

# Policy framework on biobased, biodegradable and compostable plastics



26 January 2023 Werner Bosmans Team leader 'Plastics' DG Environment



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



## Why a policy framework on these plastics?

- Perceived as 'good' or 'better' for the environment
- Today a niche market, tomorrow?
- To guide policy & market towards
  environmental benefits





Conventional plastics: fossil-based & non-biodegradable

Biobased & non-biodegradable

Biodegradable & fossil-based

Biodegradable & biobased

Biobased



# A clarifying policy framework

- Priority to reduce, reuse and recycle
- No perpetuating single use models
- No <u>generic</u> claims, e.g. bioplastics
  Proposal for directive on 'empowering consumers for the green transition'
- Yes to genuinely sustainable alternatives & transparency





#### **Biobased plastics**

- Biomass content to be specified;
  C<sup>14</sup> method (mass balance accounting)
- Priority to secondary vs primary biomass
   cascading use of biomass
   long-lived vs short-lived products
- Sustainability criteria to comply with:
  - RED III land use and biodiversity
  - GHG research needed





#### **Biodegradable plastics**

- Biodegradation = system property
- To specify timeframe not to harm environment
  receiving environment risk of transfer to other media
- To limit to specific applications where full removal not possible
  - Mulch films are a good example;
    Standard to be revised, e.g. to cover other applications
  - No claims on biodegradation for litter-prone products





#### Compostable plastics

- Only industrially compostable plastics that are collected
  - Route to be specified (pictograms)
- Only for specific applications
  - Compostable bags to collect biowaste
  - Few packaging applications
  - (Other packaging => material recycling)
  - Standard to be revised, e.g. to include additives
- ❖ Home composting ≈ open environment







#### **R&I** funding

- GHG emissions of biobased vs fossilbased plastics
- Biodegradable & recyclable
- Biodegradation processes:
  - transfer to other media, long term effects, timeframe
  - o claims & littering?



### International aspects

- Global value chains
- To pursue the objectives of this communication
- Standards







share



reuse



return & collect



sort



recycle



Learn more about the plastics and the circular economy:

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



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