

Global Chemical Management: Implications and opportunities for the UK & Coating Industry

- From a civil society's perspective of view

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REACH





2020 Goal: Sound Management of Chemicals and Wastes



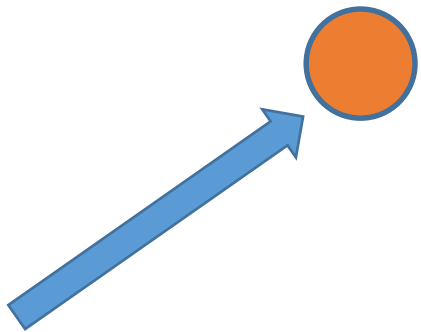
- 2015 UN Sustainable Development Summit: 17 SDGs – business implication

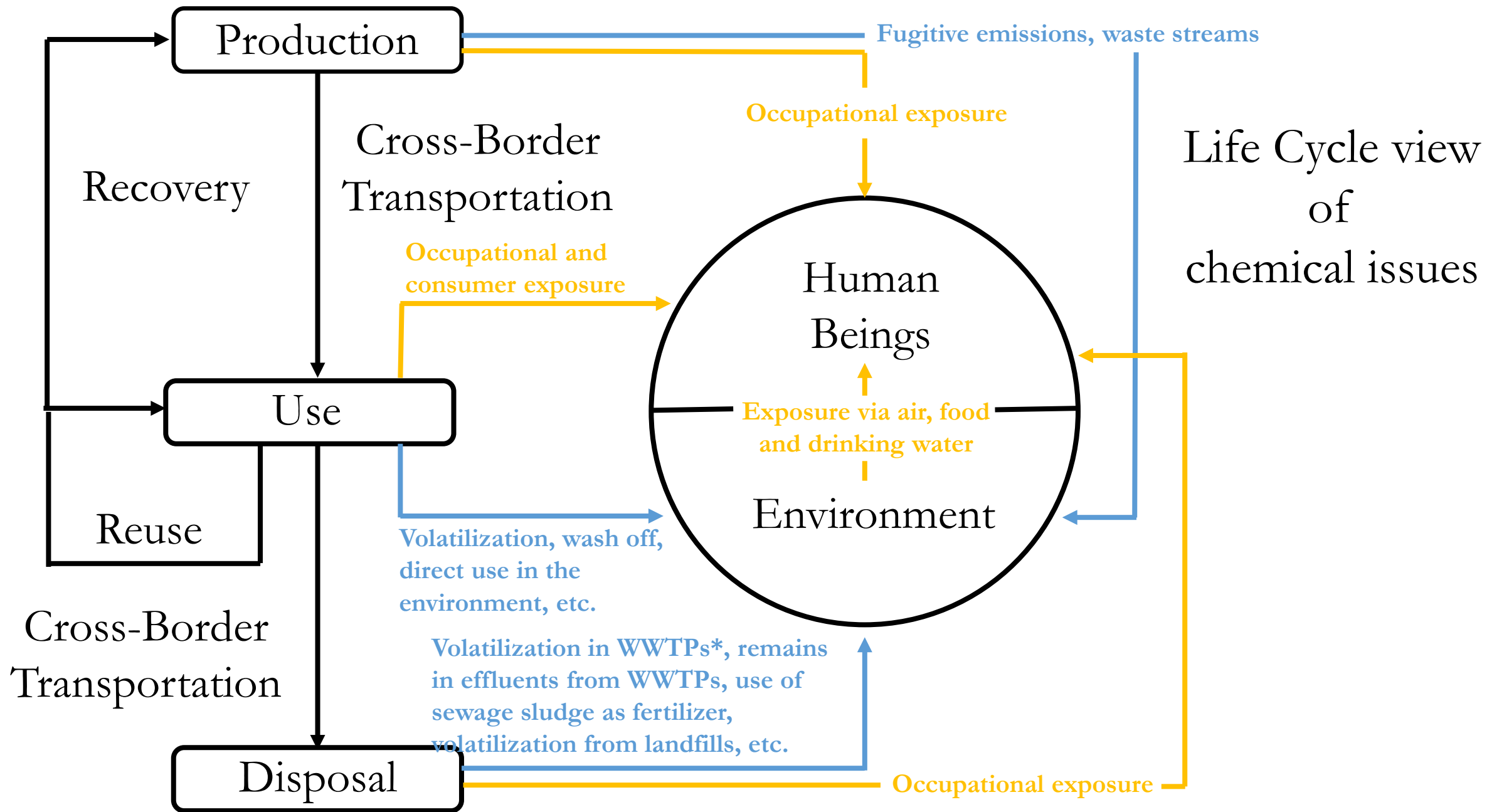
- SDG 12.4 “By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their LIFE CYCLE, in accordance with AGREED INTERNATIONAL FRAMEWORKS, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

- 2012 Rio+20 Summit: Reaffirmed

- 2002 SD Summit - Johannesburg Plan of Implementation - defined

- 1992 UN Earth Summit- Agenda 21 Chapter 19 laid out the plan to action to ensure the environmentally sound management of toxic chemicals



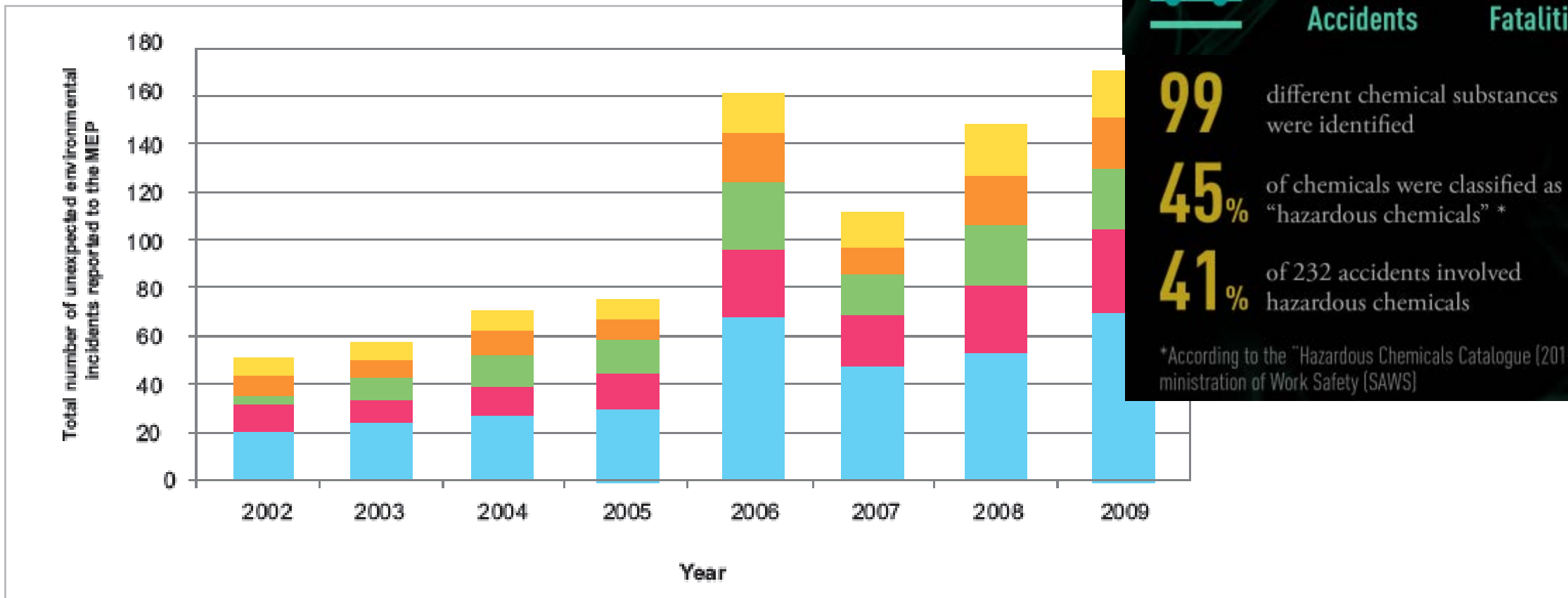


(Adjusted based on OECD 2013 Synthesis paper on per- and polyfluorinated chemicals (PFCs))

Production

Fugitive emissions

Figure 2. Growing Incidence of Unexpected Environmental Accidents as Reported to the Ministry of Environmental Protection (MEP) in the People's Republic of China (2002-2009)



232
Accidents

199
Fatalities

400
Injuries

99

different chemical substances were identified

45%

of chemicals were classified as "hazardous chemicals" *

41%

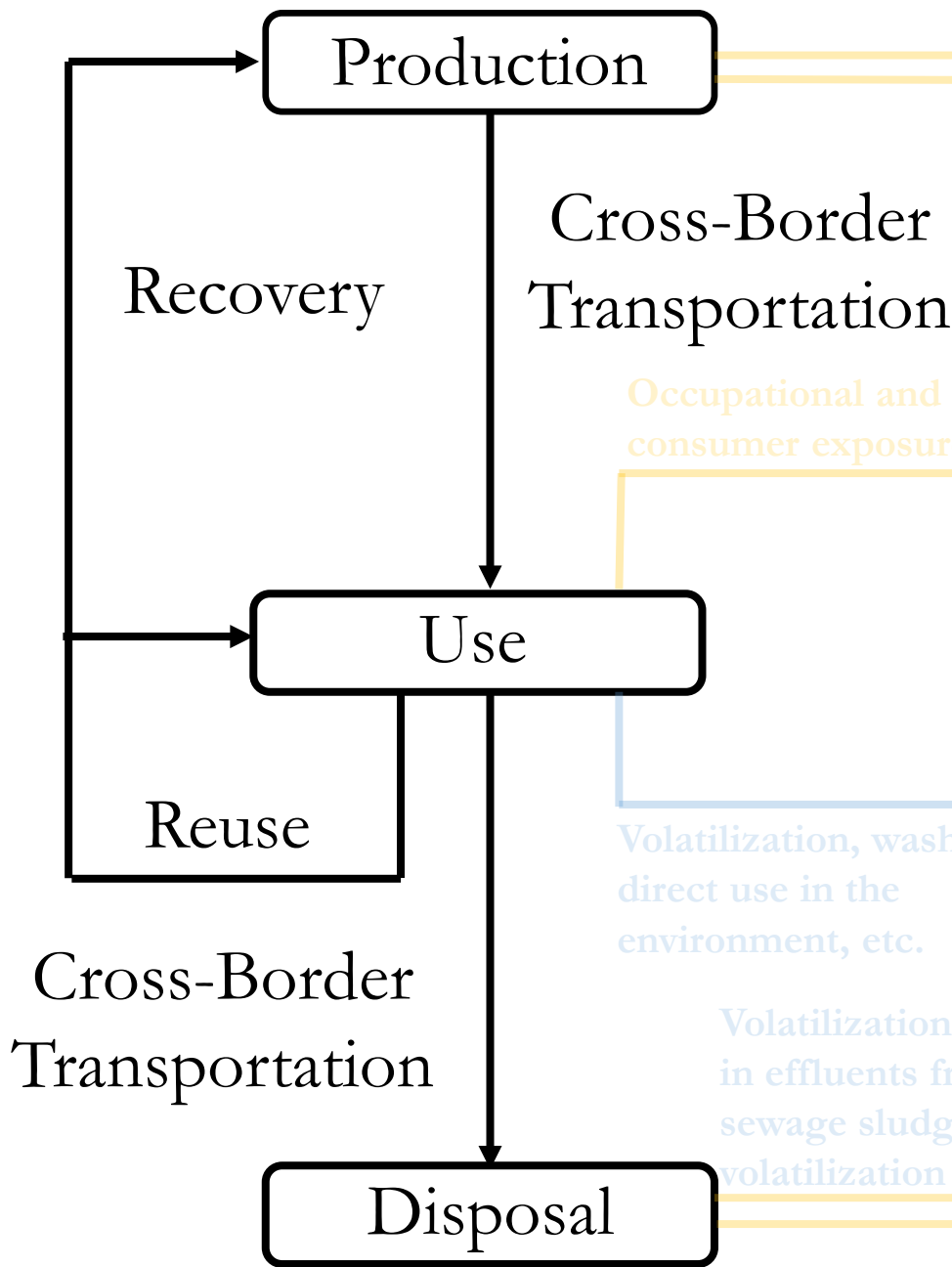
of 232 accidents involved hazardous chemicals

*According to the "Hazardous Chemicals Catalogue (2015)" published by the State Administration of Work Safety (SAWS)

Disposal

Occupational exposure

(Adjusted based on OECD 2013 Synthesis paper on per- and polyfluorinated chemicals (PFCs))




BASEL CONVENTION
ON THE CONTROL OF TRANSBOUNDARY
MOVEMENTS OF HAZARDOUS WASTES
AND THEIR DISPOSAL

1989



ROTTERDAM CONVENTION
ON THE PRIOR INFORMED CONSENT PROCEDURE
FOR CERTAIN HAZARDOUS CHEMICALS
AND PESTICIDES IN INTERNATIONAL TRADE

1998



Stockholm Convention
on **persistent organic**
pollutants (POPs)

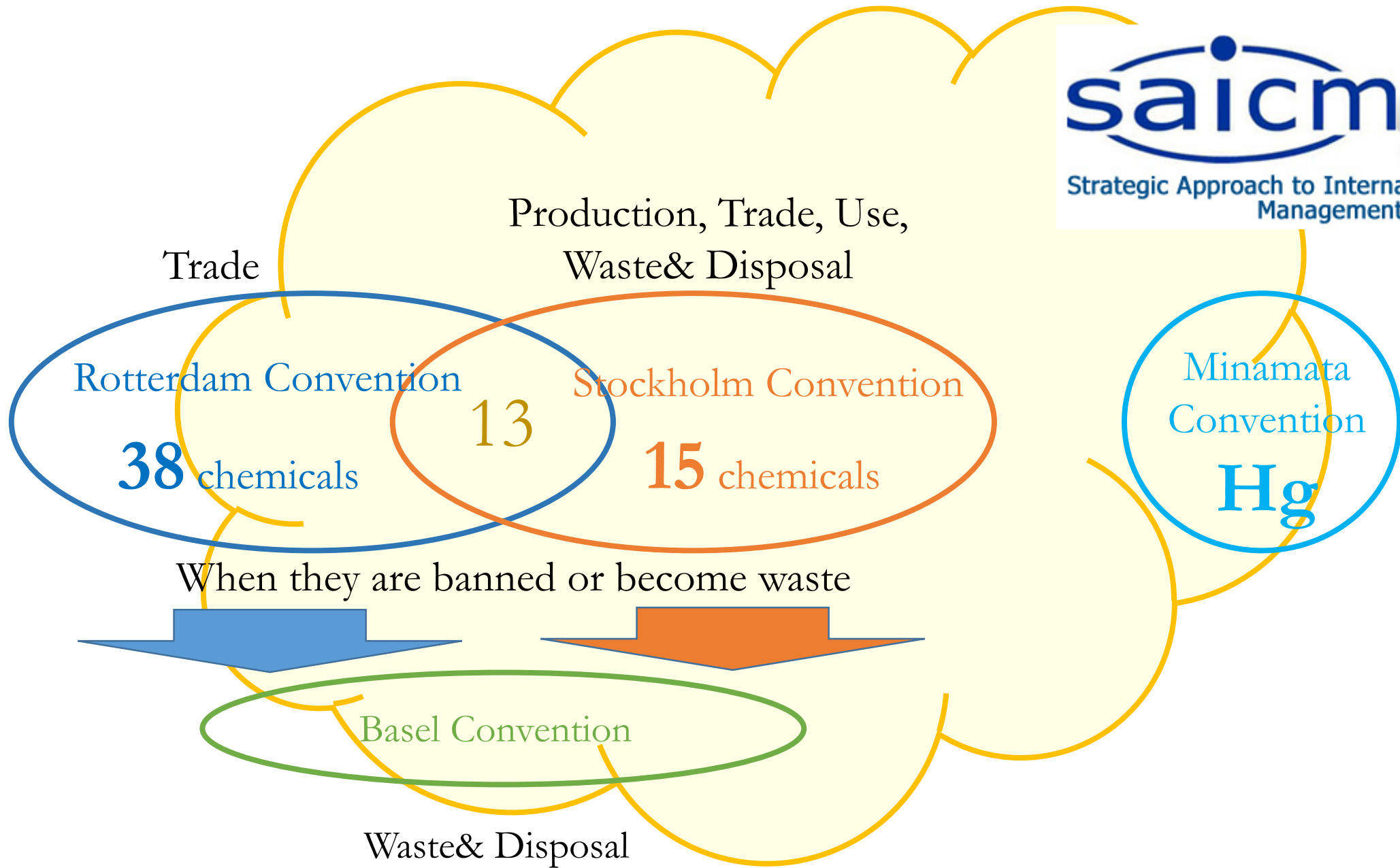
2001



UN
environment

MINAMATA
CONVENTION
ON MERCURY

2013

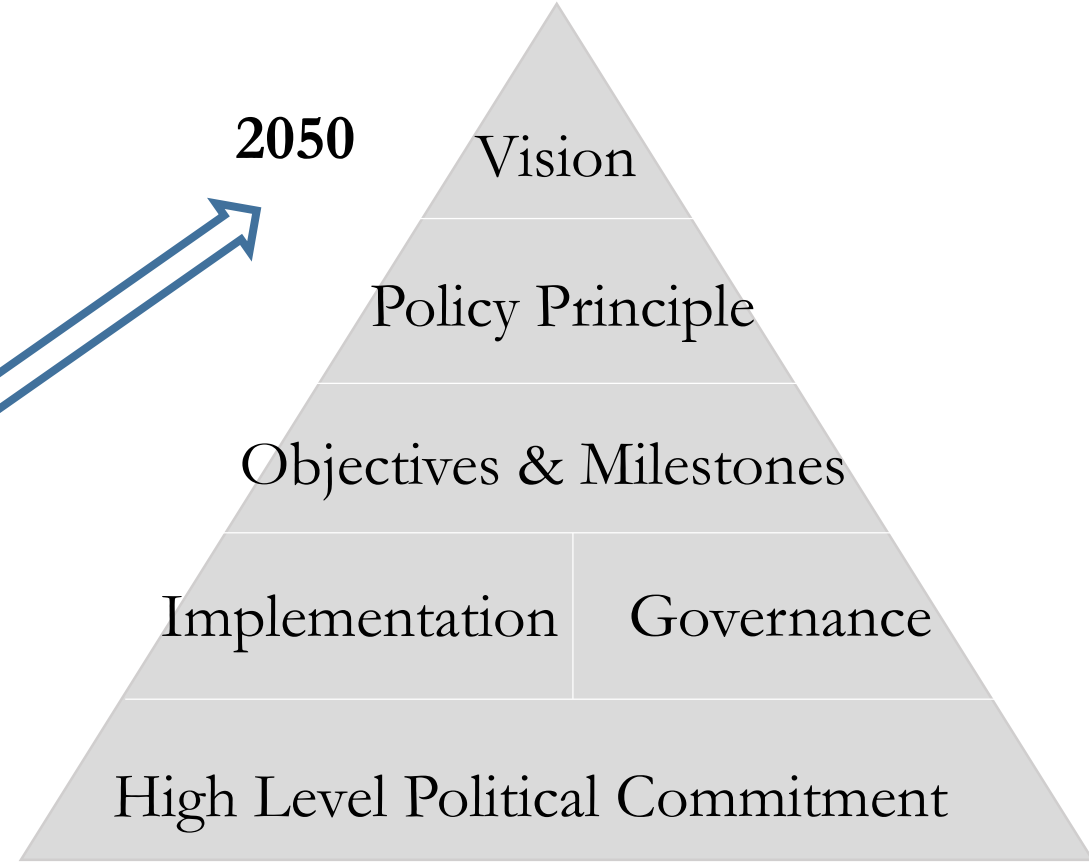


Emerging Policy Issues

- Lead in paint (IPPIC)
- Chemicals in products
- Hazardous substance within the life cycle of electrical and electronic products
- Nanotechnology and manufactured nanomaterials
- Endocrine-disrupting chemicals
- Environmentally persistent pharmaceutical pollutants
- Perfluorinated chemicals and the transition to safer alternatives
- Highly hazardous pesticides

Beyond 2020

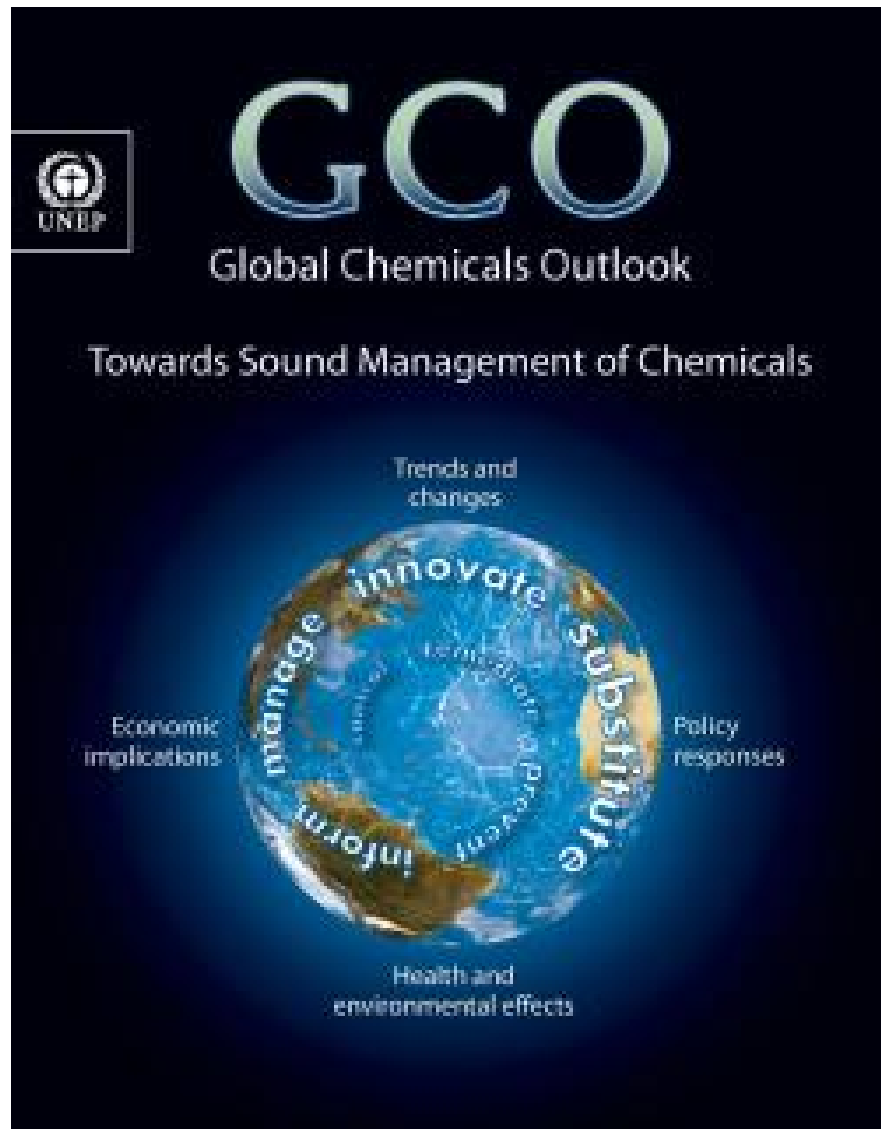
- Multi sector & multi stakeholder involvement in discussion – **midstream & downstream** user important!!!
- Intersessional meeting 1 & 2: NO IPPIC !
- To help decision makers understand your industry?
- Through CSF???



- Legally binding elements?
- Extended producer responsibility?
- Private sector contribution?



Global Chemical Outlook - II



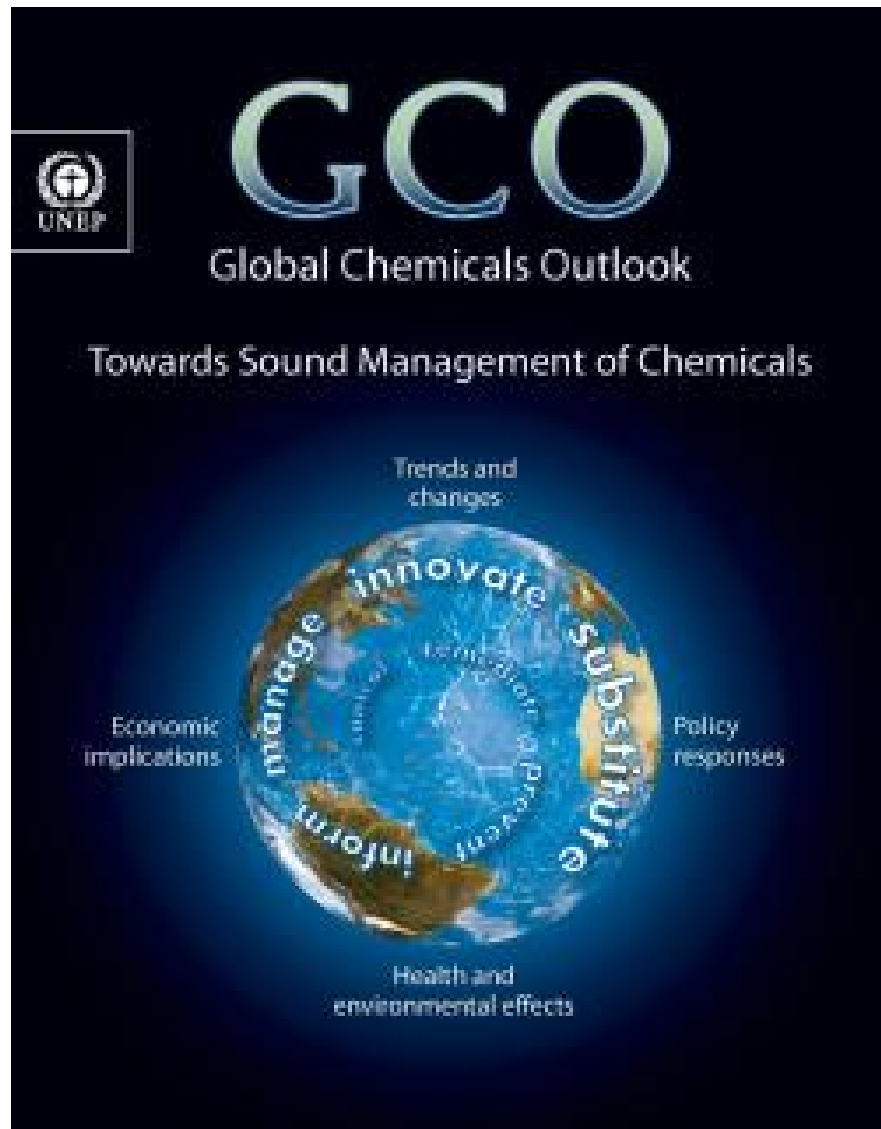
EU Issues with Emerging Evidence Indicates a Risk to Human & Environment:

- X - Lead: **paints**
- X - Organotins: **marine anti-biofouling agents**
- X - Chlorinated Paraffins: **paints**
- X - Benzotriazole UV stabilisers: **coatings**
- X - Cadmium: **coatings**

(EU: Restricts the placing on the market of **paints**)

- X - Trichloroethylene (TCE): **paints, coating**
- X - Polycyclic aromatic hydrocarbons (PAHs): **paints**
- X - Neonicotinoids
- X - Microbeads/microplastics
- X - Bisphenols
- X - Phthalates
- ...

Global Chemical Outlook - II



EU Issues with Emerging Evidence Indicates a Risk to Human & Environment:

EU leadership & competitive advantage in global trade – Brexit v.s. REACH?

Your alternatives?
(EU: Restricts the phasing out of the market of paints)

Your lessons & experience in phasing out and substitution?

X - Benzotriazole UV stabilisers: coatings

X - Cadmium: coatings

X - Trichloroethylene (TCE): paints, coating

X - Polycyclic aromatic hydrocarbons (PAHs): paint

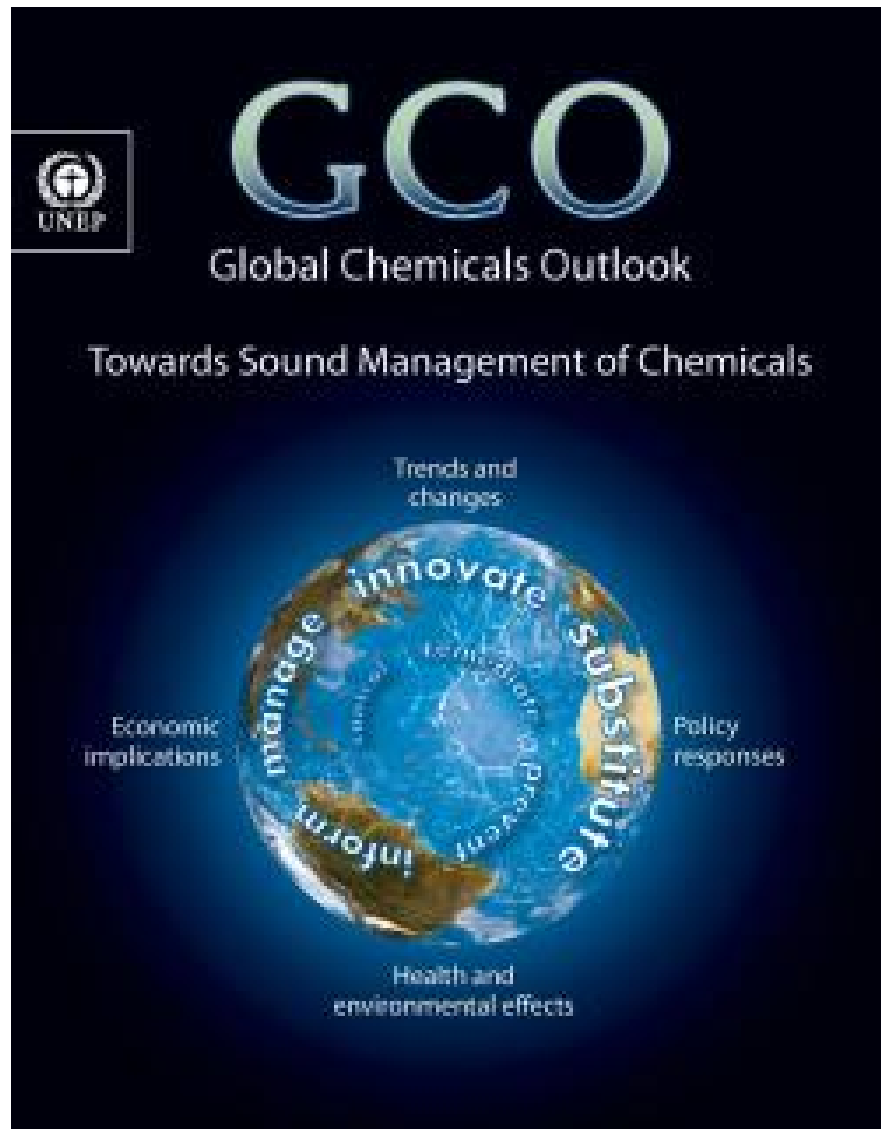
X - Microbeads/...

X - Bisphenols

X - Phthalates

- ...

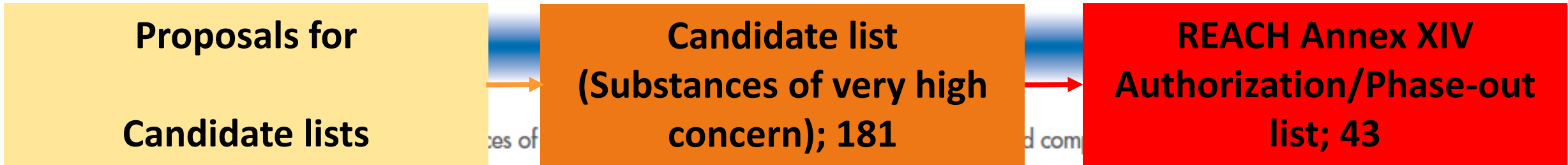
Global Chemical Outlook - II



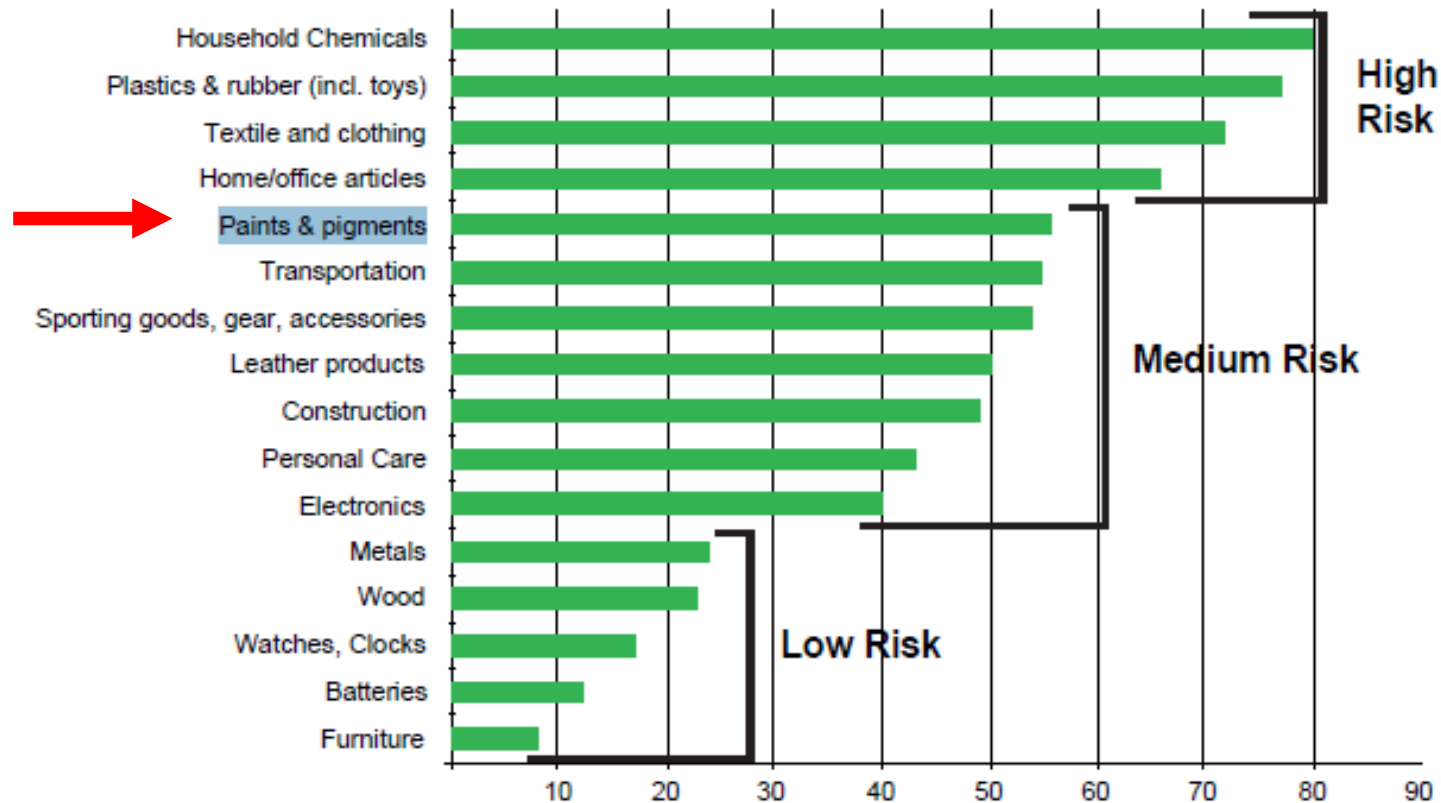
- **Enabling environment and drivers of change:** important policy, economic & fiscal instruments – particularly for middle stream & downstream users?
 - Identification and Assessment of Safer Chemical and Non-chemical **Alternatives**
 - Research , technology **innovation**, and financing
 - Emerging actors and governance issues

Proactive Innovators

Regulation Resisters



of potential SVHCs in each product category



Source: MSC/ESG Research, ChemSec's SVH List 2.0 (May 2014)

Stay far ahead of regulation

Proposals for
Candidate lists

Candidate list
(Substances of very high
concern)

REACH Annex XIV
Authorization/Phase-out
list

- Chemicals meet criteria to be phased out & substituted
- Avoid regrettable alternatives

SINList
SUBSTITUTE IT NOW!

SEARCH THE SIN LIST

Search your chemicals and we can identify if they are on the SIN List. If not, the SINilarity tool can tell you if they are similar to the SIN listed chemicals

2018.04.19

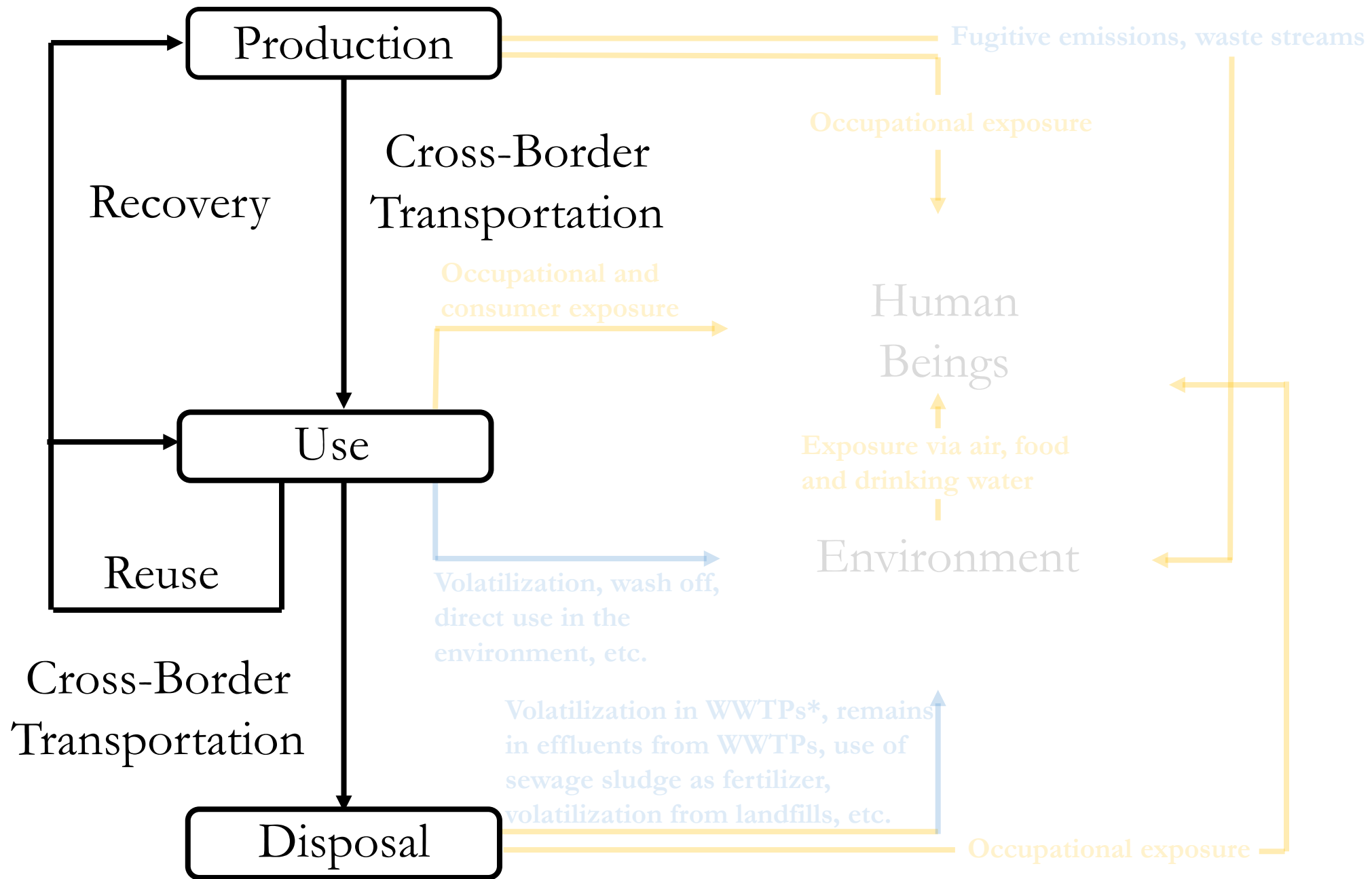
ECHA: “The vast majority of the substances in the SIN list are already (or in the process of being) regulated or under scrutiny by authorities, suggesting that SIN list is a valuable tool for industry to predict action by authorities”

Enter the CAS/EC Number or Chemical name...

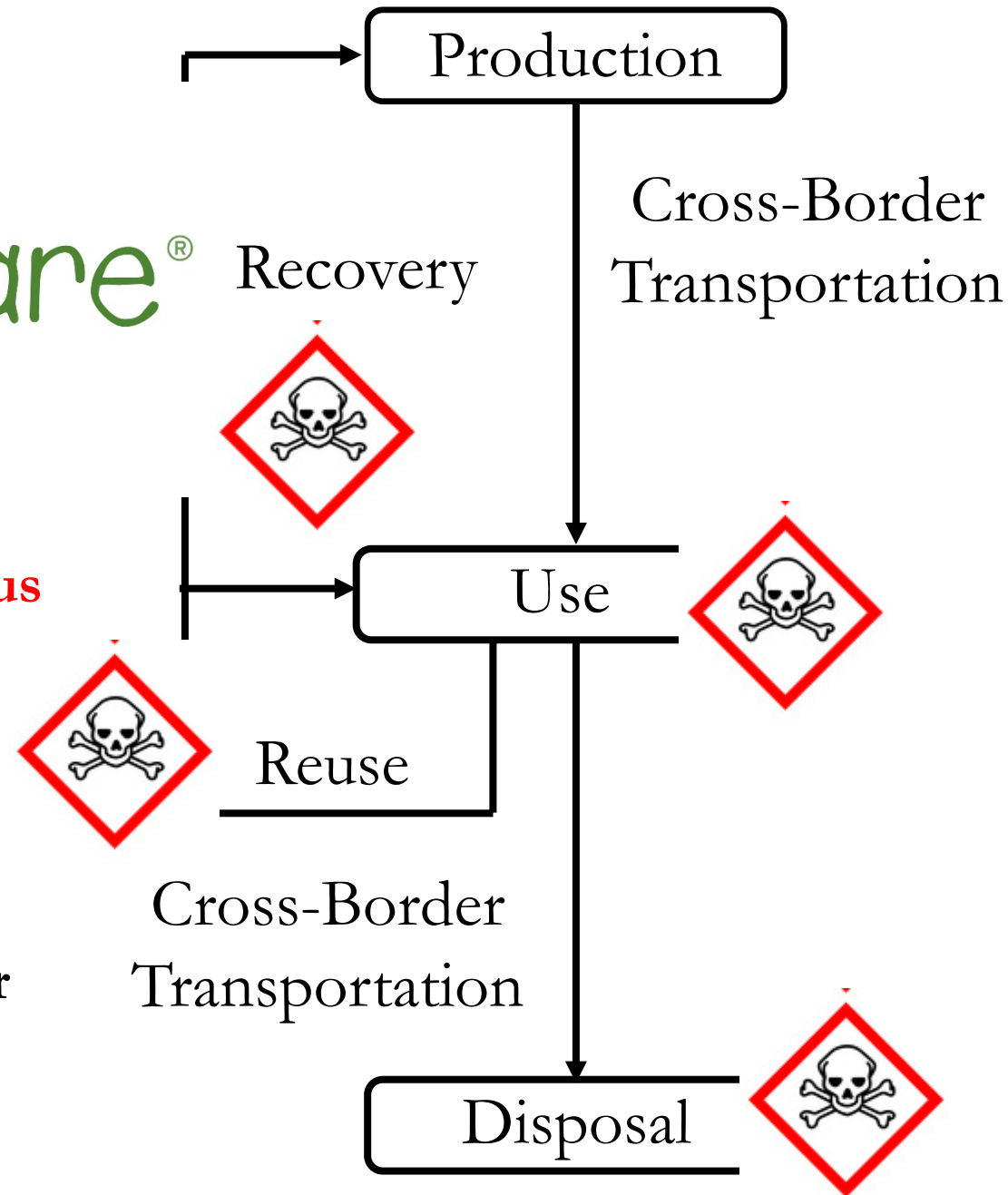
FILTER the SIN LIST ▲

Health & Environmental concerns	Uses	REACH Status	Appearance date on S
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Production volume	SIN Groups	Producers	<input type="button" value="FILTER"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	

Your filtered results gave **913** hits



(Adjusted based on OECD 2013 Synthesis paper on per- and polyfluorinated chemicals (PFCs))



- A benign Circular economy by **designing hazardous chemicals out**
- **Slow the loop** in order to close the loop
 - Sustainable production & consumption
 - **New business model**, e.g. paint lease?
- **Difficulty and complexity of recycling practice for customers?**

25th October 2004



GREENPEACE

Common position with regard to the authorisation of substances of very high concern within REACH

The Confederation of British Industry, the Chemical Industries Association and Greenpeace share the common position that substances requiring an authorisation within REACH according to Title VII, Article 54 of the Commission's proposal (i.e. substances of very high concern) should be replaced with less hazardous alternatives wherever and whenever practicable.

- Authorization & substitution has the potential to drive innovation to the benefit of business, human health and the environment.
- We therefore urge the Minister to press for substitution to be incorporated into REACH in such a way that the authorisation procedure is effective, but flexible, in progressively phasing-out substances of very high concern.

Thank
you

