INTER-ORGANIZATION PROGRAMME FOR THE SOUND MANAGEMENT OF CHEMICALS

A cooperative agreement among FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, WHO, World Bank and OECD

# Strengthening integrated chemicals and waste management

# (IP4 INF document 18)

**27/08/2022**

# Introduction and Overview

# Context for the IOMC Inf Paper on Integrated Chemicals and Waste Management: An ambitious global framework is needed

- GCO-II (UNEP 2019) concluded that the global 2020 goal to achieve the sound management of chemicals and waste was not achieved:

  ➢ The global chemical industry is projected to double by 2030.

  ➢ The majority of countries lack GHS implementation and basic chemical management systems.

  ➢ Global data gaps continue to exist concerning hazard properties of many chemicals.

  ➢ Advanced chemical management schemes have generated valuable knowledge which could be used more systematically by countries with limited resources.

  ➢ A chemical-by-chemical approach at the international level is resource and time intensive. A more strategic approach addressing key industry sectors and product value chains could be valuable.

- A range of solutions exist, but more ambitious worldwide action by all stakeholders in urgently required. "Business as usual is not an option" (GCO-II).

- Reinvigorating the concept of integrated chemicals and waste management may contribute fresh thinking and engage new actors in the "Beyond 2020" process (e.g., downstream industry sectors).

# Key questions addressed by the IOMC Inf Paper on Integrated Chemicals and Waste Management
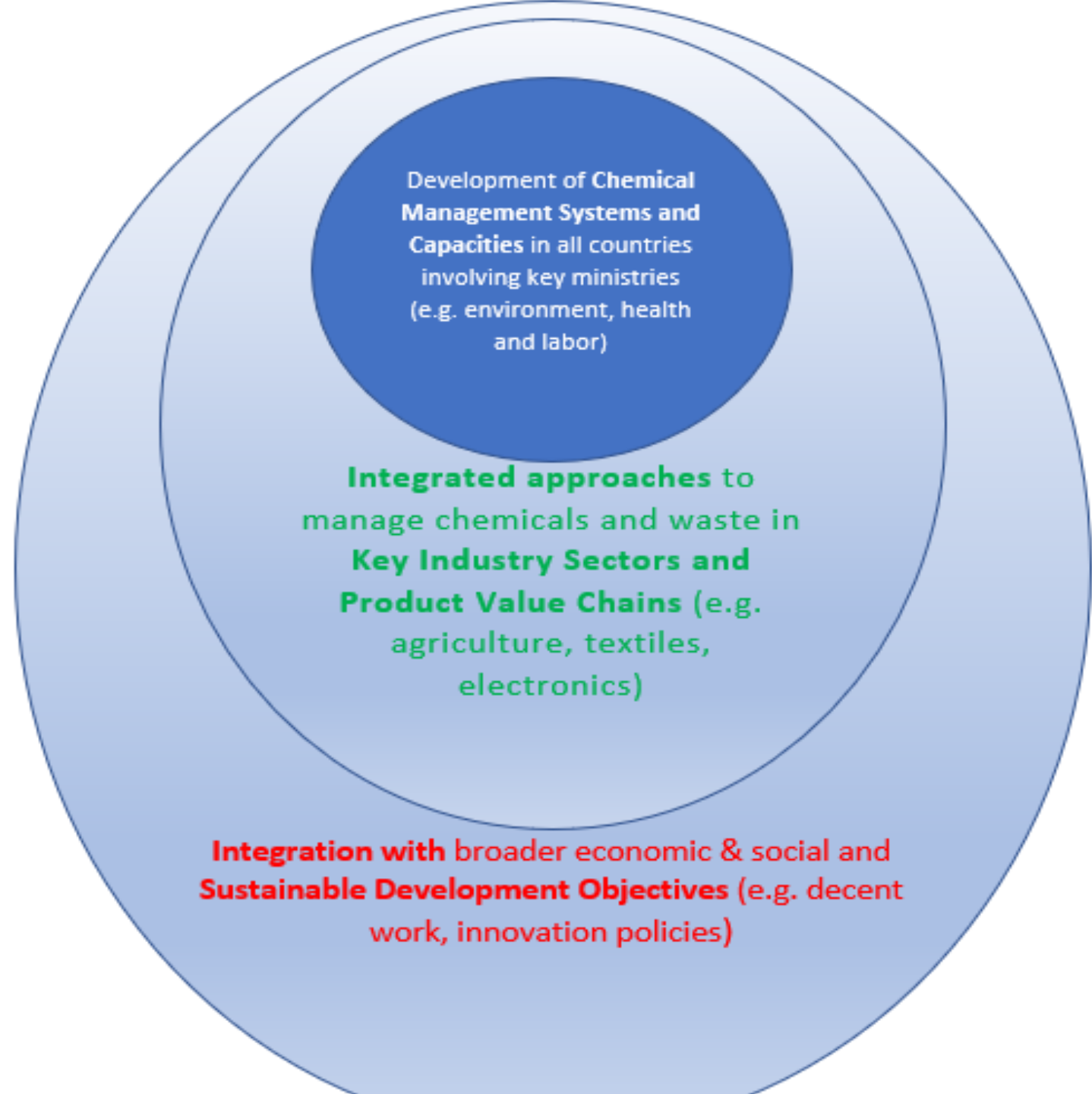
1. How can "Beyond 2020" galvanize the development and adequate financing of basic national systems and capacities for chemicals management in all countries?

2. How can issues in chemical intensive industry sectors and product value chains ("downstream sectors") be effectively addressed, and relevant actors be engaged in the "Beyond 2020" process?

3. What can be done under "Beyond 2020" to integrate chemicals and waste management into broader sustainable development action?

# Purpose and contribution of the IOMC Inf paper to the "Beyond 2020" process

## The Inf paper ….

- Seeks to inform and complement "Beyond 2020" discussions and negotiations. It does not constitute a formal IOMC negotiation position.

- Aims at further developing integrated management  already adopted at ICCM 1 in 2006 as a possible framework for "Beyond 2020".

- Features specific proposals for consideration concerning  strategic objectives and targets to help focus on priority issues.

- Encourages ambitious action by all stakeholders, and in particular key industry sectors.

- Presented at the IP 4 Technical Briefing (27 Aug.), together with some insights from the IOMC multi-stakeholder workshop (26 Aug.).

- While the IP continues, can we consider adding/changing certain objectives and targets to ensure "Beyond 2020" adequately addresses integrated chemicals and waste management?

**Three key dimensions of integrated chemicals and waste management**

Development of **Chemical Management Systems and Capacities** in all countries involving key ministries (e.g. environment, health and labor)

**Integrated approaches** to manage chemicals and waste in **Key Industry Sectors and Product Value Chains** (e.g. agriculture, textiles, electronics)

**Integration with** broader economic & social and **Sustainable Development Objectives** (e.g. decent work, innovation policies)

# General reflections on strategic objectives and targets (Annex 2)

## Strategic objectives

- Opportunity exists to sharpen strategic objectives to convey the outcome/results (i.e avoid use of  "measurers are identified").

- If strategic objectives are long there is a risk that they become incomprehensible.

- Add "short titles" to each objective to convey focus?

## Targets

- All Targets should be easily measurable and consistently worded. For example, all targets could start with "By xxxx…, yy (or a % of) countries/stakeholders.

- Targets should be simple to allow monitoring through a traffic light system (red, orange, green).

# Suggestions for adjusting strategic objectives to embrace integrated management (Annex 2)

**A. "National capacities and systems"**

Countries have the basic capacity, legal framework and institutional mechanisms in place to support the integrated management of chemicals and waste throughout the life cycle.

**B. "Data, knowledge and information"**

Comprehensive and sufficient knowledge, data and information are generated, available and accessible to all to enable informed decisions and actions

**C. "Issues of concern"**

Issues of concern are identified, prioritized and addressed

**D. "Innovative and safer solutions in product value chains"**

Safer alternatives and innovative solutions are introduced in key product value chains that maximize the benefits of chemicals to protect human health and the environment, minimize risks, and advance circularity

**E. "Integrating chemicals and waste management in strategic decision-processes"**

The sound management of chemicals and waste is integrated in all relevant sustainable development, financing and corporate decision-processes.

# Insights from the IOMC multi-stakeholder workshop (26/08/2022)

- General welcoming of the IOMC contribution on integrated management of chemicals and waste to inform and stimulate IP 4 discussions.

- The three dimensions are a valuable way to focus discussions on important issues and to engage new actors (e.g. downstream sectors, climate change community)

- Proposed targets are valuable but may be more specific (e.g. distinguish between governments and industry)

- In some cases step-by-step implementation activities are valuable (e.g. start with certain industry sector reviews or sustainable development topics)

- There was eagerness to explore how the ideas can be taken to IP4 and ICCM5, including possible further work in advance of ICCM5.

"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."
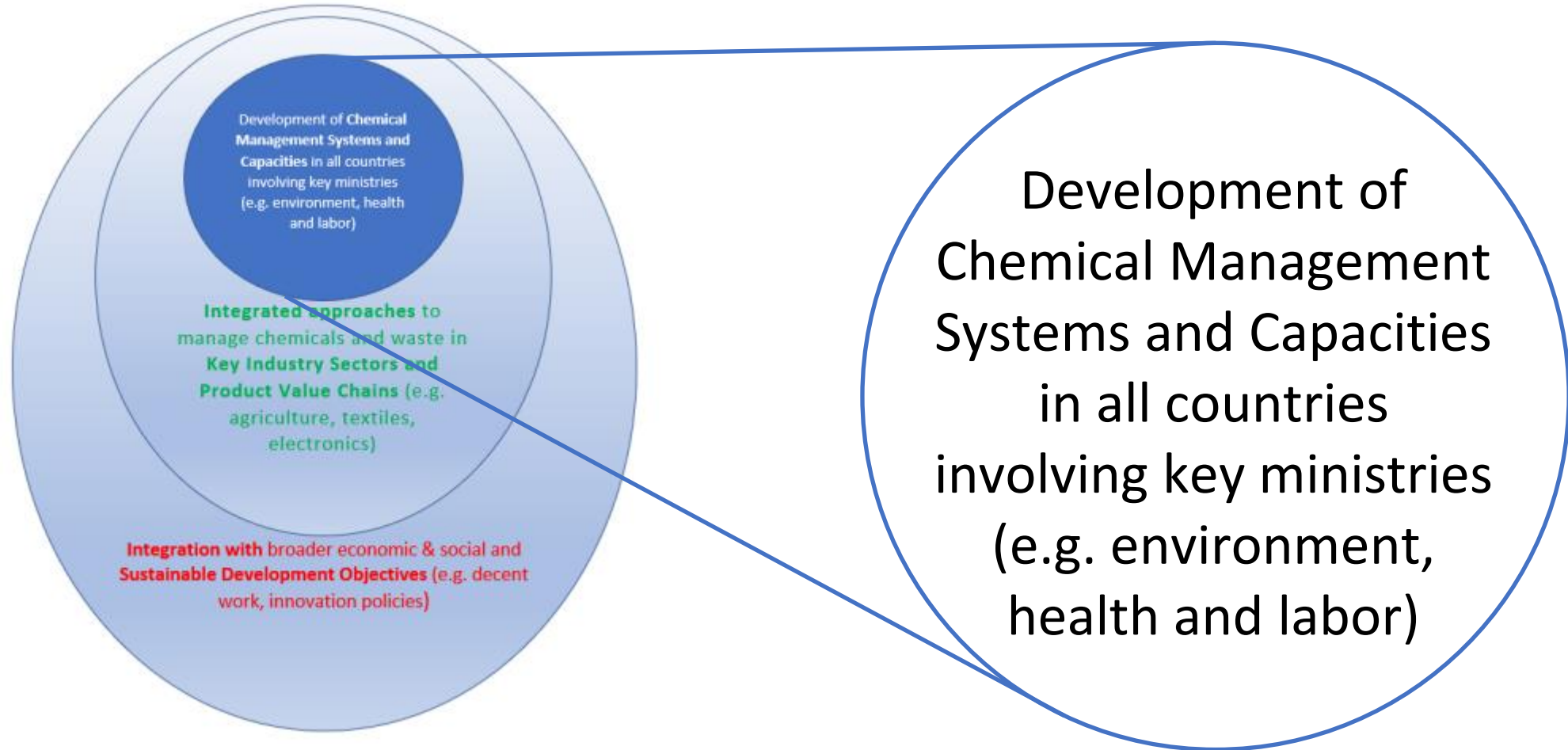
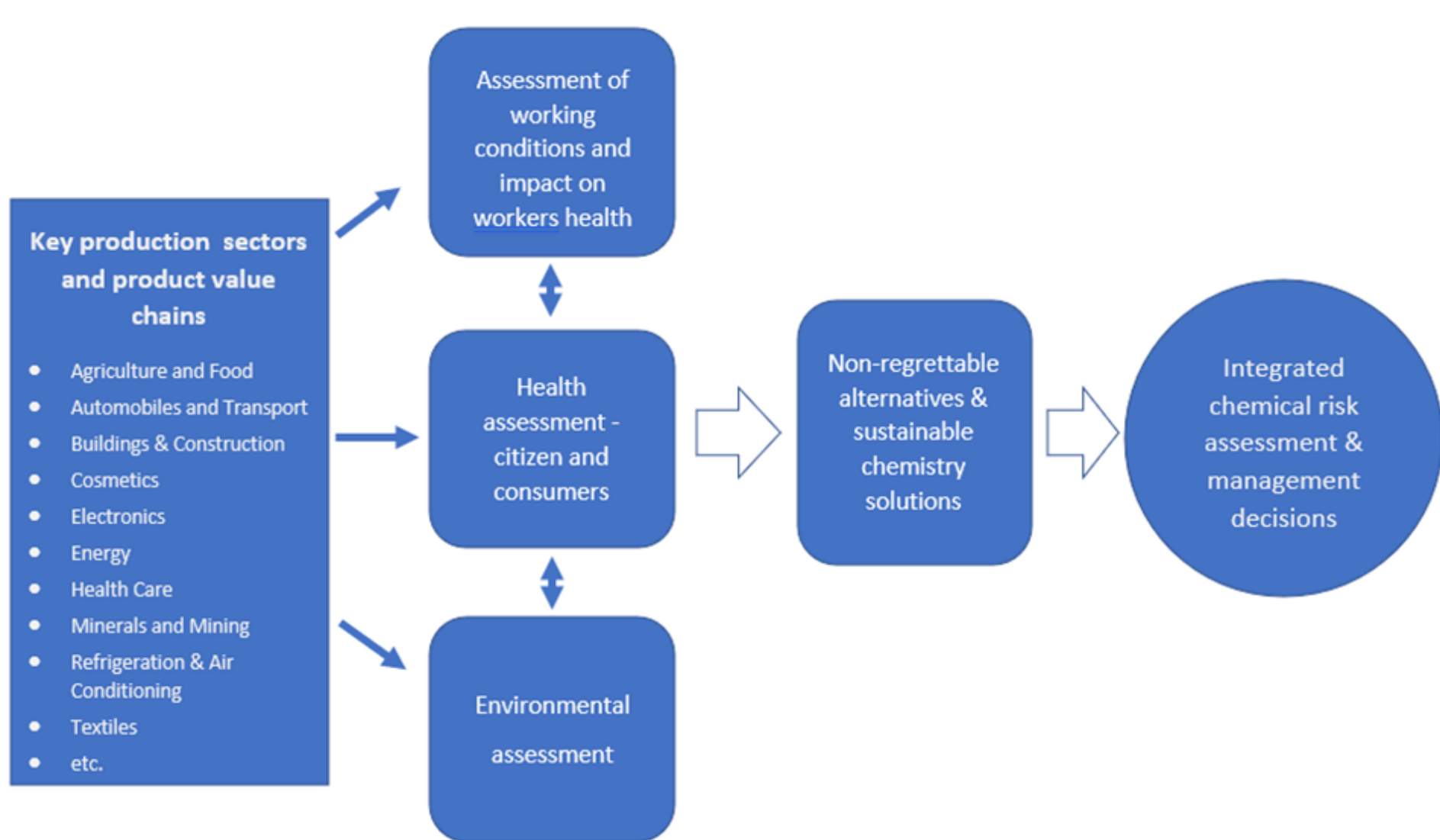THANK YOU

For more information,
please visit:

www.iomc.info

# Dimension 1 (Section 2.1)



Development of **Chemical Management Systems and Capacities** in all countries involving key ministries (e.g. environment, health and labor)

**Integrated approaches** to manage chemicals and waste in **Key Industry Sectors and Product Value Chains** (e.g. agriculture, textiles, electronics)

**Integration with** broader economic & social and **Sustainable Development Objectives** (e.g. decent work, innovation policies)

Development of Chemical Management Systems and Capacities in all countries involving key ministries (e.g. environment, health and labor)

# Priority elements of a national chemicals management system (section 2.1)

1. Ensuring classification and labelling (i.e. implementation of the GHS for industrial chemicals, agricultural chemicals, consumer product chemicals and chemicals in transport/storage )

2. Generating knowledge about hazardous chemicals in the country (e.g. chemicals inventory)

3. Integrated approaches to assess and manage chemical risks that address environment, labor, health considerations

4. Integrated and life cycle approaches to enable a circular economy

# An integrated approach to assess and manage chemical risks covering key industry sectors and product value chains



**Key production sectors and product value chains**

- Agriculture and Food
- Automobiles and Transport
- Buildings & Construction
- Cosmetics
- Electronics
- Energy
- Health Care
- Minerals and Mining
- Refrigeration & Air Conditioning
- Textiles
- etc.

Assessment of working conditions and impact on workers health

Health assessment - citizen and consumers

Environmental assessment

Non-regrettable alternatives & sustainable chemistry solutions

Integrated chemical risk assessment & management decisions

# IOMC Toolbox

Most relevant management schemes:

- Classification and Labelling System Scheme

- Industrial Chemicals Management Scheme

- National management scheme for PRTRs

www.iomctoolbox.org

# **Enabling framework** to support a national chemicals management system

1.  Effective national institutions, coordination and stakeholder engagement (e.g. inter-ministerial coordinating mechanism, chemicals agency)

2.  Legislation and enforcement covering the life cycle of chemicals, products and waste (e.g. GHS implementation, product standards)

3.  Creating linkages with other relevant initiatives at the national level (e.g. health-based monitoring, waste management)

4.  Sustainable financing and cost recovery schemes (e.g. scaling up of international financing, registration fees)

5.  Sustainable human resource capacities (e.g. National Learning Strategy)

# Updating National Profiles and fostering action through multisectoral and multistakeholder collaboration

- Many countries have already prepared National Chemicals Management Profiles and Action Plans through multisectoral and multi-stakeholder collaboration

- National Profiles and Action Plans could be updated and serve as baseline documents to assess progress in strengthening national chemicals management systems and foster action focused on specific targets agreed under "Beyond 2020"

- Existing guidance material on national profiles and chemical management systems could be updated to strengthen consideration of integrated chemicals and waste management

# National chemical management systems: Proposed targets (Section 3.2.1)
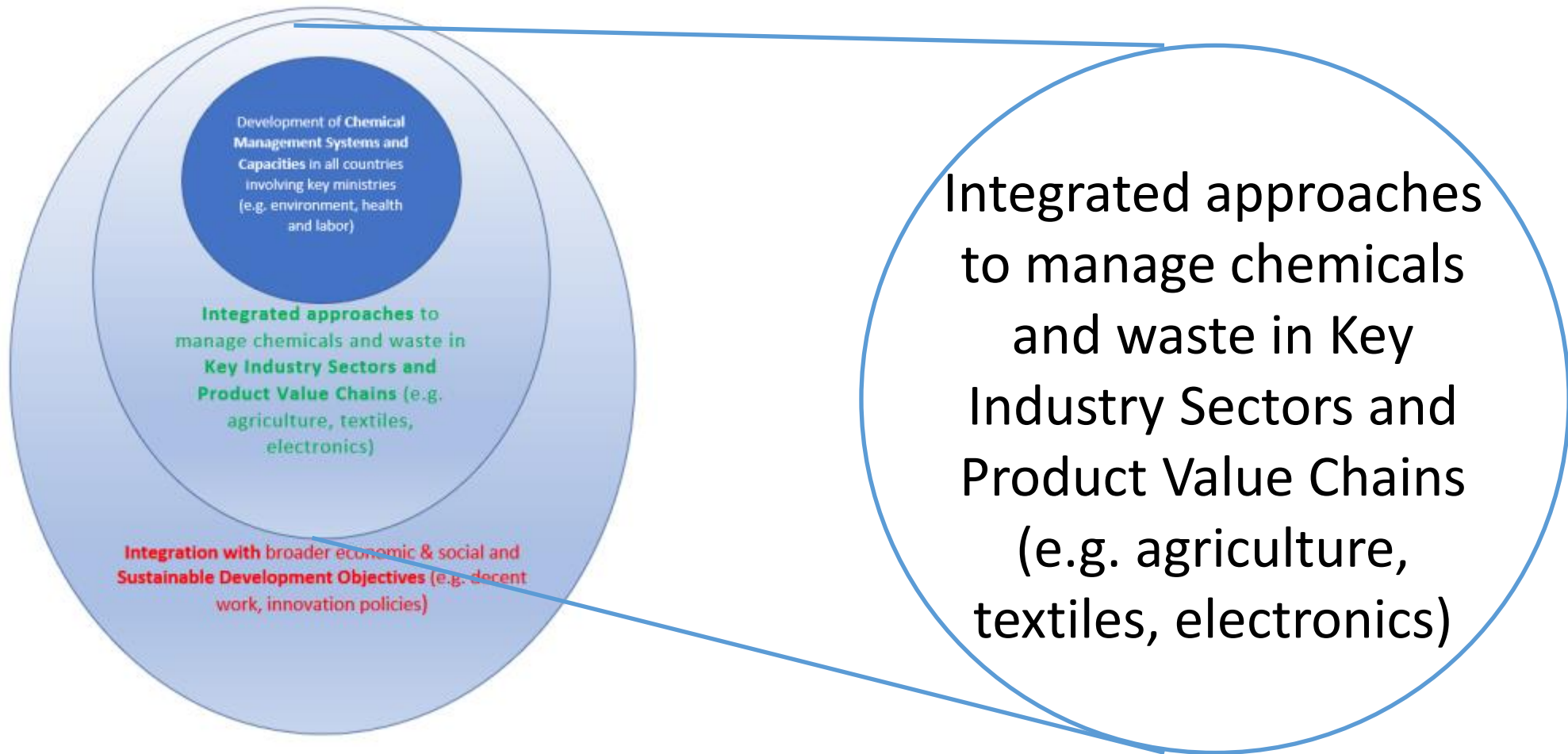
- By 20xx, yy countries have developed a National Chemicals and Waste Management Action Plan and identified priority measures to strengthen their national legal, institutional, financial and human resource capacities to implement "Beyond 2020" targets.

- By 20xx, yy countries have fully implemented the GHS (i.e., for industrial chemicals, agricultural chemicals, consumer product chemicals and chemicals in transport/storage).

- By 20xx,yy countries have in place a national information system for the sound management of chemicals and waste (i.e. chemical inventories, notification and registration schemes, right-to-know schemes).

- By 20xx,yy countries have legislation, institutions and enforcement mechanisms in place that address the life cycle of chemicals, products and waste and advance integrated assessment and management of chemical risks.

- By 20 xx, yy countries have developed a hazard-based approach to the prevention, preparedness, response and recovery to chemical accidents.

# Insights from the IOMC multi-stakeholder workshop (26/08/2022)

- Priority implementation of the GHS is supported as a fundamental basis for a national chemicals management system.

- A second priority is the establishment of inclusive national inter-ministerial coordination mechanisms, including but not limited to ministries of environment, health, labour, agriculture industry, finance, education and local government.

- A third priority is basic legal capacity to assess chemicals and implement risk management decisions that cover the life cycle of the chemicals

- Setting global priorities/targets can provide support and guide countries in strengthening their national legislation

- Designing toxics out of products for a circular economy. New actors need to be engaged such as the recycling industry

- Strong financing mechanisms are required including, but not limited to, cost recovery mechanisms to fund national systems/chemical agencies

- Compliance and enforcement activities are essential, including to address illegal trade of chemicals

Thank you for your attention!

# Dimension 2 (Section 2.2)



Development of **Chemical Management Systems and Capacities** in all countries involving key ministries (e.g. environment, health and labor)

**Integrated approaches** to manage chemicals and waste in **Key Industry Sectors and Product Value Chains** (e.g. agriculture, textiles, electronics)

**Integration with** broader economic & social and **Sustainable Development Objectives** (e.g. decent work, innovation policies)

Integrated approaches to manage chemicals and waste in Key Industry Sectors and Product Value Chains (e.g. agriculture, textiles, electronics)

# Integrating chemicals and waste management in chemical intensive industry sectors and product value chains

- Significant releases of chemicals occur in key industry sectors and their product value chains throughout the life cycle (GCO-II 2019)

- Chemical intensive industry sectors include but are not limited to:

  - Agriculture and Food Production
  - Automobiles and Transport
  - Construction and Building
  - Cosmetics/personal care
  - Electronics
  - Energy

  - Minerals and Mining
  - Pharmaceuticals
  - Refrigeration and Air Conditioning
  - Textiles
  - Others

- Lessons exist from certain sectors (e.g. agriculture and textiles)

How can issues in chemical intensive industry sectors and product value chains be addressed through "Beyond 2020"?

- Industry sector reviews?
- Thematic sector dialogues?
- Industry sector road maps?

A combination of the above?

# Possible questions to review key industry sectors
## (based on section 2.2.2)

- Are **chemical-related emissions and human health and environmental problems** in the sector known and well documented?
- Has the sector developed a **global sustainable chemicals vision** and what portion of key industries and actors are engaged? Does a global industry association exist?
- Has a **list of hazardous substances of concern been developed which includes chemicals identified at the international level** (covering raw materials, supplies and production processes)?
- What kind of **environmental and chemicals** reporting do companies already do?
- Do (global) **standards exist that specify acceptable levels of residues of chemicals in finished products?**
- Have **priority risk reduction actions** been identified?
- To what extent are **safer alternatives developed, including through green and sustainable chemistry innovation**?

# What can industry front-runners do?

- Committing to transparency, information disclosure and accountability in the supply chain

- Developing industry-wide guidelines or standards (e.g. guidelines for production, chemical substance and material disclosure, testing of final product for MRLs*)

- Systematic adoption of corporate management instrument, such as Sustainable Supply Chain Management, Extended Producer Responsibilities and Life Cycle Assessment

- Knowledge-sharing and wide dissemination of good practices including of green and sustainable chemistry solutions

- Development of capacity through training of people in the relevant sectors at all levels


- * maximum residue levels

# What can front-runner governments do?

- Phase-out particular chemicals of concern and enforcing them to establish a level playing field for all industries and companies

- Introduce community and consumer right-to-know and labelling schemes for chemicals and products

- Use tax incentives to foster market shifts towards safer alternatives, sustainable chemistry innovation, and cleaner production

- Promulgate the polluter pays principle

- Subsidize research and innovation to advance green and sustainable chemistry solutions

- Support sustainable procurement strategies for public actors

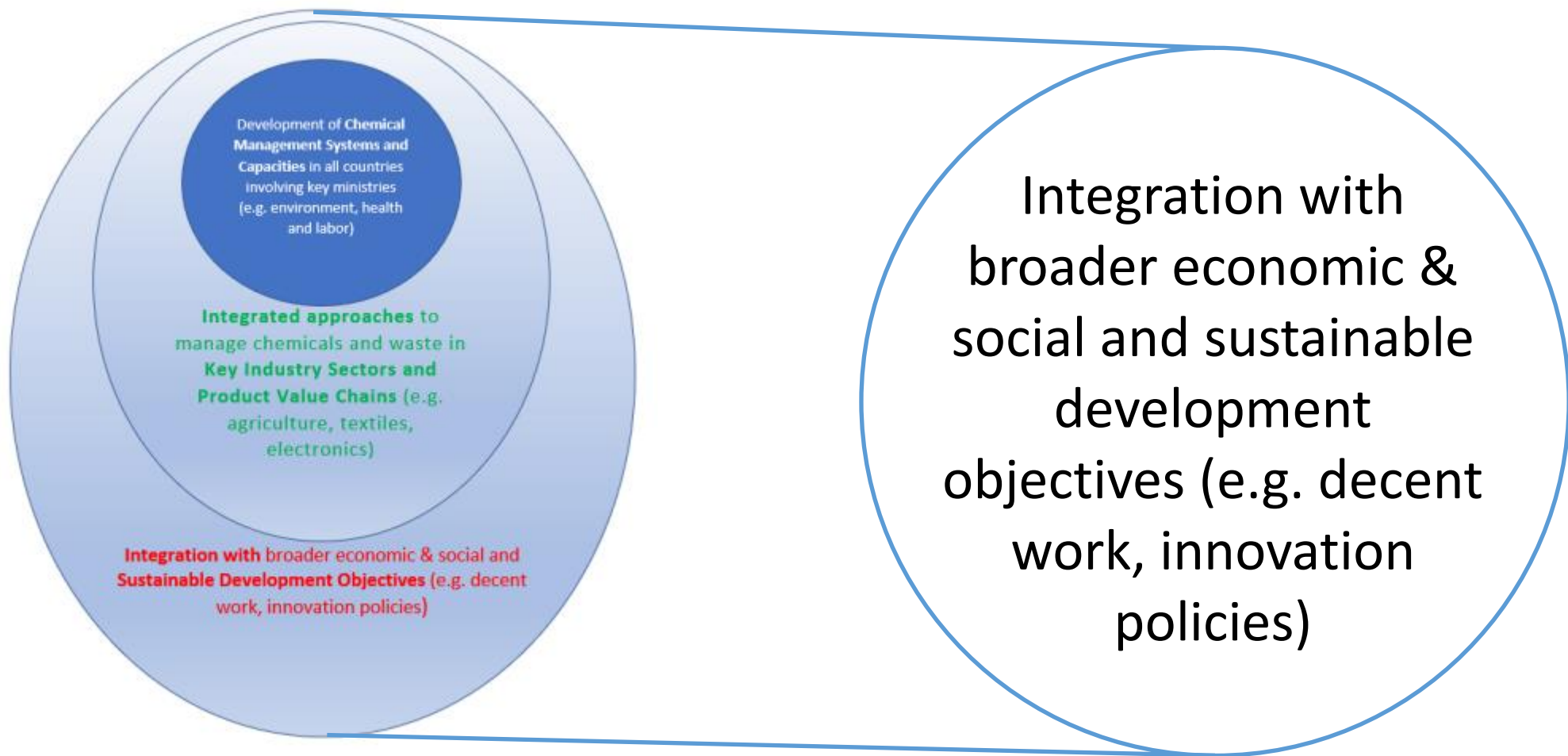# Integrating chemicals and waste management in key industry sectors: Proposed targets (Section 3.2.2)

- By 20xx, yy key chemical intensive industry sector actors have developed a sustainable chemical strategy in the x,y,z sectors (e.g. textile, electronic, building, agriculture, etc.).

- By 20xx, yy leading actors in the retail sector have developed a sustainable chemicals strategy.

- By 20xx, international guidance has been prepared through multi-stakeholder collaboration to feature good practices to support the development of sustainable chemicals strategies in key sectors.

# Insights from the IOMC multi-stakeholder workshop (26/08/2022)

- Agreement that engagement of chemicals intensive industry sector and multi-stakeholder discussions/reviews could be an important aspect of "Beyond 2020"

- The key industry sectors identified (e.g. through GCO-II) are a useful starting point, but some refinements are needed

- Front runner association and companies play a key role in advancing action under "Beyond 2020". Addressing and engaging SMEs and informal sector also important.

- Development of guidance to support sector reviews and roadmaps is valuable and could be initiated in advance of ICCM5.

- Development of an international code of conduct to address industry sectors may also be useful.

- If targets address industry sectors in the Beyond 2020 instrument it could be an incentive to engage. Clear targets are needed that address the private sector.

# Thank you for your attention!

# Dimension 3 (Section 2.3)



Development of **Chemical Management Systems and Capacities** in all countries involving key ministries (e.g. environment, health and labor)

**Integrated approaches** to manage chemicals and waste in **Key Industry Sectors and Product Value Chains** (e.g. agriculture, textiles, electronics)

**Integration with** broader economic & social and **Sustainable Development Objectives** (e.g. decent work, innovation policies)

Integration with broader economic & social and sustainable development objectives (e.g. decent work, innovation policies)

# Identifying relevant sustainable development topics

1.  **Environmental sustainability topics**: biodiversity; climate change; pollutions, clean water, ozone layer protection, etc.

2.  **Socio-economic sustainability topics**: industrial development and job creation; workers protection; public health, gender equality, etc.

3.  **Enabling sustainability topics**: education programmes; sustainability innovation, etc,

# Questions to strengthen the sustainable development dimension under "Beyond 2020"

• What are the most important sustainable development topics which need to integrate chemicals and waste management?

• Can actors from relevant sustainable development policy communities be attracted to the "Beyond 2020" process?

• Vice versa, can "Beyond 2020" encourage integration of chemicals and waste considerations in other sustainable policy-making processes?

• What action needs to be taken to achieve these linkages?

# Integrating chemicals and waste management into sustainable development action: Proposed targets (Section 3.2.3)

- By 20xx, yy countries have mainstreamed integrated and waste management in their national sustainable development strategies.

- By 20xx, yy countries have integrated chemicals and waste management considerations in key policies and initiatives to advance sustainable development.

- By 2020, yy countries have developed green and sustainable chemistry strategies to advance the substitution of chemicals of concern.

# Insights from the IOMC multi-stakeholder workshop (26/08/2022)

- Important to create linkages at the global and national levels and by industry

- Priority sustainable development topics which may be addressed by Beyond 2020 include:

  - Climate change

  - Biodiversity

  - Air pollution and health (One Health)

  - Rights at Work; a safe and healthy working environment

- Further work is encouraged at the global level to explore linkages and possible action. Some valuable work has already started (e.g. by BRS and Minamata Secretariats, Nordic Council)

- Important that guidance and incentives are developed for national focal points to interact on specific topics towards identifying specific action.

Thank you for your attention!