



European
Commission



Circular Economy and Agriculture

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Agriculture
and Rural
Development

Circular Economy



The EU Circular Economy package

- **Biomass and bio based products:**
 - to use of biomass to decarbonise our economy and for more resilient energy
- **Waste management- EU targets:**
 - for recycling municipal waste of 65% by 2030
 - for recycling packaging waste and wood packaging of 75% by 2030
 - for recycling paper board and cardboard of 75% by 2025
 - binding landfill reduction of 10% by 2030
- **Revised Fertilisers Regulation:**
 - to incentivise large scale fertiliser production and use across the EU and nutrient recycling
- **Water reuse:**
 - to reuse treated waste water for irrigation in safe and effective conditions
- **Food waste:** to prevent food waste in the EU

Biomass

- Forestry and agriculture: key sectors in the transition towards a low-carbon and climate friendly economy
- Use of biomass as sustainable and renewable material to decarbonise our economy and for more resilient energy

Revised Fertilisers Regulation

- To incentivise large scale organic fertiliser production and trading in the EU from domestic organic or secondary raw materials
- Estimate to substitute 25% of mineral fertilisers with organic fertilisers by 2025
- Good level of protection for the final user, human health and environment: safety and labelling content

Water reuse

- Challenges of water scarcity and climate change
- Use of alternative water resources for irrigation: ensuring adequate water quality standards is crucial
- Reuse of treated waste water in safe and cost-effective conditions for producers and consumers is under-used.
- Contribute also to nutrients recycling

Food waste prevention

- EU Platform on Food waste and food losses involving all actors along the food supply chain
- Common methodology and indicators on food waste
- Facilitate food donations, reuse as feedstuff, date marking

Roles of agriculture and forestry for the circular economy

1) To supply fully recyclable raw materials

2) To contribute to recycle part of organic materials produced by our economy:

- Optimise natural resource yields by circulating products, components and materials

3) To prevent and recycle waste:

- Foster effectiveness by revealing and designing out wastes and detrimental practices
- Reuse of organic materials from other sectors (e.g. waste water and nutrients recovery)

Some concrete examples

- Biomass substitution of energy intensive materials to enhance a more resilient energy union
 - construction materials, wood, furniture, paper, fibres and textiles, enzymes, bio-chemicals, bioplastics, biofuels
- New concept of industry biorefinery
 - Using wood for production of pulp fibres for graphic papers

Roles of the CAP in encouraging CE

- **Rural Development Policy (2014-2020)**

- The total allocation to the Priorities 4 and 5 accounts for 51.7% (i.e. about 51.1 Billion EUR) of the total Rural Development budget
- For Priority 5 about 2.7 billion EUR will be invested in renewable energy production and a further 2.8 billion EUR in energy efficiency
- Investments
- European Innovation Partnership

Research and innovation

- A key success factor for the Circular Economy
- Significant R&I efforts already made with FP5-FP7, NER300, LIFE...
- Agricultural R&I now stronger:
 - **€ 1.9 B** in FP7 (KBBE theme) → **€ 3.85 B** in H2020 (SC2)
 - EIP-AGRI to boost innovation through EAFRD → focus groups on water, NRR, agroforestry, forest biomass, mixed farming...
 - BBI JU: € 3.7 B earmarked for the bio-economy
 - Multi-actor approach

Research and innovation

- Bioeconomy still faces many technological challenges: biomass supply, logistic costs, sustainability/ circularity...
- Bio-based fertilisers: challenges related to safety, fertilising properties and competitiveness.
- Wastewater: main challenge is ensuring safety for humans and ecosystems at a competitive cost

RISE Foundation reports

- Welcome to reference initiatives to accelerate from linear to circular economy in particular to enhance the roles of agriculture and forestry in this process
- The RISE reports identify many of these interesting research areas and will thus be a useful input for future R&I programmes.