

Decision Tree Assessment tool for Problematic and Avoidable High-Leakage Plastic Applications

Is significant leakage* of application evident?

→
NO

The application is not problematic at this stage. It will be out of scope for the ILBI-PP but voluntary improvements for circularity may be advisable.

* Leakage values to be monitored on a national level

YES (in scope of ILBI-PP)

Improvement options along the waste hierarchy

1. Can circularity framework be improved in line with sustainability criteria?

Is it resource-efficient, reusable, and/or repairable?

YES
→

NO ↓

Is it recyclable & recycled?

YES
→

NO ↓

Are there available technologies to reuse and/or recycle the product?

YES
→

NO ↓

Is re-design for circularity possible?

YES
→

IF YES:
The plastics application is not problematic.

> However, action is required in the ILBI-PP to introduce enabling framework to drive plastics circularity, including technological improvements and educational campaigns for behavioural changes.



Assessment of the leakage to be carried out every 5 years.

NO

2. Can waste management be improved?

Can the local waste collection and sorting system be improved to avoid leakage?

YES
→

NO ↓

Is waste offtake option for certified recycling (domestic / internationally) in line with the Basel convention?

YES
→

NO ↓

Are there incineration with energy recovery options?

YES
→

NO ↓

Are there landfilling options?

YES
→

The application is not problematic.

> However, action is required in the ILBI-PP to introduce enabling framework to drive plastics circularity, including technological improvements and educational campaigns for behavioural changes.



IF YES:
The application needs circularity improvements to move up the waste hierarchy due to the linear treatment of waste.

> Introduce temporary (sector and country specific) exemptions for environmentally controlled landfill technologies.

Assessment of the application to be carried out every 5 years.

NO

3. Is the application essential and does it contribute to societal value?

Is it essential for human or animal health as well as food and transport safety?

YES
→

Does it have important societal value, i.e. enabling energy transition or climate goals?

Is it the best alternative from an LCA perspective?

NO
→

The application is problematic but non-avoidable.

> Recommendations on local waste management and their implementation to be improved.

The plastics application is considered avoidable and problematic and needs to be phased out.



Legend

- MEAs: Multilateral Environmental Agreements
- ILBI-PP: International Legally Binding Instrument on Plastic Pollution

- EOL: End of Life
- LCA: Life Cycle Assessment

Explainer: A Decision Tree for Problematic and Avoidable High-Leakage Plastic Applications

Addressing the urgent global crisis of plastic pollution

The United Nations Environmental Assembly resolution (UNEA 5/14) of March 2022 called for urgent action to end plastic pollution globally through an international legally binding instrument.

Plastics Europe supports governments' efforts and **proposes an assessment tool** that prioritises actions **to reduce plastic pollution from problematic high leakage applications**. These are plastic products and components that are highly likely to contribute to environmental pollution.



Overview of the tool: universal criteria – flexible implementation

This decision tree is **a criteria-based tool designed to identify and address problematic and avoidable plastics applications**, promoting a circular economy and a plastic-free environment. It emphasises a comprehensive approach that considers the entire life cycle of plastics and addresses critical aspects like product design, waste management, and exemptions.

As countries around the world face different realities and needs, this tool aims to set universal criteria **while allowing governments flexibility to assess and implement measures through national action plans**. It consists of a ranked flow of questions based on the waste hierarchy (i.e. prevention, resource efficiency, reuse, recycling, recovery, including energy recovery, landfill, and controlled disposal).

Three integral branches: circularity, waste management, and essentiality

The comprehensive tool guides users through specific scenarios requiring actions or assessments of national and local conditions, which can lead to product redesign or exploring alternative options.

The first part focuses on the principles of plastics circularity and promotes global 'design for circularity' standards to reduce or eliminate application leakage. It also calls for a reassessment of leakage after a 5-year transition period.

The second evaluates waste management against circularity goals. It considers the **availability of local waste facilities** and the **possibility of improving the end-of-life treatment** of plastic products and components, emphasising the transition to a circular economy.

Lastly, **the third part considers whether the plastics application is essential and has socio-economic value** in a national or local context and whether environmentally sound alternatives are available (from a life cycle assessment perspective).

A swift pathway to ending pollution

This decision tree's application-based approach **can apply to all products, fostering enabling policies globally and nationally**. It aims to achieve circularity within a timeframe or replace problematic (plastic) products with sustainable alternatives. **By focusing efforts on products with the highest likelihood of leakage**, it paves a swift and efficient pathway to ending plastic pollution.

