



Inter-Organization Programme for the  
Sound Management of Chemicals

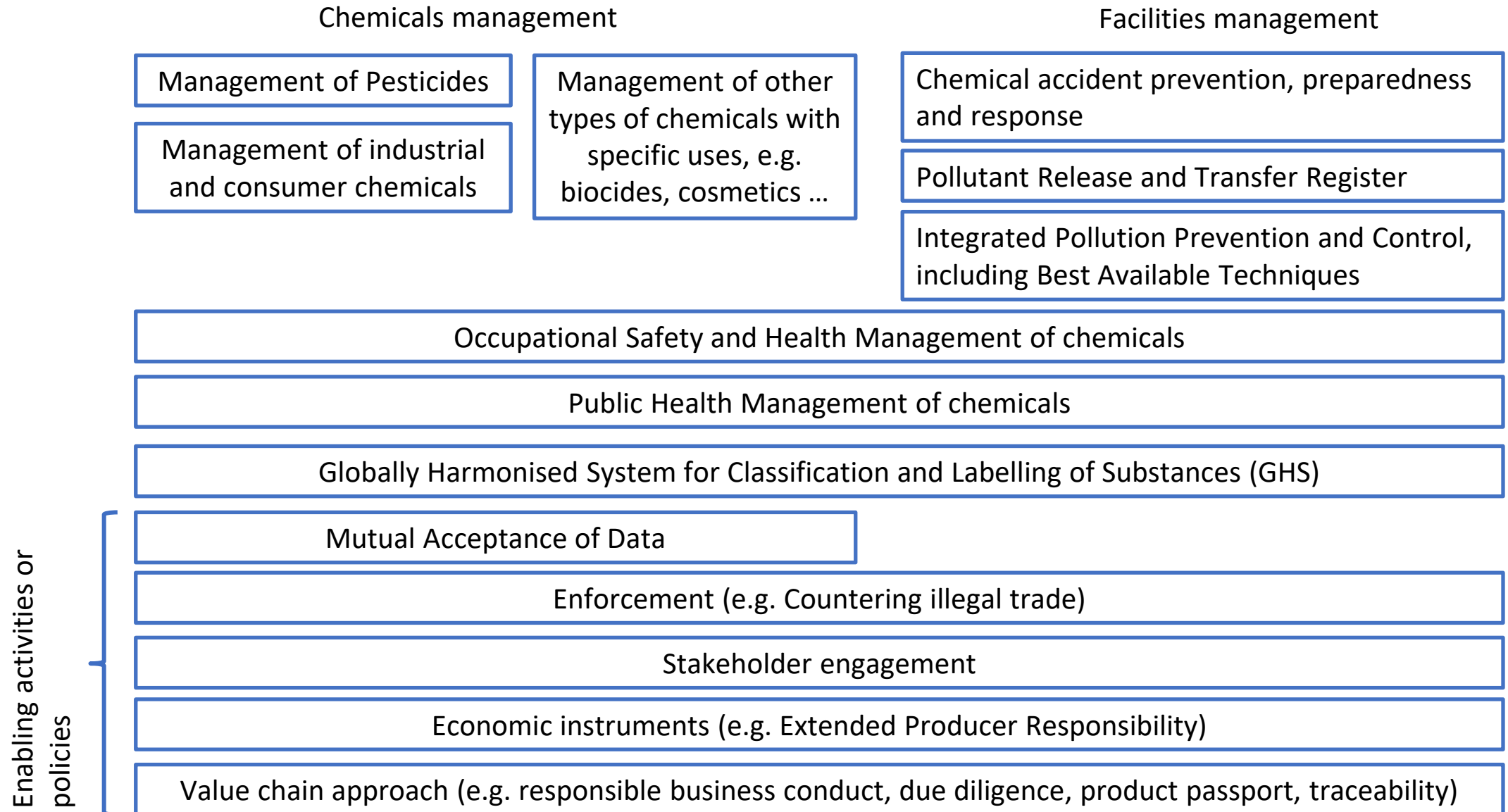
WORKING TOGETHER TO  
END CHEMICAL POLLUTION

# Roadmap to the Sound Management of Chemicals



# Strategic Approach to a Modular Chemicals Management System

- high-level view on the different modules that make up an effective chemicals management system, explain the relationships between the different modules;
- outline a strategic approach to setting up a chemicals management system;
- operationalise the GFC Implementation Programme on Strengthening National Chemicals Legislation and Institutional Capacities



# Indicative Roadmap for the Sound Management of Chemicals

- **Strategic, flexible guide** to establish or strengthen national chemicals management systems.
- **Directly linked** to the GFC targets.
- **Focus on industrial chemicals**, with applicability to other groups.
- **Grounded in global expertise**



# Roadmap Overview



## Module 0: Governance, Financing & Cooperation

No.	Element	Explanation	GFC targets
0.1	<b>Framework Legislation &amp; Interministerial Committee</b>	A single “umbrella” chemicals act (or coherent package of acts) that: sets the legal mandate for regulating the whole life-cycle of chemicals; designates leading ministry/ies; establishes an inter-ministerial committee to coordinate activities, among others.	Target <b>A1</b>
0.2	<b>Cost-recovery &amp; polluter-pays mechanisms</b>	Establishes pollution taxes or fees on registrations, licences, imports or tonnage; earmarks them in a ring-fenced fund for the sound management of chemicals, e.g., inspections, risk-management, laboratories, poison centre operations. Can include product taxes or Extended Producer Responsibility (EPR) levies to shift costs from the State to market actors. Can include subsidy reform.	Target <b>E5</b>
0.3	<b>Stakeholder dialogue mechanisms</b>	A council (government–industry–civil-society-other) that oversees implementation, reviews draft regulations, monitors progress on national chemicals action plans, among others.	Target <b>E2</b>
0.4	<b>Integration of MEAs</b>	Basel, Rotterdam, Stockholm, Minamata and other present and future MEAs are written directly into the framework legislations	Targets <b>A4, A5</b>
0.5	<b>Regional &amp; Global Cooperation Platforms</b>	Active participation in global and regional collaboration schemes such as the GFC Implementation Programmes, LARCF, and UNEP regional centres; sharing of inspectors, labs and e-tools; joint projects on emerging issues of concern.	Targets <b>E2</b>

# Module 1: Harmonized Hazard & Data Quality Frameworks

No.	Element	Explanation	Main GFC targets link
1.1	<b>GHS in all sectors</b>	A United Nations framework that sets uniform criteria for identifying chemical hazards and prescribes standardized hazard pictograms, signal words, precautionary statements, and Safety Data Sheet formats. Each country should formally incorporate the GHS requirements into its national legal framework.	Target <b>B6</b>
1.2	<b>MAD/GLP accreditation</b>	Establish and maintain a national Good Laboratory Practice (GLP) compliance monitoring programme and adhere to the OECD Mutual Acceptance of Data (MAD) system. This ensures that safety studies on chemicals are generated to internationally recognised quality standards, enabling data to be accepted across OECD and adhering countries, reducing duplicative testing, saving costs, and supporting regulatory decision-making.	Target <b>B4</b>

## Module 2: Chemicals Information and Risk-Approach

No.	Element	Explanation	Main GFC targets link
2.1	<b>National Chemicals Inventory</b>	Manufacturers and importers declare substance's CAS number, annual tonnage, uses and GHS classification, creating the evidence base for prioritization.	Targets <b>B1, B3</b>
2.2	<b>Substance Prioritization</b>	Apply science-based screening (hazard, exposure, socio-economic factors) to rank substances and distinguish high- from low-priority cases	Target <b>B4</b>
2.3	<b>Risk-Assessment</b>	Conduct or request risk-assessments of the prioritized substances using existing foreign dossiers first; carry out national assessments only where national exposure patterns differ.	Targets <b>B4</b>
2.4	<b>Risk-Management</b>	Select proportional risk-management measures (e.g., codes of practice, restrictions, authorizations or phase-outs) guided by socio-economic analysis and the polluter-pays principle.	Targets <b>A3, B4</b>
2.5	<b>Confidential Business Information (CBI)</b>	Establish a clear and transparent framework for handling confidential business information (CBI) in chemicals management. Robust CBI provisions enable authorities to obtain the full composition of substances and mixtures while ensuring that legitimate trade secrets are not disclosed inappropriately.	Targets <b>B1, B3, E3</b>



## Module 3: Facility Safeguards & Emergency Preparedness

No.	Element	Explanation	GFC
3.1	<b>Occupational Safety &amp; Health (OSH) Requirements</b>	Aligns with ILO Convention 170: mandatory workplace risk-assessments, substitution hierarchy, exposure monitoring, Personal protection Equipment (PPE) standards, worker training and right-to-know provisions.	Target <b>D7</b>
3.2	<b>Chemical Accident Prevention, Preparedness &amp; Response (CAPPR)</b>	“Seveso-type” rules: threshold-based major-hazard controls, safety reports, land-use planning, off-site emergency plans, mandatory incident reporting and root-cause analysis.	Target <b>D7</b>
3.3	<b>Pollutant Release &amp; Transfer Register (PRTR)</b>	Facilities above a release threshold must annually report pollutant emissions and off-site transfers; data published in GIS-ready formats to inform communities and guide enforcement.	Target <b>B3</b>
3.4	<b>Integrated Pollution-Prevention &amp; Control (IPPC) Permitting</b>	A single, comprehensive licence is issued to industrial installations, setting emission limits and operating conditions across all relevant media (air, water, soil, energy) based on Best Available Techniques (BAT). By requiring operators to adopt, document, and periodically upgrade to BAT benchmarks, permits minimise routine pollution at the source and embed continuous improvement within facility management.	Target <b>D2</b>
3.5	<b>Public Health Surveillance, Poison Centres &amp; Incident Response</b>	Operate a national network that (i) provides 24/7 medical advice on chemical exposures, (ii) monitors poison-centre calls with hospital and laboratory data to detect exposure trends, and (iii) triggers coordinated incident reporting and health-protection alerts.	Target <b>A6</b>

## Module 4: Product & Supply Chain Measures

No.	Element	Explanation	Main GFC targets link
4.1	<b>Chemicals-in-Products (CiP) &amp; Supply-chain Due Diligence</b>	<p>Require manufacturers/importers to disclose the presence of chemicals of concern above a set threshold in articles and empower authorities to ban or restrict substances of concern in toys, food-contact, electronics, etc.</p> <p>Require companies to trace chemicals through every tier of their value chain and provide structured, machine-readable data on substance content, hazards and sustainability attributes, so regulators and customers can verify compliance and screen out chemicals of concern (e.g., Digital Product passports)</p>	Targets <b>B2, B6</b>
4.2	<b>Circular-economy Roadmaps &amp; BAT/BEP</b>	<p>Develop sector-specific circular economy roadmaps (e.g., construction, textiles, plastics) that integrate safer-by-design principles, non-toxic material cycles, and Extended Producer Responsibility (EPR). Issue Best Available Techniques (BAT) and Best Environmental Practices (BEP) guidance to ensure recycling and recovery processes do not reintroduce legacy substances of concern into the supply chain.</p>	Targets <b>D2, D6</b>
4.3	<b>Customs e-permitting &amp; Illegal Trade Controls</b>	Digital linkage between chemical licences and customs codes; identify/flag shipments of banned or restricted chemicals; joint operations with custom officers, police and INTERPOL.	Target <b>A4</b>

## Module 5: Environmental & Legacy Measures

No.	Element	Explanation	Main GFC targets link
5.1	<b>Environmental &amp; Biomonitoring Network</b>	Long-term sampling of air, water, soil, biota and human tissues (sentinel populations) to detect trends and evaluate policy effectiveness; data shared via open dashboards.	Target <b>B7</b>
5.2	<b>Contaminated Site Inventory &amp; Remediation</b>	National register that screens industrial/legacy sites; prioritises remediation based on risk to human health/ecosystems; secures polluter funding or applies public “orphan site” funds.	Targets <b>A1</b>

# Roadmap Overview

## Module 0 Governance, Financing & Coop.

0.1 Framework Law  
0.2 Costs / "polluter pays"  
0.3 Stakeholder dialogue  
0.4 MEAs Integration  
0.5 Regional cooperation

## Module 1 Hazard & Data Frameworks

1.1 GHS  
1.2 MAD / GLP

## Module 2 Information and Risk

2.1 Inventory  
2.2 Prioritization  
2.3 Risk assessment  
2.4 Risk Management  
2.5 Confidentiality (CBI)

## Module 3 Facilities and Emergencies

3.1 OSH  
3.2 CAPPR  
3.3 PRTR  
3.4 IPPC Permitting  
3.5 Public Health Surveillance, Poison Centres & Incident Response

## Module 4 Products & Supply Chain

4.1 CiP & Supply-chain Due Diligence  
4.2 Circular economy Roadmaps & BAT/BEP  
4.3 Customs e-permitting & Illegal Trade Controls

## Module 5 Environmental & Legacy Measures

5.1 Environmental & Biomonitoring Network  
5.2 Contaminated Site Inventory & Remediation





# Self- Assessment Survey



# Survey Overview

## Self-Assessment Survey: Implementation of the Roadmap for the Sound Management of Chemicals (SMC)

Draft version. Updated: September 2025

**Target audience:** Government agencies and regulators involved in chemicals management.

**Purpose:** Assess the country status—by legislation, implementation, and enforcement or effectiveness—for each roadmap element, as well as capacity-building and practical needs.

**Expected completion time:** The full survey is designed to be completed in approximately 2–5 hours, depending on the availability of information and the number of chemical sectors addressed. It may be completed in multiple sittings, and responses can be coordinated among different agencies as needed.

### Instructions

- For each element complete all sections: indicate the status for Legislation/Programme, Implementation, and Enforcement/Effectiveness, as applicable.
- Provide details: include references to legal instruments, programmes, or institutional mechanisms where relevant.
- Highlight gaps and needs: identify barriers and specify the type of support required.
- Where prompted, add sector- or category-specific information.
- If reporting for additional chemical groups beyond industrial chemicals, copy and complete the Module 2 questions for each group.
- You may complete this in phases and coordinate responses across agencies; partial submissions are welcome

## MODULE 0 – Governance, Financing & Cooperation

### Element 0.1: Framework Legislation & Interministerial Committee

#### A. Framework Legislation

Does a national chemicals framework legislation (or package) covering the entire life-cycle of chemicals exist?

☐ Not started ☐ In progress (drafted, under consideration) ☐ In force

Does the legislation designate a lead ministry for SMC?

☐ Yes ☐ No

Is there an interministerial coordination body established?

☐ Yes, meets regularly ☐ Yes, but meets irregularly ☐ No

#### B. Implementation

Year framework legislation enacted (if any):

[Open text]

Is the legislation fully operational?

☐ Fully ☐ Partially (explain) ☐ Not implemented

#### C. Effectiveness

Are subordinate regulations enforced and effective?

☐ Yes ☐ Partially ☐ No

How effective is interministerial coordination in SMC?

☐ Very effective ☐ Moderately effective ☐ Not effective

Reference(s): [Open text field- please paste legal article numbers/URLs or upload files]

Barriers/Support needed: [Open text field]

### Element 0.2: Cost-Recovery & Polluter-Pays Mechanisms

Which economic instruments are in place for SMC? (select all that apply)

- ☐ Pollution taxes/fees
- ☐ Registration or import/tonnage fees
- ☐ Extended Producer Responsibility (EPR) levies
- ☐ Other: [Open text field]

Do these instruments generate revenue and support SMC activities?

☐ Yes, regularly ☐ Partially/irregularly ☐ No

Is revenue earmarked and legally reserved for SMC activities?

☐ Yes ☐ No ☐ Partially

Are subsidies for chemicals of concern being phased out?

☐ Yes ☐ No

Are fees effectively collected and penalties imposed for non-compliance?

☐ Yes ☐ Partially ☐ No

Reference(s): [Open text field- please paste legal article numbers/URLs or upload files]

Barriers/Support needed: [Open text field]

## Feedback from authorities at LARCF in October 2025

1. Argentina
2. Brazil
3. Chile
4. Colombia
5. Costa Rica
6. Ecuador
7. El Salvador
8. Honduras
9. Perú
10. Uruguay



## Main Feedback: Roadmap

- Broadly **positive**, validating its **core structure**.
- Suggestions for **Missing Elements**:
  - Enforcement and Oversight**: as cross-cutting functions essential for implementation.
  - Standardization**: standardized concepts and evaluation criteria to facilitate harmonization.
  - Capacity Building**: formal mechanisms for building capacity.
- **Other Key Areas**: adding or clarifying concepts related to consumer information, legal responsibility, and green/sustainable chemistry.
- **Low-priority elements**: Cost-recovery & polluter-pays mechanisms, Contaminated Site Inventory & Remediation, and Biomonitoring.
- **Areas for Improvement**: "Level of technical detail" ; "Clarity of elements"





# Main Feedback: Self-assessment tool

“Clear” or “Very clear”

Suggestions for improvement:

- **Answer Options:** add intermediate options beyond a simple "yes/no," such as "in process," to better reflect the status of ongoing work.
- **Clarity and Interpretation:** need for clearer questions to minimize the risk of double interpretations, include practical examples for each module to aid understanding.
- **Format and Usability:** improve the document's format to make it easier to complete.

Reported completion times varied significantly, from under 4 hours to over 4 hours. This range often reflects **different levels of inter-agency coordination** required.





# Next Steps

**Update of the  
roadmap and self-  
assessment tool  
(end of 2025)**

**Wider  
stakeholder  
consultation  
(Q1/2 2026)**

**Integrate  
elements of  
roadmap into ToR  
of IP1 (Q1/Q2)**

**2<sup>nd</sup> piloting in  
another region  
(Q3 2026)**

**Presentation at  
IC1 (Q4 2026)**

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# Innovative solutions to chemicals management

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# Legislation and regulatory frameworks

- Focus on **industrial** chemicals and **consumer** product regulatory systems (rather than pesticides)
- Technically challenging and **costly** to ensure a harmonized approach that creates an enabling environment for the private sector operating beyond national borders.
- New approaches and «**fit for purpose**» legislation
- Targets A1 and A2

## Key elements

**Survey existing Legal Frameworks and approaches:** describe various approaches from different countries and regions, highlighting, when possible, innovative approaches. These include:

Regulatory & policy objectives & desired levels of protection

Sectoral & framework approaches

Risk management approaches

Approaches to listing chemicals (positive & negative lists, watchlists)

Data requirements and transparency

# Core elements of the Guidance



- The guidance will provide stakeholders with options to:
  - Determine the type of chemicals legislation countries wish to adopt.
  - Highlight best practices on how to involve stakeholders in creating effective policies and laws
  - Adopt approaches for building a regulatory architecture for chemicals
  - Highlight options on data requirements and information systems approaches
  - Adopt Economic instruments to create incentives safer alternatives
  - Include Model clauses or examples for certain provisions

# Next steps

- Peer expert review – by 15 December
- Completion in 2025
- Launch in 2026 Q1





**“The IOMC vision is to shape a sustainable future through coordinated global action to achieve the sound lifecycle management of chemicals and waste for healthy lives and the environment.”**

**THANK YOU**

**For more information,  
please visit:**

**[www.iomc.info](http://www.iomc.info)**

