

# Policy framework on biobased, biodegradable and compostable plastics



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A climate-neutral, resource-efficient and competitive economy



Maintaining the value of products, materials and resources in the economy for as long as possible, & minimising the generation of waste



Improving the economics and quality of recycling & curbing plastic waste & littering



### A clarifying policy framework (adopted in 2022)

- Plastics perceived as 'good' or 'better' for the environment
- Today a niche market, tomorrow?
- 1. No to generic claims, e.g. bioplastics
- 2. Priority to reduce, reuse and recycle
- 3. No to perpetuating single use models
- 4. Yes to genuinely sustainable alternatives





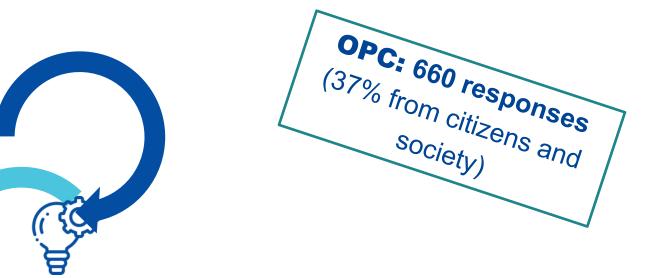
#### **Evidence**

## Biobased plastics (EC study - to come)

- How much biomass content?
- Is sourcing sustainable?
- JRC Plastic LCA Method

# Biodegradable plastics (EC Chief Scientific Advisors - published)

- No licence to litter
- For which applications does it make sense?
- The case of agri-plastics (EC study)



# Compostable plastics (EC study - published)

- Contamination of waste streams is an issue
- For which applications does it make sense?



#### Biobased plastics

- They can help us:
  - reduce our dependency on fossil resources; meet our climate
    neutrality targets; create jobs
- Challenges:
  - The biomass content must be specified
  - Priority to **secondary** vs primary **biomass**
  - Sustainability criteria to comply with:
  - RED III for land use and biodiversity
  - For GHG more research is needed





#### Biobased plastics & Taxonomy

- Climate Delegated Act (2021)
  - Substantial contribution to climate change mitigation
  - Focus on plastic in its primary form
  - As an option if biomass is compliant with bioenergy sustainability criteria and if life-cycle GHG emissions are lower than fossil-based equivalent
- Environmental Delegated Act (2023)
  - Substantial contribution to transition to a CE
  - Focus on plastic packaging
  - As an option if biowaste feedstock is used



#### Biodegradable plastics

- They can help us:
  - reduce plastic accumulation in the environment (eg soil, water)
- Challenges:
  - Timeframe & environment must be specified
  - Only for specific applications (eg mulch films)
  - No licence to litter
  - No to claims on biodegradation for litter-prone products





### Compostable plastics

- They can help us:
  - reduce plastic accumulation in the environment & increase capture of biowaste (as of 31.12.2023, biowaste must be collected separately)
- Challenges:
  - Only industrially compostable plastics (infrastructure in place)
  - Route must be specified (pictograms)
  - Only for specific applications (eg biowaste bags)







#### Research still needed

- Life-cycle GHG emissions of biobased plastics
- Look at biogenic carbon (under discussion) and then, at possible sustainability criteria
- Look at biomass: demand is increasing!



#### International aspects

- Global value chains
- Global plastic treaty (e.g. sustainable alternative plastics)
- Standards







share | Nove Sharing



return & collect



sort



recycle

reuse



Learn more about the plastics and the circular economy:

Circular economy action plan (europa.eu) & Plastics (europa.eu)



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