

Using data on harmful chemicals to improve circularity

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About Eurits

The European Union for the Responsible Incineration and Treatment of Special Waste (Eurits)

Established 1994 and represents over 90% of the EU's specialist hazardous waste incineration sector

Total HW incineration capacity of over 3 million tonnes HW pa

26 members in 12 EU countries + Switzerland

40 state of the art plants and 4500+ well trained employees



About Eurits

More than just incineration!

Historically the members are tied by operation of a HW incinerator

However all members have diversified over the last 30+ years:

- Service provision to industrial sectors
- Alternative treatment techniques to recover / recycle hazardous waste eg solvents
- Advanced treatment techniques to recover valuable fractions eg precious metals and / or to prevent hazardous substances contaminating uncontaminated wastes
- The incinerators recover energy (according to local needs) and materials (mostly metals)

Some (hazardous) waste is inevitable – our role is to make sure that it is treated correctly and either destroyed or irreversibly transformed to keep recycling loops clean.



Outline

- **Current information gaps**
- **Opportunities for the future from better information flows**
- **Examples of the consequences of good and bad information for waste operators**
- **How to keep secondary materials cycles clean and the benefits that will bring**

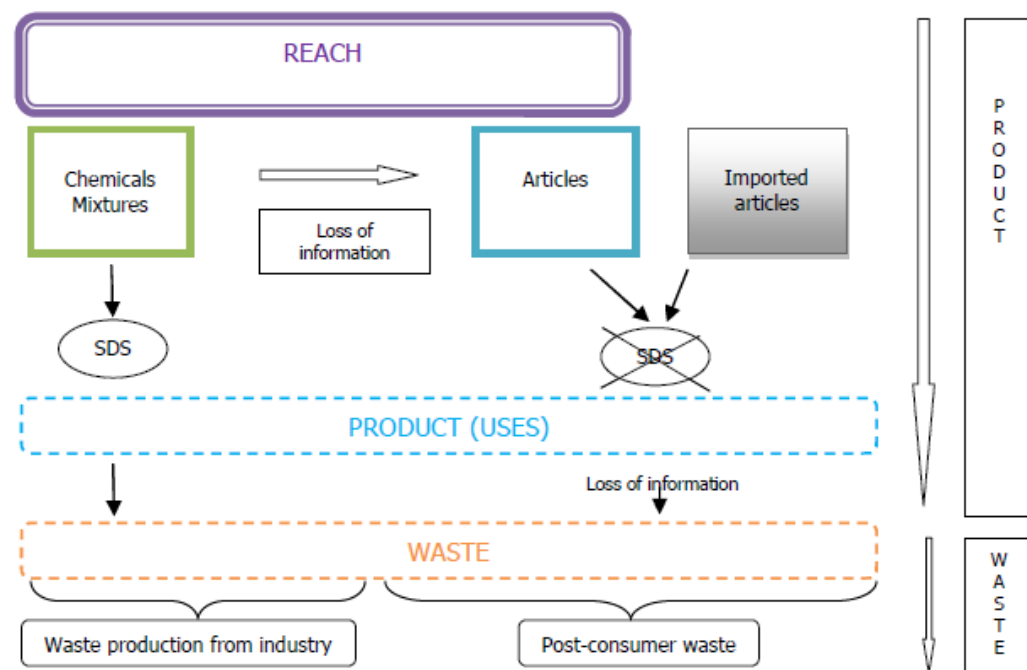
Information gaps

What information is needed?

More information!

- Details of articles?
- Aggregation of waste streams?
- As waste managers we're still learning
- ECHA's SCIP database will start to fill information gap
- Quality recycling depends on market (value and product requirements)

No one-size fits all solution for each waste or waste stream.



Information gaps

Why do we need more information? What is the added value?

Insufficient information about substances of concern in products and particularly waste

- **Useful to waste operators** in identifying which products and waste streams are likely to contain substances of concern
- **Reduces need for complex chemical analysis** at waste input
- **Need to improve traceability of SoCs in end-of-life products**
- Support objectives of enhancing protection of human health (worker consumer perspectives), protection of the environment and the use of **cleaner secondary raw materials that are suitable for re-entering production streams.**
- Support development of **sector/waste -specific approaches to better recycling**

Information gaps cont.

Insufficient information about substances of concern in products and particularly waste

- **Develop a definition of “substances of concern”**
 - Should be built on a risk-based approach for products
 - Should set concentration thresholds
- **Traceability is crucial:** can't be voluntary if it is to be effective. Imports should follow same rules

Allows better information for consumers and greater opportunities for waste management companies to keep recycling loops clean and to decontaminate recycling loops when necessary.

How should we define Substances of Concern (SoC)?

As comprehensively as possible!

REACH defines substances of very high concern (SVHCs) and is the focus of SCIP database.

Eurits believes that we could go further!

- Other substances have restrictions eg POPs in the Stockholm Convention; Hg in the Minamata Convention; heavy metals; CMR substances; etc
- Legacy substances:
 - perhaps one of the most difficult topics as new substances are defined as SoCs in some cases years after the substance is created (and incorporated into an article)
 - Some articles/products have very long life spans

Will this ultimately lead to requirements for full material disclosure in supply chains?

Opportunities for the future...

Not just Substances of Concern, but also Substances of Interest (Sol)

- Opportunities to identify critical raw materials
- Increase dismantling and recycling
- Would allow us to retain more valuable resources rather than requiring more virgin materials

Other benefits to recyclers

- More information allows new techniques to be developed
- Better targeting of substances
- Potentially reducing the amount of chemical analysis

We are just at the start of exploring the possibilities offered by the SCIP database!

Examples of the consequences of good information flows

Proper hazardous waste collection and treatment acts as a “gatekeeper” to the circular economy

- To build trust in the quality of the secondary raw materials
- Adopt a precautionary approach to avoid the reintroduction of legacy substances in recycling by properly identifying and removing substances of concern at an early stage
- To enable the safe recovery and recycling processes eg worker safety and to prevent SoCs reaching the wider environment
- Ensure that the circular economy remains clean and economically viable

Allows greater confidence in the quality of secondary raw materials and destroys or captures unwanted hazardous substances.

Examples of the consequences of bad information flows

We must keep the material recycling loops as clean as possible if we want to maintain trust and value in secondary raw materials.

We risk destroying trust in recycled materials if we allow lower standards for recycled materials.

- Primary and secondary raw materials should be **subject to the same rules**
- We already observe **problems with contaminants** from recycled materials affecting the material cycles eg bisphenol A (BPA) from receipts reducing the quality of recycled paper
- Eco-design and substitution will help, but **not every SoC can be substituted**

We need to level the playing field with high standards for recycled materials (input and output) and not reduce the standards for recycled materials.

How to keep materials cycles clean

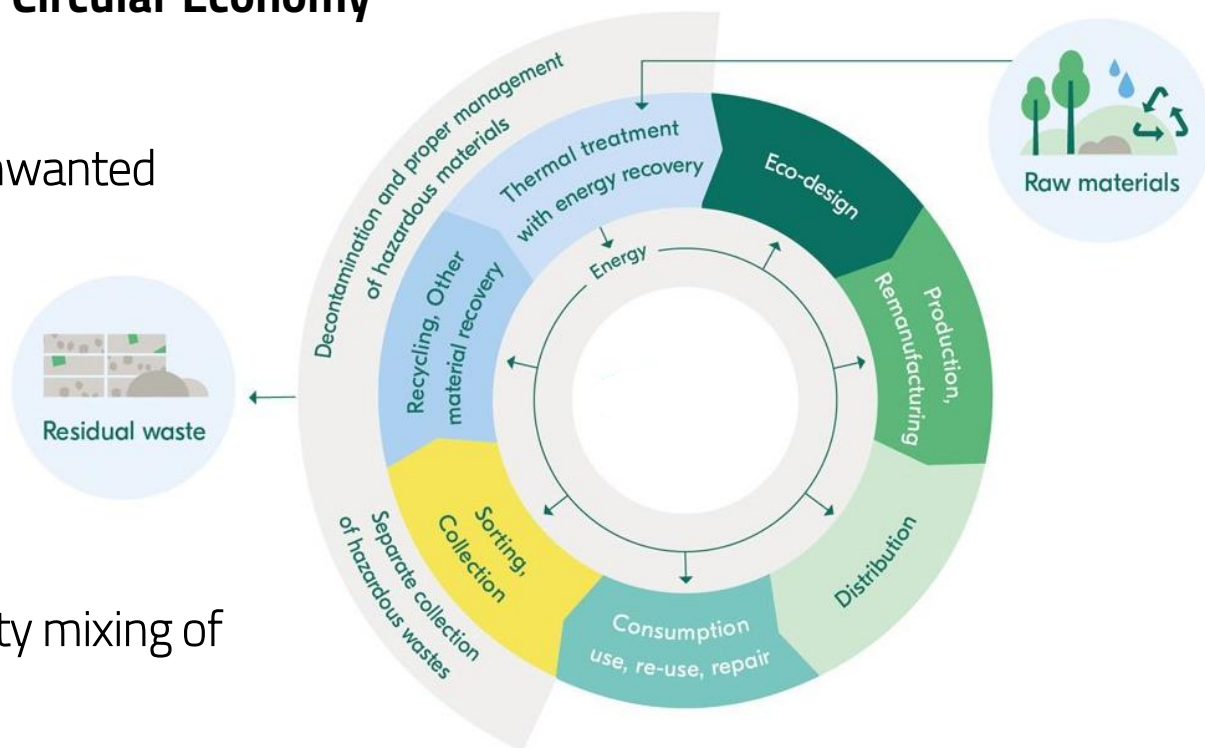
And why does it matter in the Circular Economy (CE)?

Decontamination to remove unwanted hazardous substances

Allows more and higher quality recycling

Clean recycling loops

Prevents dilution and low quality mixing of recycled materials



How to keep materials cycles clean

“The hazardous waste management sector has an important role to play in striking the right balance between recovery and final disposal of materials that become waste. This is because they have the right tools and technologies to remove substances of concern from waste and, if this is not possible, to destroy these materials, obtaining energy during the process”

(Former) European Commission Vice-President, Jyrki Katainen, 2018

Key messages

Better information will lead to more intelligent recycling

- Waste operators need more information, but those requirements will differ across different types of waste
- We all need harmonised rules for waste classification, end-of-waste **AND**
- Better enforcement – much of the existing legislation is good but is not enforced sufficiently
- Source separation is critical, dilution of substances will kill off recycling and clean material loops
- Develop and promote markets for secondary raw materials

More intelligent and informed recycling is an area of economic growth that we should take advantage of across the EU!

www.eurits.org

Thanks for your time!

admin@eurits.org