SDG indicator metadata
(Harmonized metadata template - format version 1.0)

0. Indicator information

0.a. Goal
Goal 12: Ensure sustainable consumption and production patterns

0.b. Target
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

0.c. Indicator
Indicator 12.4.1: Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement

0.d. Series
N/A

0.e. Metadata update
2021-02-03

0.f. Related indicators
Indicators 12.4.2, 12.5.1, 3.9.1, 3.9.2 and 3.9.3.

0.g. International organisations(s) responsible for global monitoring
United Nations Environment Programme (UNEP)

1. Data reporter

1.a. Organisation
United Nations Environment Programme (UNEP)

2. Definition, concepts, and classifications

2.a. Definition and concepts

Definitions:
The indicator refers to the number of parties (=countries that have ratified, accepted, approved or accessed), to the following Multilateral Environmental Agreements (MEAs):

1. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention);
2. The Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade (Rotterdam Convention);
3. The Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention);
4. The Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol);
5. Minamata Convention on Mercury (Minamata Convention),

Which have submitted the information to the Secretariat of each MEA, as required by each of the agreements.

The information required is as follows:

**Basel Convention**:  
1. Designation of the Focal Point and one or more Competent Authorities;
2. Submission of the annual national reports.

**Rotterdam Convention**:  
1. Designation of the Designated National Authority(-ies) and Official contact points;
2. Submission of the import responses.

**Stockholm Convention**:  
1. Designation of the Stockholm Convention official contact points and national focal points;
2. Submission of the national implementation plans;
3. Submission of the revised national implementation plan addressing amendments;
4. Submission of the national reports.

**Montreal Protocol**:  
1. Compliance with annual reporting requirements for production and consumption of controlled substances under Article 7 of the Montreal Protocol;
2. Submission of information on Licensing systems under (Article 4B of) the Montreal Protocol;
3. For each party, a percentage value is assigned to indicate how much of the required information has been submitted.

**Minamata Convention**:  
1. Designation of a national focal point for exchange of information under Article 17 of the Convention;
2. Submission of national reports as required under Article 21 of the Minamata Convention.

**Concepts**:

- **Parties**: countries that have ratified, accepted, approved or accessed a convention.
- **Information**: Parties to the Basel Convention have an obligation to present an annual national report as provided for by Article 13, paragraph 3 in order to enable monitoring of the implementation of the Basel Convention by its Parties. The reports are to contain, inter alia, Information regarding transboundary movements of hazardous wastes or other wastes in which Parties have been involved, including the amount of hazardous wastes and other wastes exported, their category, characteristics, destination, any

---

1 The parameters presented below are based on the obligations of the Parties to transmit information to the Secretariat, whatever its national circumstances. Other information that only needs to be communicated to the Secretariat based on national circumstances, such as a possible national definitions of hazardous wastes, possible article 11 agreements under the Basel Convention, or a possible exemptions under the Stockholm Convention would not be included, either because the Secretariat is not in a position to assess whether the obligation to transmit information has materialized itself, or because Parties have the right not to make use of a right.
transit country and disposal method as stated on the response to notification, the amount of hazardous wastes and other wastes imported their category, characteristics, origin, and disposal methods; information on accidents occurring during the transboundary movement and disposal of hazardous wastes and other wastes and on the measures undertaken to deal with them; information on disposal options operated within the area of their national jurisdiction; and other information as per reporting format.

Import responses under the Rotterdam Convention are the decisions provided by Parties indicating whether or not they will consent to import the chemicals listed in Annex III of the Convention and subject to the prior informed consent (PIC) procedure. Article 10 of the Rotterdam Convention sets out the obligations of Parties with respect to the future import of chemicals listed in Annex III.

Under the Stockholm Convention a Party has an obligation to report on the measures it has taken to implement the provisions of the Convention and on the effectiveness of such measures in meeting the objectives of the Convention. The national reports include statistical data on the total quantities of production, import and export of each of the chemicals listed in Annex A and Annex B or a reasonable estimate of such data; and to the extent practicable, a list of the States from which it has imported each such substance and the States to which it has exported each such substance. A National Implementation Plan under the Stockholm Convention is a plan explaining how a Party is going to implement the obligations under the Convention and make efforts to put such a plan into operation (Article 7). Changes in the obligations arising from amendments to the Convention or its annexes, for example when a new chemical is listed into the annexes of the Convention, a Party will review and update its implementation plan, and transmit the updated plan to the Conference of the Parties within two years of the entry into force of the amendment for it, consistent with paragraph 1 (b) of the Convention (according to paragraph 7 of the annex to decision SC-1/12).

The Minamata Convention requires, under its article 17, paragraph 4, that each Party designates a National Focal Point for the exchange of information under it, including with regard to the consent of importing Parties under Article 3.

Pursuant to Article 21 of the Minamata Convention on Mercury, each party to the Convention shall report to the Conference of the Parties on the measures it has taken to implement the provisions of the Convention, on the effectiveness of such measures and on possible challenges in meeting the objectives of the Convention. In decision MC-1/8 on the Timing and format of reporting by the Parties, the Conference of the Parties at its first meeting (2017) agreed on the full format of reporting and decided that each Party shall report every four years using the full format and report every two years on four questions marked by an asterisk in the full format. The Conference of the Parties further decided on the following timing with regards to the short and full reporting: 31 December 2019 as the deadline for first biennial short report; 31 December 2021 as the deadline for first full report.

The Montreal Protocol requires, under its Article 7, that each Party provides to the Secretariat for each controlled substance statistical data on its annual production, amounts used for feedstocks, amounts destroyed by technologies approved by the Parties, imports from and exports to Parties and non-Parties respectively and amount of the controlled substance listed in Annex E used for quarantine and pre-shipment applications, for the year during which provisions concerning those substances entered into force for that Party and for each year thereafter. Each Party shall also provide to the Secretariat statistical data on its annual emissions of HFC-23 per facility. The calculation of control levels is provided in Article 3.
of the Protocol. This reporting enables monitoring of the implementation of the Protocol, and compliance with the control measures under the protocol.

Additionally, under Article 4B, each party is required to establish and implement a system for licensing the import and export of new, used, recycled and reclaimed controlled substances. Each Party is required, within three months of the date of introducing its licensing system, to report to the Secretariat on the establishment and operation of that system.

2.b. Unit of measure

For the Basel, Rotterdam and Stockholm Conventions the units of measurements are the transmission of information, such as the number of country contacts designated, number of national reports, national implementation plans and import responses. For each party, a percentage value is assigned to indicate how much of the required information has been submitted.

For the Minamata Convention the units of measurement are the number of designated national focal points and the number of national reports received. For each party, a percentage value is assigned to indicate how much of the required information has been submitted.

For the Montreal Protocol the units of measurement are the number of parties that comply with their reporting obligations with regard to production and consumption of controlled substances (Article 7) and submission of information on licensing systems (Article 4B). For each party, a percentage value is assigned to indicate how much of the required information has been submitted.

2.c. Classifications

3. Data source type and data collection method

3.a. Data sources

Description:
1. Basel Convention: national focal points, electronic reporting system for annual national reports;
2. Rotterdam Convention: official contact points and designated national authorities, PIC circular for import responses;
3. Stockholm Convention: official contact points; electronic reporting system for national reports every four years, National Implementation Plans;
4. Montreal Protocol: national focal points;
5. Minamata Convention: national focal points.

3.b. Data collection method

Data is collected by the Secretariat of the Basel, Rotterdam and Stockholm Conventions from Focal Points for the Basel Conventions, official contact points and designated national authorities for the Rotterdam Convention, official contact points for the Stockholm Convention, by the Ozone Secretariat from national focal points for the Montreal Protocol, and by the Secretariat of the Minamata Convention from national focal points for the Minamata Convention.
3.c. Data collection calendar

1. First reporting cycle: 2017;
2. Second reporting cycle: 2020;
3. Third reporting cycle: 2025;

3.d. Data release calendar

1. First reporting cycle: 2010-2014;
3. Third reporting cycle: 2020-2024;

3.e. Data providers

1. Focal Points and Competent Authorities for the Basel Conventions (188 Parties);
2. Designated National Authorities and Official contact points for the Rotterdam Convention (164 Parties);
3. Official contact points and national focal points for Stockholm Convention (184 Parties);
4. Focal points for Montreal Protocol (198 Parties);
5. Focal points for information exchange and national focal points for the Minamata Convention (currently 127 Parties).

3.f. Data compilers

1. Secretariat of the Basel, Rotterdam and Stockholm Conventions;
2. Secretariat for the Montreal Protocol on Substances that Deplete the Ozone Layer (Ozone Secretariat);

3.g. Institutional mandate

**Basel Convention**: Pursuant to article 5 of the Basel Convention, Parties are required to designate or establish one or more competent authorities and one focal point to facilitate the implementation of the Convention. Parties also have an obligation to inform the Secretariat of any changes regarding designations made by them. The Conference of the Parties has adopted a standard form for notification of designation of contacts (decision BC-11/21), which Parties are requested to use to transmit information to the Secretariat including modifications.


In order to enable monitoring of the implementation of the Basel Convention by its Parties and to present reports on this matter to the Conference of Parties on a regular basis, the Convention establishes a mechanism for Parties to transmit information about implementation of the Convention. According to Article 13, the Parties, consistent with national laws and regulations, shall transmit, through the
Secretariat, to the Conference of the Parties established under Article 15, before the end of each calendar year, a report on the previous calendar year.

Article 13 mandates the Secretariat to receive and disseminate this and other types of information.

**Rotterdam Convention:** Pursuant to Article 4 of the Rotterdam Convention, each Party is required to designate one or more national authorities that shall be authorized to act on its behalf in the performance of the administrative functions required by the Convention. The Secretariat also communicates with an Official Contact Point (OCP) of a Party on official issues. Here too the Conference of the Parties has adopted a standard form for notification of designation of contacts (decision RC-6/13), which Parties are requested to use to transmit information to the Secretariat. A contacts database is available on the Rotterdam Convention website at http://www.pic.int/Countries/CountryContacts/tabid/3282/language/en-US/Default.aspx

Article 10 of the Convention sets out the obligations of Parties with respect to the future import of chemicals listed in Annex III. Parties have an ongoing obligation to submit to the Secretariat, as soon as possible and in any event no later than nine months after the date of dispatch of a decision guidance document, their import response 2 (whether a final or interim response) concerning the future import of the chemical. If a Party modifies its response, it has an obligation to immediately submit the revised response to the Secretariat.

Article 14 in addition to other relevant Articles gives the mandate to the Secretariat to facilitate the information exchange. The Secretariat maintains various databases of information on the Convention website based on transmissions from Parties e.g. country profiles, database of import responses, national legislation collection.

**Stockholm Convention:** Pursuant to Article 9 of the Stockholm Convention, each Party shall designate a national focal point for the exchange of the information referred to in paragraph 1 of article 9. Pursuant to decision SC-2/16 of the second meeting of the Conference of the Parties of the Stockholm Convention, Parties are invited to nominate Official Contact Points. A revised harmonised form for notification of designation of contacts has also been adopted by the Conference of the Parties to the Stockholm Convention for notification of contacts, including modifications (decision SC-6/26). The Secretariat also maintains for this Convention a database of country contacts at http://chm.pops.int/Countries/CountryContacts/tabid/304/Default.aspx

Parties to the Stockholm Convention are required to develop, endeavour to implement, update and review as appropriate, a plan explaining how they are going to implement the obligations under the Convention (Article 7) (“national implementation plans”). The plans are made available on the Convention website.

Furthermore Article 9 specifies that the Parties facilitate or undertake the exchange of information relevant to the reduction or elimination of the production, use and release of persistent organic pollutants and alternatives to them directly and or through the Secretariat.

---

2 The import response may consist of an interim response that is not necessarily a decision see for example Article 10(4)(b)(ii)-(iv)
A national report contains information on the measures taken by a Party in implementing the Stockholm Convention. The information provided in the national reports is one of the main references to be used for the evaluation of the effectiveness of the Convention in accordance with its Article 16. The Conference of the Parties (COP) decided at its first meeting that national reports shall be submitted every four years. The Official Contact Point has the authority to submit a national report to the Secretariat.

Parties requested the Secretariat of the Minamata Convention to facilitate cooperation in the exchange of information referred to Article 17, including with respect to the designation of national focal points, pursuant to paragraph 3 of Article 17 of the Minamata Convention. Article 24 of the Convention further includes in the functions of the Secretariat, *inter alia*, to assist Parties in the exchange of information related to the implementation of the Convention, and to prepare and make to the Parties period reports based on information received pursuant to Article 21.

Under the Montreal Protocol, the role of the Secretariat is stipulated in Article 12 of the Protocol including the obligation to receive, data provided pursuant to Article 7. Additionally, under Article 4B, each Party is required, within three months of the date of introducing its licensing system, to report to the Secretariat on the establishment and operation of that system. Compliance of the Parties with their reporting obligations is considered by an Implementation Committee established under the Protocol’s Non-Compliance Procedure and is determined by the Meeting of the Parties based on the Committee’s recommendations ([https://ozone.unep.org/list-of-implementation-committee-recommendations](https://ozone.unep.org/list-of-implementation-committee-recommendations)).

### 4. Other methodological considerations

#### 4.a. Rationale

The proposed indicator is process-oriented, focusing on compliance with the obligations that contribute to the overall target of achieving the environmentally sound management of chemicals and all wastes throughout their life cycle.

It doesn’t measure the quantity of chemicals in media and doesn’t quantify adverse impacts on human health and the environment. The MEAs, however, were developed and adopted to address the most urgent challenges for human health and the environment and therefore, through the implementation of MEAs progress will be made to reduce release to air, water and soil and well as presence of hazardous chemicals in products.

#### 4.b. Comment and limitations

The transmission of information as required by the five Conventions follows a different timing. This is the reason why the reporting to this indicator has been scheduled for 5-year cycles, which would allow capturing the compliance of Parties with the transmission of information of all the Conventions.

Please also note that the timing for submission of reporting for the Minamata Convention has not yet been agreed on. It is not clear whether any reporting will be required prior to 2020, nor it is clear how many times reporting would be required prior to 2030. Thus, the Minamata Convention is included here, but the reporting is subject to further decisions on this.
4.c. Method of computation

In the following methodology, reporting is to take place in 2017 for the period 2010-2014, in 2020 for the period 2015-2019, in 2025 for the period 2020-2024 and in 2030 for the period 2025-2029. Reporting parameters include the following:

The Country Score depends on the amount of information that is sent to the Conventions’ Secretariat, and is calculated as follows (and communicated by the Secretariats):

**Basel Convention:**
1. Designation of the Focal Point and one or more Competent Authorities (1 point);
2. Submission of the annual national reports during the reporting period (1 point per report).

**Rotterdam Convention:**
1. Designation of the Designated National Authority(-ies) and Official contact point (1 point);
2. Submission of the import responses during the reporting period (0.2 point per import response).

**Stockholm Convention:**
1. Designation of the Stockholm Convention official contact point and national focal point (1 point);
2. Submission of the national implementation plan (1 point);
3. Submission of the revised national implementation plan(s) addressing the amendments adopted by the Conference of the Parties within the reporting period (1 point per revised and updated plan)\(^3\);

**Montreal Protocol:**
1. Compliance with annual reporting requirements for production and consumption of controlled substances under Article 7 of the Montreal Protocol (15 points per report);
2. Submission of information on Licensing systems under (Article 4B of) the Montreal Protocol (5 points).

**Minamata Convention\(^4\):**
1. Designation of a national focal point (Article 17) (5 points);
2. Submission of national report (Article 21) (15 points).

<table>
<thead>
<tr>
<th>Convention</th>
<th>Available Points (ap)</th>
<th>Points per year ([p(t)])</th>
<th>Country Score (cs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Basel Convention</td>
<td></td>
<td>([p(t1)]+ [p(t2)]+ [p(t3)]+ [p(t4)]+ [p(t5)]/ap)</td>
<td></td>
</tr>
<tr>
<td>b Rotterdam Convention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c Stockholm Convention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d Montreal Protocol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e Minamata Convention</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^3\) Applicable to Parties bound by the amendments to the Stockholm Convention. Parties that are not bound by the amendments will by default receive one point for each such amendment.

\(^4\) Please note that at the moment data is not available for the Minamata Convention. The timing of submission of reporting is not yet decided. Information on the timing of submission of reporting has been included under chapter 2.a.
Transmission Rate \(= \frac{a_{cs} + b_{cs} + c_{cs} + d_{cs} + e_{cs}}{N. of Conventions} \times 100\)

The final indicator will be a number expressed as percent, where 100% is the maximum degree of compliance with the reporting obligations of the MEAs to which a Country is a Party, and 0% the least degree of compliance with those obligations.

4.d. Validation

All the information mentioned below on the Basel, Rotterdam and Stockholm Conventions is submitted through the officially designated country contacts.

The databases of country contracts for the Basel, Rotterdam and Stockholm Conventions:

National annual reports under the Basel Convention:


National reports under the Stockholm Convention:

Transmission of the National Implementation Plans under the Stockholm Convention:


Under the Montreal Protocol, the Secretariat does not carry out any validation, other than simple completeness and consistency checks which are communicated back to the reporting party. There is no consultation with countries on the national data submitted to the SDGs Indicators Database.

4.e. Adjustments
4.f. Treatment of missing values (i) at country level and (ii) at regional level

- **At country level:**
  Missing values are not imputed.

- **At regional and global levels:**
  Missing values are not imputed.

4.g. Regional aggregations

The data will be aggregated at the sub-regional, regional and global levels. For the aggregation methods, please see:
http://wesr.unep.org/media/docs/graphs/aggregation_methods.pdf

4.h. Methods and guidance available to countries for the compilation of the data at the national level

For the Basel Convention, information on mandate, frequency, format and procedures for the designation of the focal points and competent authorities:
http://www.basel.int/Procedures/FocalPoint/tabid/1325/Default.aspx
http://www.basel.int/Procedures/CompetentAuthorities/tabid/1324/Default.aspx

Format and manual for national reporting for the year 2018 and onwards under the Basel Convention:

For the Rotterdam Convention, information on mandate, frequency, format and procedures for the designation of the official contact points Designated National Authorities:
http://www.pic.int/Procedures/OfficialContactPoints/tabid/3285/language/en-US/Default.aspx and

Forms and Instructions for Parties on import responses:

For the Stockholm Convention, information on mandate, frequency, format and procedures for the designation of the official contact points and national focal points:
http://chm.pops.int/Procedures/NationalFocalPoint/tabid/3279/Default.aspx and
http://chm.pops.int/Procedures/OfficialContactPoint/tabid/3278/Default.aspx

User manual for the Electronic Reporting System of the Stockholm Convention on Persistent Organic Pollutants (POPs) and Manual for national reports under Article 15 of the Stockholm Convention:

A set of guidance documents for the development and updating the National Implementation Plans under the Stockholm Convention:

For transmission of notifications of designations of country contacts in accordance with the Basel, Rotterdam and Stockholm Conventions, the revised form has been harmonised and may be used to
transmit information on designated contacts in accordance with the provisions of any or all three of the Conventions. This is intended to facilitate transmission of information to the Secretariat while respecting the legal autonomy of each Convention.


The Montreal protocol does not provide any guidance to countries for the compilation of the data at the national level. However, the parties adopted data reporting forms to guide the parties on the information to be reported to the Secretariat. Additionally, under the institutions of the protocol, developing countries get technical and financial assistance, part of which includes training manuals and other resources and guidance on compilation reporting of data - https://www.unenvironment.org/ozonaction/resources.

4.i. Quality management

The BRS Secretariat reviews the national reports for completeness and correctness and communicates with Parties with a view of addressing identified gaps, when possible.

Under the Committee administering the Mechanism for Promoting Implementation and Compliance (ICC), which is a subsidiary body of the Basel Convention, there is a standing area of work on the national reporting which aims at improving timely and complete national reporting under paragraph 3 of Article 13 of the Convention. Activities in the biennium 2020-2021 include, inter alia, classifying and, as appropriate, publishing information on Parties’ compliance with their annual national reporting obligations for 2016 and 2017 based on the assumptions, criteria and categories adopted by the Conference of the Parties at its thirteenth meeting and the targets adopted by the Conference of the Parties at its fourteenth meeting; developing recommendations on the revision of targets referred to in paragraph 13 of decision BC-14/15 for the reports due for 2018 and subsequent years; and with a view to increasing the completeness and timeliness of national reporting under paragraph 3 of Article 13, exploring how individual Parties can integrate national reporting needs under the Basel Convention into the United Nations Development Assistance Framework.

The Minamata Secretariat has a system in place to (i) review the completeness and correctness of the reports received; and (ii) to inform Parties about the outcomes of such review before the reports are published on the Minamata Convention website.

The Secretariat for the Montreal Protocol uses an online reporting system with a database for collecting and managing the reported information. The system includes a variety of checks and validation rules to ensure completeness and consistency of the reported information.

4.j Quality assurance
For the Basel and Stockholm Conventions the Electronic Reporting System is the tool to be used by Parties to submit their national reports.

For guidelines please see the responses for the question 4(h).

A reporting format for the Minamata Convention on Mercury has been adopted by the first Conference of the Parties for the submission of national reports pursuant to Article 21. The Secretariat drafted guidance for the short reports (4 questions) to assist Parties. At its second meeting, the Conference of the Parties requested the Secretariat to draft guidance on how to fill out the full reporting format (48 questions), which is under preparation. An online reporting tool has been prepared by the Secretariat to assist Parties and facilitate collecting the information for the reports.

Under the Montreal Protocol, the responsibility for quality assurance of the submitted data and information lies with the parties.

4.k Quality assessment

For the Basel, Rotterdam and Stockholm Conventions, information transmitted by Parties to the Secretariat is made available to the Conference of the Parties for monitoring.

For the Minamata Convention, the Secretariat can report very high reporting rates: 80% of Parties have submitted complete reports (data is available at https://www.mercuryconvention.org/Countries/Parties/Reporting/tabid/8189/language/en-US/Default.aspx) The Secretariat can also report that 80% of Parties have designated national focal points in a timely and appropriate manner (a list of designations is available at https://www.mercuryconvention.org/Countries/Parties/Notifications/tabid/3826/language/en-US/Default.aspx)

Under the Montreal Protocol, the responsibility for the overall evaluation of fulfilling quality of the submitted data lies with the parties.

5. Data availability and disaggregation

Data availability:
1. Basel Conventions: 188 Parties;
2. Rotterdam Convention: 164 Parties;

Time series:
The reporting on this indicator will follow a 5-year cycle.
1. First baseline reporting cycle in 2017: data collected from 2010 to 2014;
2. Second reporting cycle in 2020: data collected from 2015 to 2019;
3. Third reporting cycle in 2025: data collected from 2020 to 2024;
4. Fourth reporting cycle in 2030: data collected from 2025 to 2029.

Disaggregation:
The indicator is available at country level. It is disaggregated by Convention, in addition to providing the average transmission rate of the five Conventions.

6. Comparability / deviation from international standards

For the BRS Conventions, the data is produced by Parties and then transmitted to the Secretariat which makes it publicly available on the Conventions website.

For the Minamata Convention, the data reported in this paper is only produced by countries.

Under the Montreal Protocol, the data and information reported are produced by the Parties.

7. References and Documentation

Relevant links to the Basel, Rotterdam and Stockholm Conventions:
http://chm.pops.int/Countries/Reporting/NationalReports/tabid/3668/Default.aspx

Relevant links for the Minamata Convention relevant to this indicator:

For the Montreal Protocol, relevant links can be found on the Secretariat’s website at:
https://ozone.unep.org/
https://ozone.unep.org/treaties
https://ozone.unep.org/countries
https://ozone.unep.org/countries/data
https://ozone.unep.org/countries/data-reporting-tools
https://ozone.unep.org/additional-reported-information