Biorefineries as impulse for Europe’s regions

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CoR Multi-Level Dialogue on Just Transition

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Growing importance of **bio-based industries** in the Bioeconomy

**Development of valued added in the bioeconomy (EU27, 2008-2017)**

- **Bio-based chemicals, pharmaceuticals, plastics and rubber**
- **Paper**
- **Wood products and furniture**
- **Bio-based textile**
- **Food, beverage and tobacco**

**BB industries in EU***
- 7.55 million workers
- €393 billion of value added (in 2017)
- 5.3% growth from 2016 to 2017

*Construction and waste treatment are not accounted for

Biorefineries as one solution towards a climate-neutral economy


Sustainable biorefineries

• Using biomass and in particular food waste and residues
• Replacing fossil-fuels
• Creating growth and jobs up- and downstream in rural areas
• Resulting products with smaller environmental footprints
• Important element in various Green Deal initiatives
Distribution of biorefineries in EU

Chemical and material biorefineries

- Includes the production of innovative high value bio-based products.
- *High-value added chemicals and materials* such as cosmetics, pharmaceuticals, food additives.
- *High volume chemicals and materials* such as general bio-based polymers or chemical feedstocks (i.e. building blocks).
- EU has a good basis to strengthen and scale-up the bio-based sector.
- Clustering of biorefineries in few countries/regions.
- Important potential in many regions to use biomass/waste.

Biorefineries – a regional call

Specialization in feedstock and products:
- Feedstock availability (e.g. agriculture or forestry)
- Transport costs
- Industrial clusters
- Labor market pooling
- Intellectual spillovers
The European Commission’s Knowledge Centre for Bioeconomy

Thank you

Any questions?
You can find us at

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https://knowledge4policy.ec.europa.eu/bioeconomy

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Agricultural residue production in the EU

Distribution across EU of residue production for the reference period 2015-2019 in the main crop groups

Residue Production
Kt/year per 25 km grid cell
2015-2019