framework • Availability of data to create a baseline and to assess progress: • Have a designated custodian • Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data comparability	
Robustness	Suggestions?
Limitations	Suggestions? What about updating – how do you consider a profile, even if old?
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	
Data availability, accessibility and compatibility	Data is published and available on the webpage: https://www.ilo.org/topics-and-sectors/safety-and-health-work#nationaloshprofiles
Sustainability of the data collection	Not specified
Reporting mechanism	National Reporting system
Data disaggregation / aggregation	Not applicable.
METHODOLOGY	
Methodology for indicator calculation	Counting member states that have national Occupational Safety and Health (OSH) profiles.
REFERENCES	ILO National Profiles on Occupational Safety and Health https://www.ilo.org/resource/national-profiles-occupational-safety-and-health ILO Information system on International Labour Standards Promotional Framework for Occupational Safety and Health Recommendation, 2006 (No. 197) ILO Topic Portal https://www.ilo.org/topics-and-sectors/safety-and-health-work

Name of indicator	Proportion of agricultural area under productive and sustainable agriculture
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator demonstrates the proportion --- measured in percentages (%) --- of agricultural area under productive and sustainable agriculture. The scope of this indicator is the agricultural farm holding, and more precisely the agricultural land area of the farm holding, i.e. land used primarily to grow crops and raise livestock. This indicator measures progress in achieving more productive and sustainable agriculture and is being pilot tested in selected countries and regions. It is made up of relevant sub-indicators that will provide governments with strategic information for evidence-based policies. For **SDG Indicator 2.4.1 Metadata**, see: https://unstats.un.org/sdgs/metadata/files/Metadata-02-04-01.pdf For **SDG Indicator 2.4.1 data portal**, see: https://www.fao.org/sustainable-development-goals-data-portal/data/indicators/Indicator2.4.1-proportion-of-agricultural-area-under-productive-and-sustainable-agriculture/en
Group	Impact Indicator
Rationale/Relevance to the Framework/ Target relevance	A7 - By 2035, stakeholders have taken effective measures to phase out highly hazardous pesticides in agriculture where the risks have not been managed and where safer and affordable alternatives are available, and to promote transition to and make available those alternatives. • Assesses the implementation and effectiveness of measures (among others) to transition away from HHPs to safer and sustainable alternatives D5 - By 2030, Governments implement policies and programmes to increase support to safer and more sustainable agricultural practices, including agroecology, integrated pest management and the use of non-chemical alternatives, as appropriate. • Measures the adoption of safer and more sustainable agricultural practices.
Existing Uses and Linkages	Indicator in the 2030 Sustainable Development Agenda. • Adopted by all 193 UN member states. **SDG 2** End hunger, achieve food security and improved nutrition and promote sustainable agriculture. **SDG 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. **SDG 2.4.1** Proportion of agricultural area under productive and sustainable agriculture.

Scale of application	National scale of application
Reporting period	Annual frequency of updates
Ownership/custodian	FAO
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	Indicator 2.4.1 is defined as the "proportion of agricultural area under productive and sustainable agriculture", which is expressed by the quotient of the area under productive and sustainable agriculture divided by the agricultural land area. For **information on methodology**, see: https://openknowledge.fao.org/server/api/core/bitstreams/e344e3ee-4630-49c1-98a8-b1f5df3dcb8f/content
Assessment against criteria • Relevance and/or meaningfulness to the Framework • Availability of data to create a baseline and to assess progress: • Have a designated custodian • Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data comparability	Assessing Relevance to GFC: • The indicator is relevant regarding knowledge and information transparency. • Data per country is scarce, see references. • Already has a designated custodian • Allows for regular updates • Data easily accessible • Data comparability possible between countries
Robustness	To ensures robustness of the indicator, countries are recommended to complement the farm survey with a monitoring system that measures the impact of agriculture on the environment. This provides additional information and helps crosschecking the robustness of the indicator.
Limitations	The indicator measures sustainable agriculture broadly. It is not clear to what extent chemicals/synthetic pesticides and fertilisers are included in the measurements or reporting.
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	
Data availability, accessibility and compatibility	Datasets can be downloaded from two platforms, being the FAO SDG Data Portal or the UNSDG Database. The **FAO Data Portal** allows for directly viewing regional assessments for, unfortunately, only a small selected amount countries. Some results are available up until 2023. Sub-indicators can be viewed to compare different participating

	countries. The whole dataset can be downloaded in .XLSX format. The **UNSDG Database** is limited to 2021and shows the same amount of sub-indicators for SDG 2.4.1. **FAO data portal**, see: https://www.fao.org/sustainable-development-goals-data-portal/data/indicators/Indicator2.4.1-proportion-of-agricultural-area-under-productive-and-sustainable-agriculture/en For **statistical data**, see: https://unstats.un.org/sdgs/dataportal/database ➢ **Data series** 12.4.2 ➢ **Countries, areas or regions** all groupings ➢ **Period** years (2000-now)
Sustainability of the data collection	Farm surveys are the main instrument for data collection. These surveys focus on agricultural land areas and holdings, capturing economic sustainability well but less suited for environmental and social impacts. Environmental impacts are measured through monitoring systems like remote sensing, while social themes are often captured through household surveys.
Reporting mechanism	National reporting system
Data disaggregation / aggregation	Disaggregation possible • Farm Output Value per Hectare: Economic performance of farms. • Net Farm Income: Financial health of agricultural holdings. • Risk Mitigation Mechanisms: Strategies employed by farms to manage risks. • Prevalence of Soil Degradation: Environmental impact on soil quality. • Variation in Water Availability: Access to water resources. • Management of Fertilizers: Practices related to fertilizer use. • Management of Pesticides: Practices related to pesticide use. • Use of Agrobiodiversity-Supportive Practices: Biodiversity in farming practices. • Wage Rate in Agriculture: Economic conditions for agricultural workers. • Food Insecurity Experience Scale: Levels of food insecurity among farm households. • Secure Tenure Rights to Land: Land ownership and security.
METHODOLOGY	
Methodology for indicator calculation	Indicator 2.4.1 is defined as the "proportion of agricultural area under productive and sustainable agriculture", which is expressed by the quotient of the area under productive and sustainable agriculture divided by the agricultural land area. $$\text{SDG } 2.4.1 = \frac{\text{Area under productive and sustainable agriculture}}{\text{Agricultural land area}}$$ This implies the need to measure both the extent of land under productive and sustainable agriculture (the numerator), as well as the extent of agricultural land area (the denominator). The numerator is the subject of this note, and its computation is described in the sections

	"Assessing sustainability performance for each sub-indicator" and "Reporting the indicator at national level". The denominator is the sum of the agricultural land area (as defined by FAO) utilized by agricultural holdings that are owned (excluding rented-out), rented-in, leased, sharecropped or borrowed. For **more information on methodology**, see: https://openknowledge.fao.org/server/api/core/bitstreams/e344e3ee-4630-49c1-98a8-b1f5df3dcb8f/content A farm's productivity and sustainability is "calculated" and defined by the questionnaire's many sub-indicators. Dimensional factors include economic, environmental and social factors which are eventually evaluated to be deemed *desirable*, *acceptable* or *unsustainable*. The methodological note further indicates that the construction of the indicator must respect the following conditions: • The indicator must reflect the priorities as they are expressed in the SDG Target 2.4 and therefore to consider issues related to resilience, productivity, ecosystem maintenance, adaptation to climate change and extreme events, and soils • The preferred data source is the farm survey • The need to define productive and sustainable agriculture implies the use of criteria to distinguish between sustainable and unsustainable areas.
REFERENCES	UNStats SDG 2.4.1 Metadata https://unstats.un.org/sdgs/metadata/files/Metadata-02-04-01.pdf FAO SDG 2.4.1 Methodology https://openknowledge.fao.org/server/api/core/bitstreams/e344e3ee-4630-49c1-98a8-b1f5df3dcb8f/content FAO SDG Indicator 2.4.1 Data Portal https://www.fao.org/sustainable-development-goals-data-portal/data/indicators/Indicator2.4.1-proportion-of-agricultural-area-under-productive-and-sustainable-agriculture/en UNStars SDG Database https://unstats.un.org/sdgs/dataportal/database

Name of indicator	**Total amount of funding for developing and developed countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies**
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator tracks the total amount of funding for developing and developed countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies. The purpose of this indicator is to track the total amount of approved funding to promote the development, transfer, dissemination, and diffusion of environmentally sound technologies. A two-pronged approach is suggested: • Level 1 (globally estimated). Use globally available data to create a proxy of foreign trade flows in environmentally sound technologies; • Level 2 (national). Collect national data on investment in environmentally sound technologies, as well as on environmental goods and services sector.
Group	Process Indicator
Rationale/Relevance to the Framework/ Target relevance	E3 – Adequate, predictable and sustainable financial resources from all sources needed to support achieving the sound management of chemicals and waste are identified and mobilized in alignment with the vision, strategic objectives and targets of the Framework in all sectors by and for all stakeholders, including by leveraging private finance and promoting innovative and blended-finance schemes.
Existing Uses and Linkages	The proposed indicator is consistent with indicator 17.7.1 of the Global indicator framework for the Sustainable Development Goals (SDG) and targets of the 2030 Agenda for Sustainable Development: **Goal 17.** Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development. **Target 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. **Indicator 17.7.1.** Total amount of funding for developing and developed countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies.
Scale of application	Global, regional, national
Reporting period	Every two years.
Ownership/custodian	UNEP
ASSESSMENT	

Evaluation of the indicator.	
Summary of Methodology	Data validation: Level 1 indicators (globally estimated): UNEP uses a random sampling for few countries and calculates the total of HS codes for export, import, re-export and re-import and compares with the automated produced amounts for those countries. The value per HS is also compared with the data on the COMTRADE database. Level 2 indicators (national): UNEP carries out data validation procedures and contacts countries for clarification if needed.
Assessment against criteria • Relevance and/or meaningfulness to the Framework • Availability of data to create a baseline and to assess progress: • Have a designated custodian • Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data comparability	Assessing Relevance to the GCF: • The indicator is relevant regarding knowledge and information transparency. • According to the 2024 Global Assessment of Environmental-Economic Accounting and Supporting Statistics, organized by UNSD, 43 countries compile EGSS statistics. • Data on EGSS are available for 27 EU countries in the Eurostat Database. Data per country will be available and accessible on the Global SDG Database in 2026. • Already has a designated custodian. • Allows for regular updates. • Data easily accessible. • Data comparability between countries is possible.
Robustness	Overall, the robustness of SDG 17.7.1 is achieved through comprehensive data collection, standardized methodologies, rigorous quality control, long-term monitoring, and peer review. These elements work together to provide a reliable and accurate measure of funding to promote the development, transfer, dissemination and diffusion of environmentally sound technologies in countries.
Limitations	Various definitions of “environmentally sound technology” exist and are in use. Terms such as “environmental technology”, “clean technology”, and “cleantech” or “low-carbon technology” are sometimes used, although low-carbon technology can be considered as a sub-set of green technology. Other less commonly used terms include climate-smart and climate-friendly technology. Additional limitations include the different baseline years in numerous available databases, and the different purposes of available databases.

	Many national statistical systems lack the capacity to compile information on "Total amount of approved funding to promote the development, transfer, dissemination and diffusion of environmentally sound technologies". Compiling data on this indicator presents a challenge in terms of consistent definitions and approaches. However, this methodology recognizes these difficulties and provides an approach that can allow a comparability among countries. National data collected on investment in environmentally sound technologies, as well as on environmental good and services, are not disaggregated with identification of chemicals and waste. However, since the Classification of Environmental Purposes (CEP) was officially adopted as an international statistical classification by the UN Statistical Commission in March 2024, disaggregation division, including "Waste, materials recovery and savings", may become possible in the future. Found in **SDG 17.7.1 Metadata**.
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	
Data availability, accessibility and compatibility	The indicator is available in the Global SDG Indicators Database with relevant datasets: https://unstats.un.org/sdgs/dataportal/database ➢ **Data series**:17.7.1 ➢ **Countries, areas or regions:** all groupings ➢ **Period:** years (2000-now) Eurostat Database on EGSS statistics: https://ec.europa.eu/eurostat/statistics-explained/index.php?oldid=667354
Sustainability of the data collection	National data collection through the UNEP Questionnaire on Environmentally Sound Technologies (to be published in November 2025) every two years. The Data Collection Frequency is reflected in the UNEP E-Calendar: https://sdgs.unep.org/indicator-frequency
Reporting mechanism	Indicator Reporting Information System (IRIS)
Data disaggregation / aggregation	Disaggregation by ISIC codes
METHODOLOGY	
Methodology for indicator calculation	The methodology for tracking the total amount of approved funding to promote the development, transfer, dissemination,

and diffusion of environmentally sound technologies has a two-pronged approach:

Level 1 Use globally available data to create a proxy of foreign trade flows in environmentally sound technologies.
Level 2 Collect national data on investment in environmentally sound technologies, as well as on environmental goods and services.

Level 1: International Proxy

Use globally available data to create a proxy of foreign trade flows in environmentally sound technologies:

Total trade of tracked Environmentally Sound Technologies (ESTs) is that of trade (e.g. traded goods and services that have been internationally agreed to have a positive environmental benefit), using HS codes of the Harmonized Commodity Description and Coding Systems, preferably more than 6-digit level.

Total trade of tracked Environmentally Sound Technologies (ESTs) is calculated as the sum of tracked exported, imported, re-exported and re-imported ESTs.

An international proxy is critical in order to provide a complete picture of the EST market globally, including the influence of the global market on access to ESTs by developing countries. For example, this would help in assessing the impact of the falling costs of different technologies as they are deployed globally. Without such a figure, it will be difficult to ascertain the levels of finance/support being transferred and whether it is above or below the global average. It was therefore agreed that the indicator should be split into two sub-indicators: one global, one domestic.

The sectors deemed to be ESTs through historical research include:

- Air pollution control
- Wastewater management
- Solid and Hazardous waste management
- Renewable Energy
- Environmentally Preferable Products
- Water Supply & Sanitation
- Energy Storage & Distribution
- Land & Water Protection & Remediation.

Level 2: National Data

Collect national data on environmental goods and services sector (EGSS):

ESTs can be considered as the environmental goods and services sector (EGSS), described in the System of Environmental-Economic Accounting - Central Framework (SEEA CF). The EGSS consists of producers of all environmental goods and services. Thus, all products that are produced, designed, and manufactured for purposes of environmental protection and resource management are within scope of the EGSS. This aligns with the intent of the EGSS to provide information on the extent to which the economy may become more environmentally friendly and resource efficient. The types of environmental goods and services in scope of the EGSS are environmental specific services, environmental sole-purpose products, adapted goods and environmental technologies.

Environmental specific services are environmental protection and resource management specific services produced by economic units for sale or own use. Examples of environmental specific services are waste and wastewater management and treatment services, and energy and water-saving activities. Environmental specific services are those services that have the main purpose of:

- Preventing or minimizing pollution, degradation or natural resources depletion (including the production of energy from renewable sources)
- Treating and managing pollution, degradation and natural resource depletion
- Repairing damage to air, soil, water, biodiversity and landscapes
- Carrying out other activities such as measurement and monitoring, control, research and development, education, training, information, and communication related to environmental protection or resource management

Environmental sole-purpose products are goods (durable or non-durable) or services whose use directly serves an environmental protection or resource management purpose and that have no use except for environmental protection or resource management. Examples of these products include catalytic converters, septic tanks (including maintenance services), and the installation of renewable energy production technologies (e.g., solar panels).

Adapted goods are goods that have been specifically modified to be more “environmentally friendly” or “cleaner” and whose use is therefore beneficial for environmental protection or resource management. For the purposes of the EGSS, adapted goods are either:

	• "Cleaner" goods, which help to prevent pollution or environmental degradation because they are less polluting at the time of their consumption and/or scrapping, compared with equivalent "normal" goods. Equivalent normal goods are goods that provide similar utility except for the impact on the environment. Examples include mercury-free batteries and cars or buses with lower air emissions • "Resource-efficient" goods, which help to prevent natural resource depletion because they contain fewer natural resources in the production stage (e.g., recycled paper and renewable energy, heat from heat pumps and solar panels); and/or in the use stage (e.g., resource efficient appliances and water-saving devices such as tap filters). Adapted goods differ from environmental specific services and sole-purpose products because, while they serve an environmental protection or resource management purpose (through being cleaner or more resource-efficient), these are not the primary reasons for their production (e.g., the primary purpose for manufacturing buses with lower air emissions is transportation). Environmental technologies are technical processes, installations and equipment (goods), and methods or knowledge (services), whose technical nature or purpose is environmental protection or resource management. Environmental technologies can be classified as either: • End-of-pipe (pollution treatment) technologies, which are mainly technical installations and equipment produced for measurement, control, treatment and restoration/correction of pollution, environmental degradation, and/or resource depletion. Examples include plants within which to treat sewage, equipment for measuring air pollution, and facilities for the containment of high-level radioactive waste • Integrated (pollution prevention) technologies, which are technical processes, methods or knowledge used in production processes that are less polluting and less resource-intensive than the equivalent "normal" technology used by other producers. Their use is less environmentally harmful than that of relevant alternatives.
REFERENCES	UNEP SDG Indicator 17.7.1 overview https://sdgs.unep.org/article/indicator-1771 SDG Indicator 17.7.1 Metadata https://unstats.un.org/sdgs/metadata/files/Metadata-17-07-01.pdf SDG 17.7.1 Methodology (general recommendations) https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/38265/SDG17.7.1_Method.pdf

SEEA Central Framework
https://seea.un.org/content/seea-central-framework

Name of indicator	Number of Parties (Stockholm) with regulatory and assessment schemes for new pesticides and/or new industrial chemicals
SPECIFICATIONS *This section provides the technical description of the indicator.*	
Description	This indicator counts the number of Parties (Stockholm) with regulatory and assessment schemes for new pesticides and/or new industrial chemicals
Group	Process Indicator
Rationale/Relevance to the Framework/ Target relevance	Evaluate the regulatory capacity of countries to regulate and assess new pesticides and industrial chemicals and the measures taken to prevent the authorization to produce or use new chemicals with POPs characteristics. A1 - By 2030, Governments have adopted and are implementing and enforcing legal frameworks, and have established appropriate institutional capacity to prevent or, where prevention is not feasible, minimize adverse effects from chemicals and waste as appropriate for their national circumstances. • Assesses regulatory capacity, which is essential to prevent adverse effects from new pesticides/industrial chemicals.
Existing Uses and Linkages	Indicator is used under the Effectiveness Evaluation process of the Stockholm Convention. This indicator is relevant to the Stockholm convention. • Number of Parties: 186.
Scale of application	Global scale of application
Reporting period	Every four years (2022, 2026, 2030…)
Ownership/custodian	BRS Secretariat
ASSESSMENT *Evaluation of the indicator.*	
Summary of Methodology	Information extracted through the Stockholm Convention National Report Dashboard from questions 6 and 7 of Part B, Section II on intentional production and use (Article 3).
Assessment against criteria • **Relevance and/or meaningfulness to the Framework** • **Availability of data to create a baseline and to assess progress:** • Have a designated custodian	• Data per country readily available and accessible on Stockholm Convention Secretariat's webpage, see references. • Already has a designated custodian • Allows for regular updates • Data easily accessible • Data comparability possible • Data Baseline: 2001, since this is the cut off date in the national report.

• Allow for regular updating • Allow for easy access to data and enable stakeholder participation in data collection • Data **comparability**	
Robustness	Not Applicable
Limitations	Not Applicable
DATA SPECIFICATIONS *This section provides information on data sources (including links to sources or metadata), availability, scale of data collection, etc.*	
Data availability, accessibility and compatibility	Stockholm Convention Secretariat's webpage https://chm.pops.int/
Sustainability of the data collection	Not Applicable
Reporting mechanism	National reporting mechanism
Data disaggregation / aggregation	Not Applicable
METHODOLOGY	
Methodology for indicator calculation	Information extracted through the Stockholm Convention National Report Dashboard from questions 6 and 7 of Part B, Section II on intentional production and use (Article 3).
REFERENCES	Stockholm Convention Webpage: https://chm.pops.int/ Stockholm Convention Status of ratification: https://www.pops.int/Countries/StatusofRatifications/PartiesandSignatoires/tabid/4500/Default.aspx Stockholm Convention National Reports Dashboard: https://www.pops.int/Countries/Reporting/ReportingDashboard/tabid/7477/Default.aspx Effectiveness evaluation of the Stockholm Convention on Persistent Organic Pollutants https://chm.pops.int/Portals/0/download.aspx?d=UNEP-POPS-COP.11-19-Add.1.English.pdf