

# Threats and opportunities of biodegradable plastics

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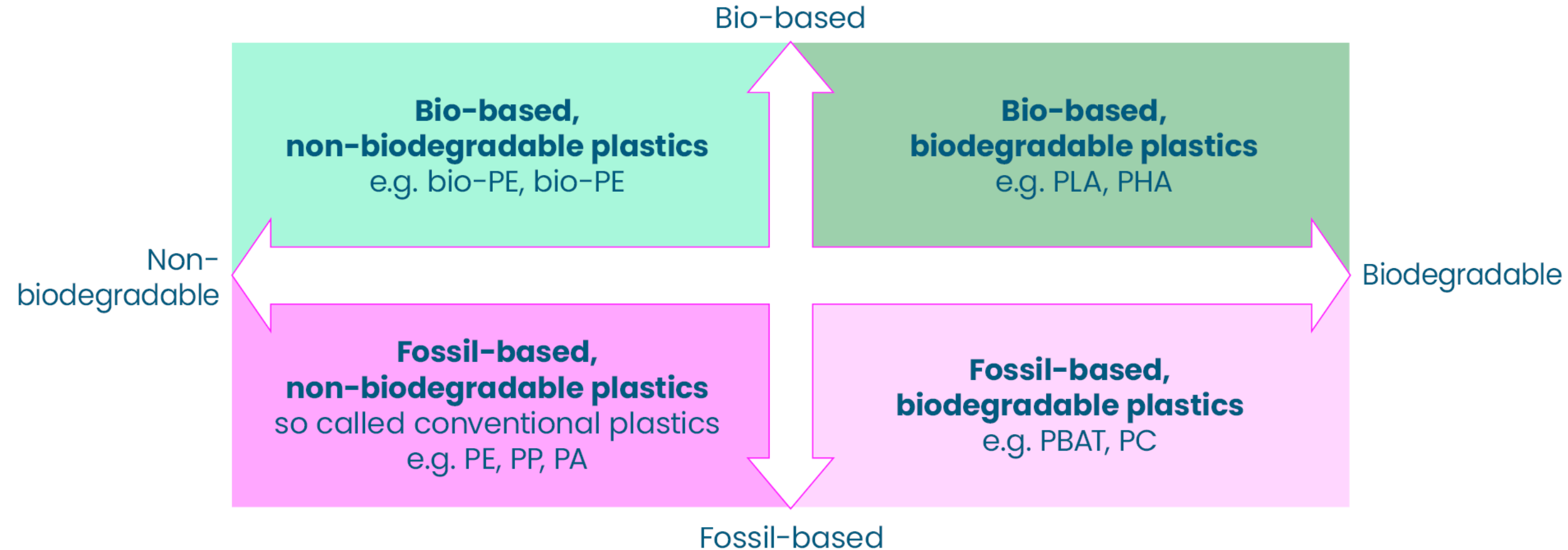


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# Biodegradable plastics are made of fossil-based or renewable, i.e. bio-based, materials



PE= polyethylene, PET = Polyethylene terephthalate, PLA= Polylactic acid, PHA = Polyhydroxyalkanoates, PP= Polypropylene, PA= Polyamide, PBAT= polybutylene adipate terephthalate and PCL= Polycaprolactone.

# PlastLIFE recommendations 1/3



1. In Finnish conditions, plastic recycling may be a better option than biodegradability. **Biodegradable plastics should only be used in applications where biodegradability is beneficial and when the material cannot be recycled.**



2. When biodegradable plastics are used, they **must be able to degrade efficiently and completely at the end of their lifecycle.** Otherwise, they must be recyclable along with other plastic waste.



3. **Biodegradable plastics must degrade in the environment where they end up**



# PlastLIFE recommendations 2/3



**4. Standards for material biodegradability should be updated, and a mandatory EU-level certification system should be established.** This would ensure that products meet strict biodegradability requirements and that both products and their packaging are clearly labeled.



**5. The certificates and biodegradability standards must be verified under Finland's cold conditions.** Taking northern conditions into account in standards also opens opportunities for Finnish research and innovation



# PlastLIFE recommendations 3/3



- 6. Transparency regarding the composition and additives of biodegradable plastics must be increased in the production of plastics.** Biodegradability should be taken into account in the development of life cycle assessments for packaging and products.



- 7. Regulations promoting chemical safety must better address the chemicals contained in biodegradable plastics, to prevent the release of harmful and persistent substances into the environment when the plastics degrade.**

# Related EU regulations

- EU Packaging and Packaging Waste Regulation EU 2019/1020 (national implementation 2025-2027)
- EU Single-Use Plastics Directive 2019/904
- EU Fertilisers Regulation EU1069/2009 (assessment of the need to update the limit values for plastic impurities by 07/2029)
- Common Agricultural Policy (CAP) (Preparation for the period 2028-2034 in 2025-2027, e.g. termination of national support for tarpaulins)
- EU Circular Economy Regulation (drafting 2025- 2027)
- EU Bioeconomy Strategy (update 2025-2026)
- Bio-based, biodegradable and compostable plastics policy developments COM/2022/682 final
- EU Circular Economy Action Plan COM/2020/98 final
- EU Plastics Strategy COM/2018/028 final
- EN13432 standard (update 2026-2028)

# Thank You!

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Recommendations of the PlastLIFE-project

**Threats and opportunities of biodegradable plastics:**

<http://hdl.handle.net/10138/600621>



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