Responsible management of packaging from Plant Protection Products

Container Management Strategy (CMS) & the Commitment for the Circular Economy

CEUREG FORUM

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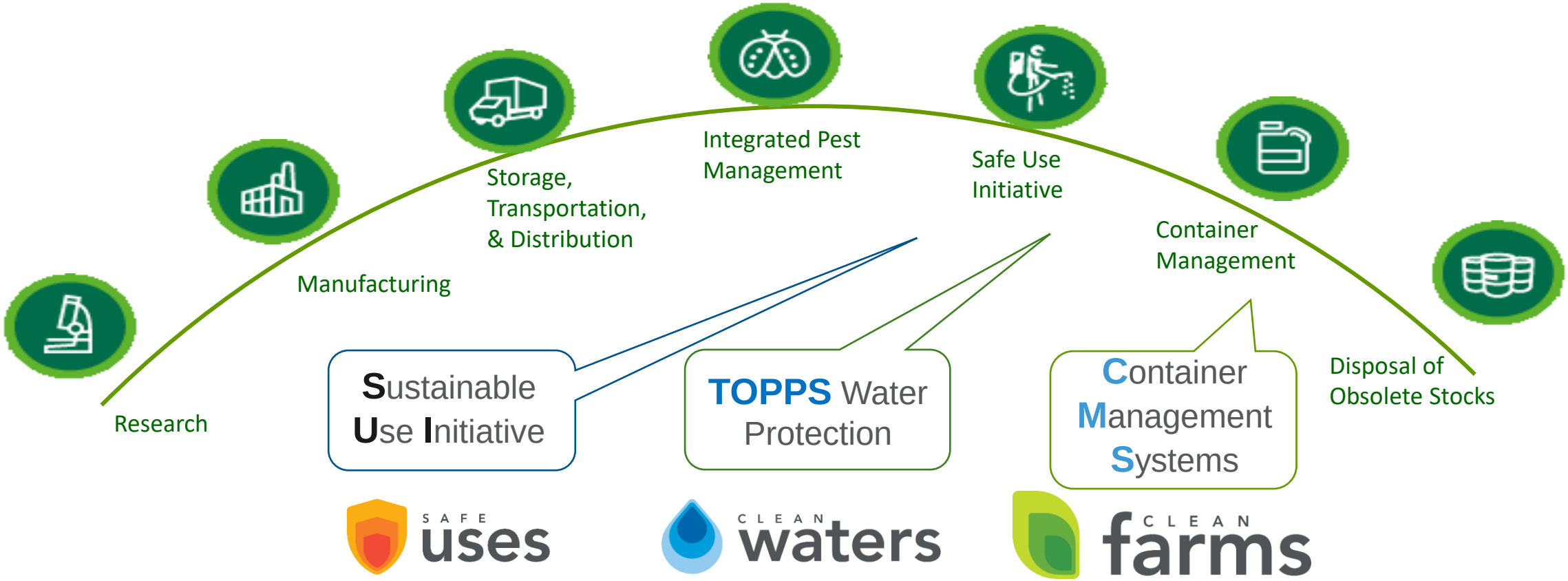
Industry initiatives for Container Management

Stewardship Lifecycle for Crop Protection Chemicals



from Discovery — **Stewardship encompasses Entire product life cycle** — *to* Recovery

Company Activities | **Association Activities**

Industry initiatives for Container Management

Objectives & Activities

Objectives

- Prevent the production of hazardous waste and the residues exposure for humans and the environment
- Maximise the collection of empty packaging
- Contribute to circular economy by promoting safe recycling of high value material

Key Activities

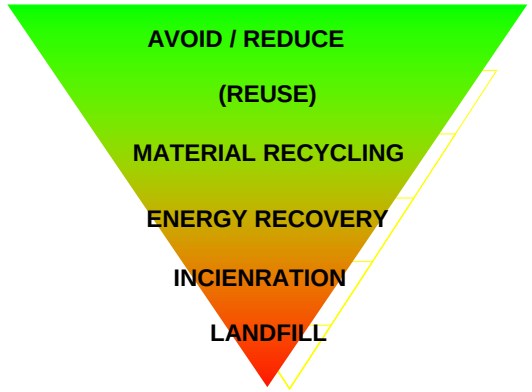
- Promote proper container rinsing to minimize residues & risks
- Retrieve empty pesticide packaging from farms via build up of country-specific collection system
- Achieve suitable disposal or recycling end-use

Industry initiatives for Container Management

Elements for successful Container management



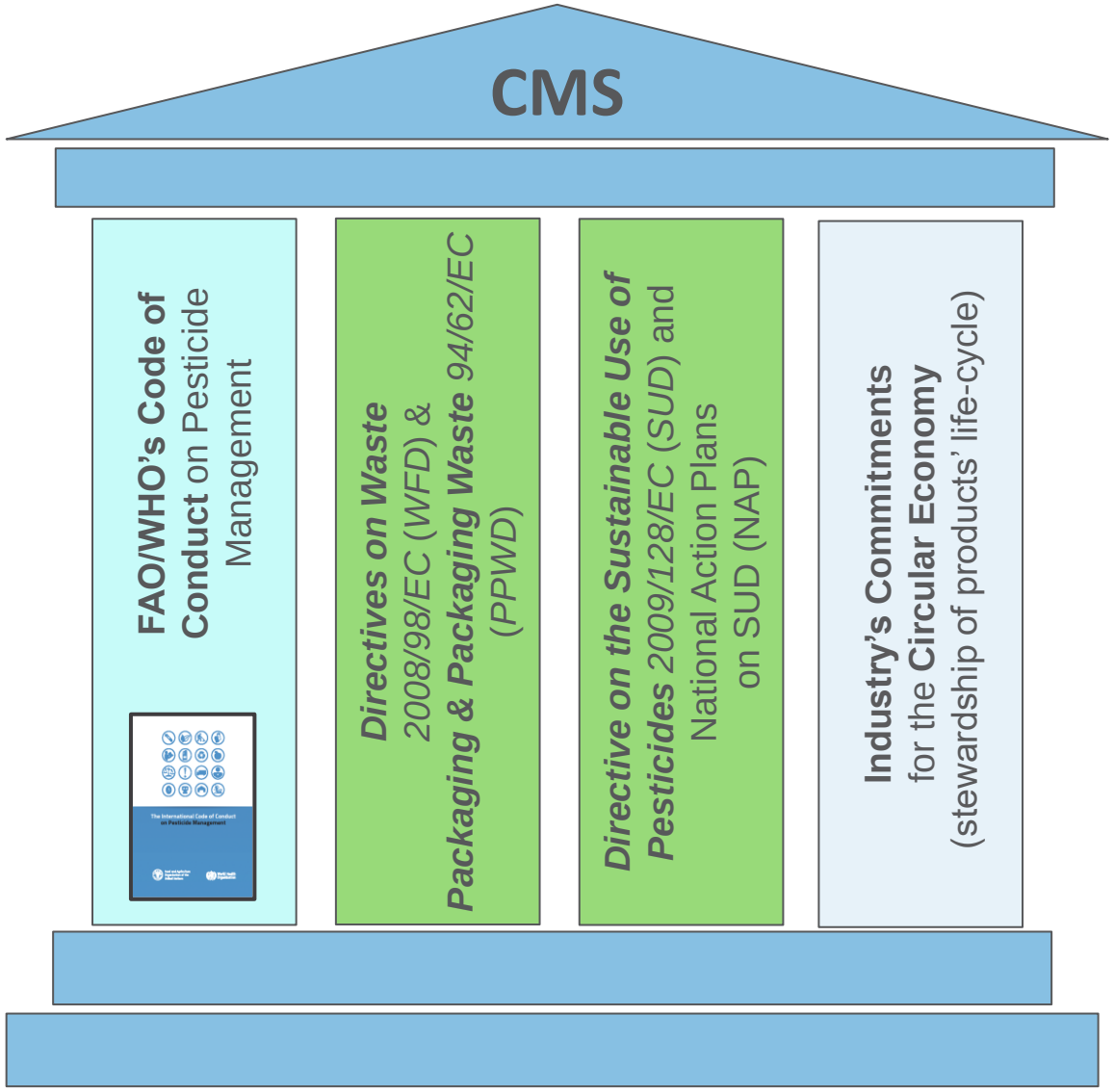

1. **Suitable packaging** and **labelling**
2. **Proper rinsing** and drainage of empty containers (= decontamination)
3. **Free of charge for users**
4. **Inspection** of all wastes entering the CMS system
5. Sort, collect and manage pesticide packaging **separately from other waste** via **dedicated systems**
6. **Efficient logistic** and strive to **minimize footprint on environment / maximize value of collected materials**
7. **Safe and controlled material recycling** or energy recovery; **No landfilling!**
8. Clear **role & responsibilities** for all stakeholders: based on **Extended Producer Responsibility** and **Shared Responsibility** of the whole value chain
9. **CMS's net costs covered by Producers & Importers** (based on their share of packaging shipped); Other involved stakeholders contribute with in-kind services
10. Work on **enabling regulations**



Multi Stakeholder Task & Shared Responsibility

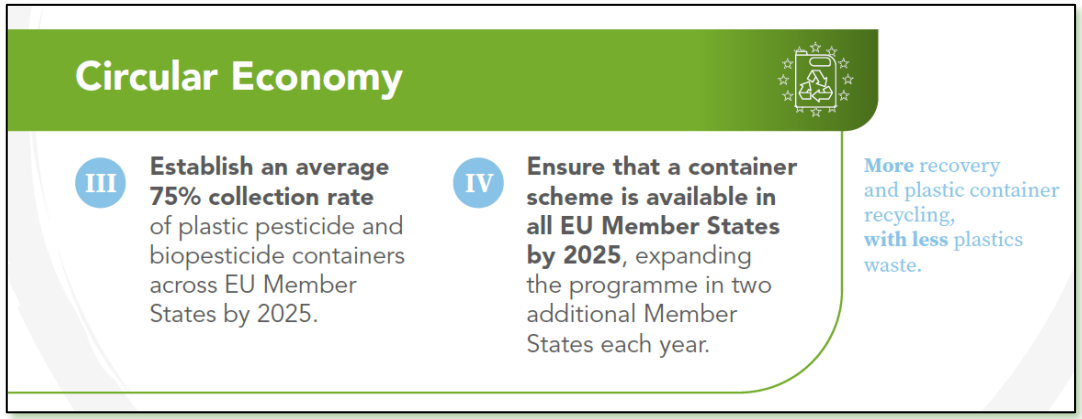
Industry initiatives for Container Management

The EU legal framework: opportunities & risks



2030 Commitments

For the Future of #Ag



With new CMS projects in:

Czech Republic; Estonia;

Denmark; Latvia; Finland;

Ireland; Malta & The Netherlands

Commitments for Circular Economy

Implementation monitoring

Circular Economy

IV **Ensure that a container scheme is available in all EU Member States by 2025**, expanding the programme in two additional Member States each year.

*EU MS with dedicated & monitored CMS programmes in **24 MS***
(+3 MS vs PY)

- **Mature programmes in 12 MS:** BE, BG, CY, DE, ES, FR, HR, HU, PL, PT, RO, SI
- **Pilot programmes in 5 MS** (+1 vs PY): FI, (GR), LT, **NL** (new!), SK
- **Independent dedicated programmes** with data in **3 MS:** AT, IE, SE
- **Independent dedicated programmes** without data, yet (only estimates available) in **4 MS** (+2 vs PY): IT, LU, **EE** (new!), **LV** (new!)

EU MS without CMS and/or performance monitoring in 3 MS

- **Project in design phase –** without reported dedicated collection or data: CZ, DK, MT

Status 2024

Nationwide industry run CMS (Mature) (EU) CLEAN farms

(BG) (CY) (FR) (DE) (BE) (ES) (HR) (HU) (PL) (PT) (RO) (SI)

Industry run pilot CMS (EU) CLEAN farms

(GR) (LT) (NL) (SK) (FI)

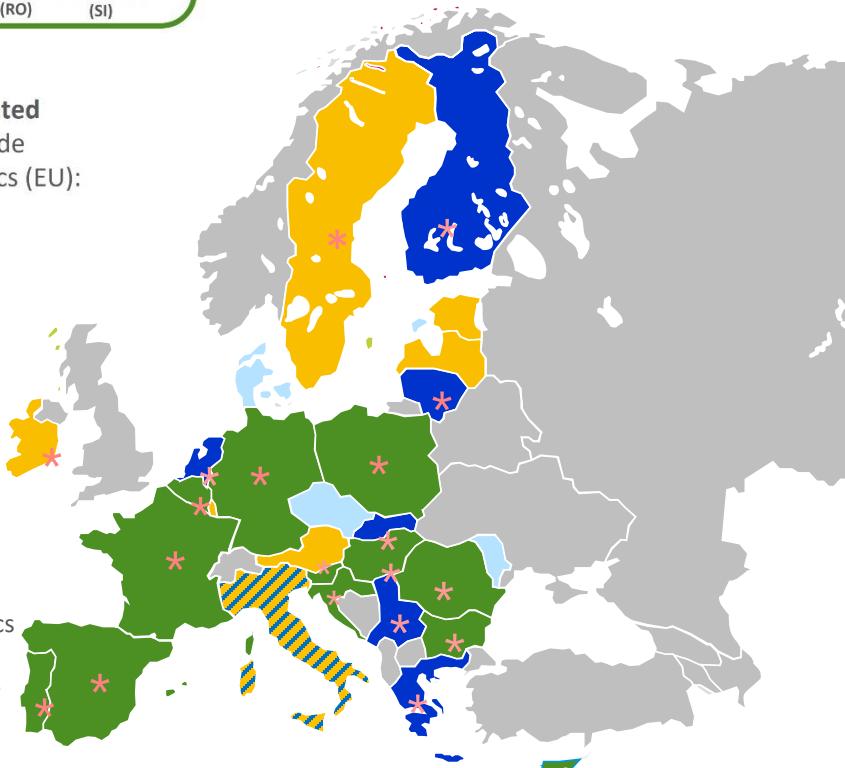
Countries with independent dedicated collection programme(s) for pesticide packaging and/or agricultural plastics (EU):

(IE) (AT) (IT) (LU) (SE)

Some of them without data, yet (e.g. EE, LV)

Projects in assessment / design phase

* Countries providing annual statistics to CropLife International on a regular basis. Other countries have occasionally provided partial collection data (e.g. IT, LU)



Commitments for Circular Economy

Implementation monitoring

Circular Economy

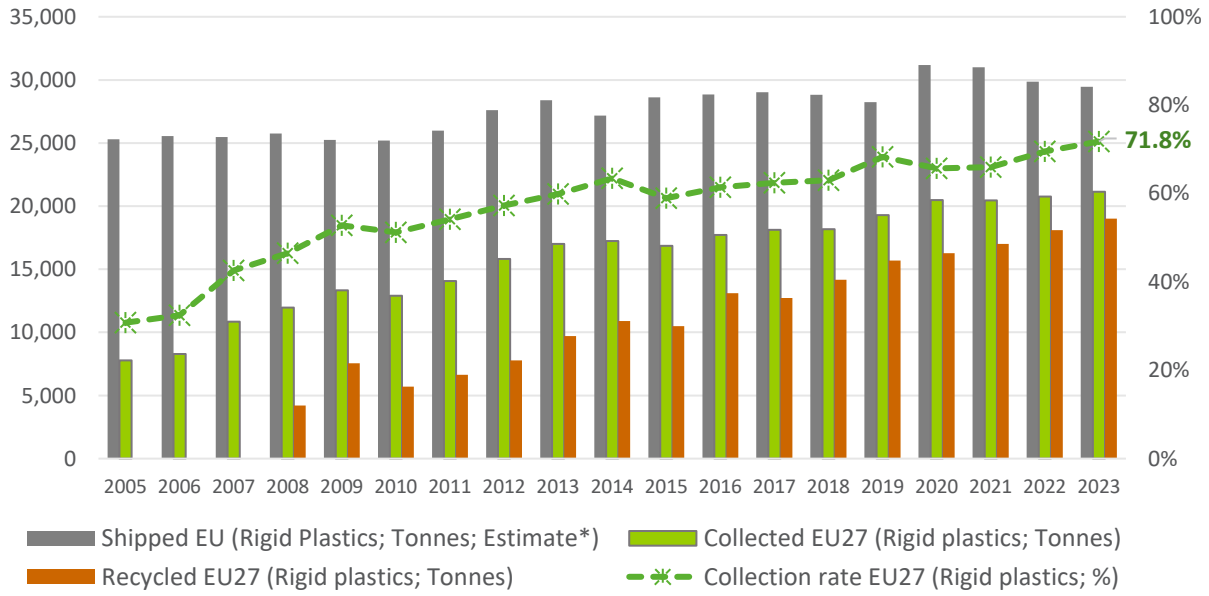
III **Establish an average 75% collection rate** of plastic pesticide and biopesticide containers across EU Member States by 2025.

More recovery and plastic container recycling, **with less** plastics waste.

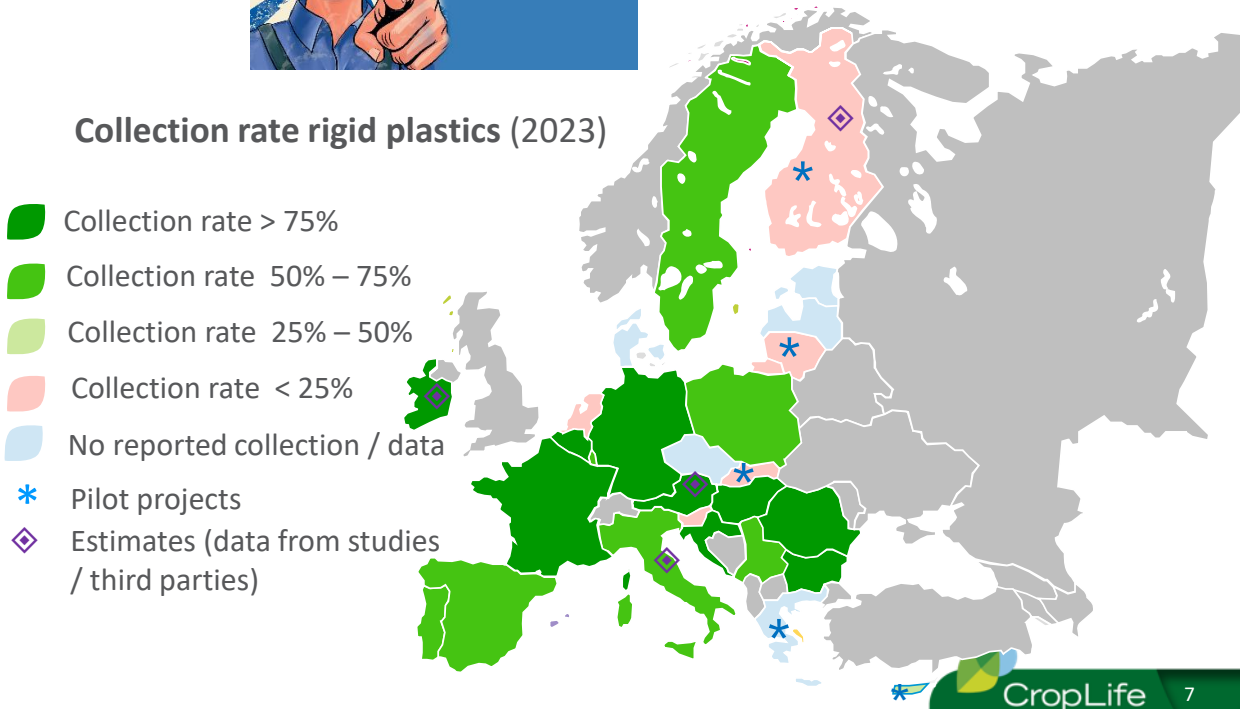
Status 2023

- **71.8% overall collection rate** for rigid plastics in EU27 (vs 69.5% in PY)
- **89.9%** of the collected rigid plastics were sent for **recycling**
- No packaging collected by the CMS programmes were sent for **landfilling**!

Overall EU27 (Rigid plastics)



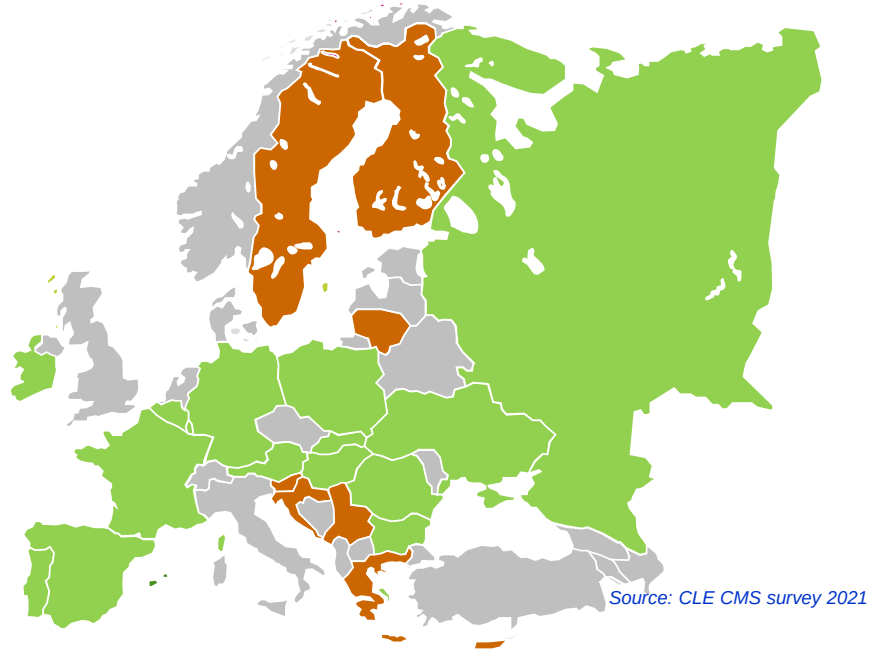
Collection rate rigid plastics (2023)



Commitments for Circular Economy

Safe and controlled recycling of materials from primary pesticide packaging

Country with **recycling programme** in place



- Recycling programme in place for rigid plastics (HDPE)
- Incineration with energy recovery
- No info available

Road fence & cones
(SCAPA; RO)

Internet protection tube
(SCPP; Bulgaria)

Cable conduits twin-layers
(ADIVALOR, France)

Industry's guideline for the safe recycling of plastics:

- **Only rinsed** & **controlled** pesticide packaging should be sent for recycling
- **Toll Manufacturers** (Reprocessors, Recyclers):
  - Contracted based on a full **assessment** and **approval process**
  - Clear **responsibilities** & **liabilities** established through **legally binding contract**
  - Prefer **few partners & long-term collaboration** to allow investment in **best available technologies**
  - **Performance** should be **measured** and **improved**
- Must <u>not</u> recycle containers into products destined for the **food, drink, toy, clothes, pet, veterinary, hobby garden sectors, pharmaceutical & furniture**
- **End-use application** should undergo a risk assessment. Prefer applications that are:
  - ✓ **Not in human contact** on a routine basis
  - ✓ Mainly **outdoor** and **industrial applications**
  - ✓ Ideally **underground/enclosed applications**
  - ✓ **A list of tested end-use applications** is available on the CropLife International website.
- The industry promotes **Bottle-to-bottle recycling** when it is based on a **risk assessment** and that guidelines developed by CropLife International are followed
- Country programs are accountable for the implementation of these safeguard measures are requested to **submit annual report** to CropLife International with recyclates' end-use applications, incident report, KPIs, etc.

Plastic being recycled into unknown or untested end use applications is considered an industry risk!

Industry initiatives for Container Management

New legal pressure from EU regulations

Increasing regulatory pressures on the industry:

- All packaging under **Extended Producer Responsibility (EPR)** by 2025
- Increasing obligations on **Circular Economy**, e.g. the new **EU Packaging & Packaging Waste Regulation** (PPWR):
  - All packaging **recyclable** (2030) & "**recycled at scale**" (2035)
  - Minimum **recycled content** (2030)
  - **Reuseable packaging & reuse targets** for transport packaging (e.g. wrap plastic films)
  - Definition and details will be provided in **delegated acts** to be developed by the Commission in coming years, with entry into force for 2029 – 2035!
- **Sustainable Use Regulation** (SUD/SUR) on the use of pesticide products, with collection systems for pesticide wastes
- **PFAS restrictions** under REACH regulation (Amendment of Annex XVII of EC 1907/2006)
- **New taxes** on plastics & packaging

Conclusion:

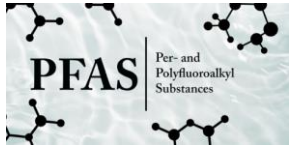
- Plastic packaging must be fully circular and within a dedicated (closed-loop) systems by 2030!
- Some exemption for specific packaging (e.g. Dangerous Good packaging).
- Important opportunities but also challenges that will affect all stakeholders, including regulators at Member States level.

Why does our industry need to innovate its packaging

Contribute to providing and implementing sustainable solutions to meet Europe's ambitious green targets

PPWR

Be prepared to meet future legal targets for making packaging more recyclable and including recycled plastic



Be prepared to meet future regulations, imposing restrictions on use of C-F chemistry

Support to the CropLife Europe commitment to establish container collection schemes in all EU member states at an average 75% collection rate

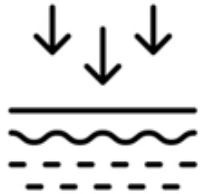
Need to implement new barrier technologies

Optimal

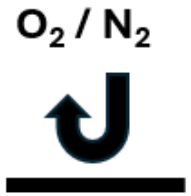
Suboptimal

Constrained

Concerned

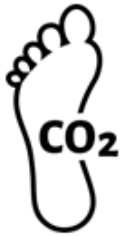


Solvent Barrier

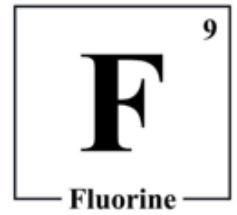


Gas Barrier

Recyclability



Carbon Footprint



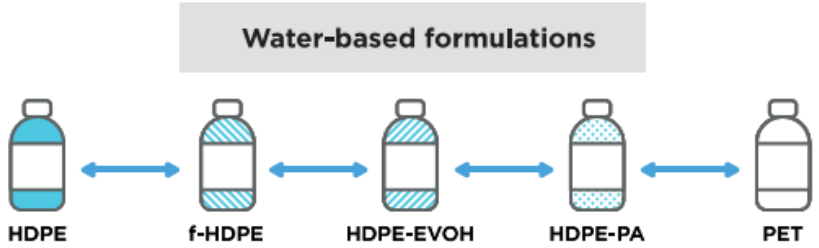
Non-F-Based Chemistry

Coex-PA					
Coex-EVOH					
Fluorination					
SiOx Plasma Coating					

CropLife International Technical Monograph N°17

According to international guidelines, the following extrapolations are acceptable:

- For water-based formulations (e.g. SC, FS, SL) extrapolation between plastic materials is possible and stability data generated for one of the materials can be used in support of any of the others.



- For organic solvent containing formulations (e.g. EC, SE, EW): extrapolating stability data of the product in HDPE to higher barrier HDPE-type materials (HDPE-PA, HDPE-EVOH, f-HDPE) is acceptable without generating further stability data when stability in HDPE was demonstrated. For different plastics like PET, it is recommended as a minimum to provide data on seepage.

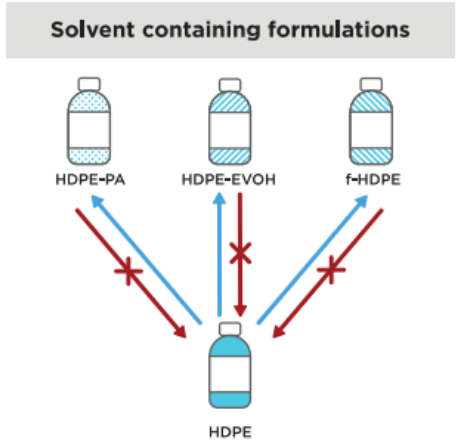


Figure 6: Examples for extrapolation from HDPE to higher barrier packaging materials used for solvent containing formulations

- Extrapolation between higher barrier HDPE-type materials (HDPE-PA, HDPE-EVOH, f-HDPE) for solvent containing formulations is acceptable when stability of the product in any of these materials was demonstrated and data show that no seepage and no significant weight change occur.

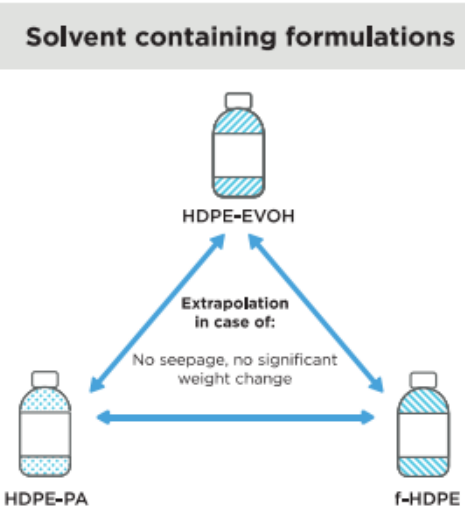


Figure 7: Examples for extrapolation between higher barrier HDPE-type materials for solvent containing formulations

CropLife International Technical Monograph N°17

Preferred approach

Based on an evaluation by packaging experts from the member companies in CropLife Europe:

- The CP industry needs the flexibility to timely respond to societal expectations and upcoming legislations related to sustainability of packaging and potential PFAS bans.
- A pragmatic revision of the commonly accepted extrapolation rules can enable a quicker introduction of new barrier technologies, while preserving the integrity of the registered product.
- A recommended approach would be to focus on the criteria to be met to demonstrate the equivalence **any new technology** with the registered packaging material.
- Relevant criteria:
  - Chemical compatibility
  - Tightness of the container and the closure
  - Absence of any seepage
  - Absence of strong panelling or ballooning
  - No significant weight change
- Data collection:
  - Based on worst-case reference liquids
  - Acceptance of accelerated studies, as mentioned in SANCO-document 10473/2003

Thank you!

Time for Questions

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