

# Policy framework on biobased, biodegradable and compostable plastics



*23 January 2024*

*Paola Migliorini, dHoU, DG Environment, European Commission*



## The European Green Deal

**A climate-neutral,  
resource-efficient  
and competitive  
economy**



## Circular Economy Action Plan

For a cleaner and  
more competitive  
Europe

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



## A EUROPEAN STRATEGY FOR PLASTICS IN A CIRCULAR ECONOMY

*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)



**OPC: 660 responses**  
(37% from citizens and society)

## 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)**
- Home composting  $\approx$  open environment





## 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



