



# Bioeconomy Communication 2018

### What is the EU's understanding of the Bioeconomy.....

All sectors & systems that use / produce / process / are driven by biological resource



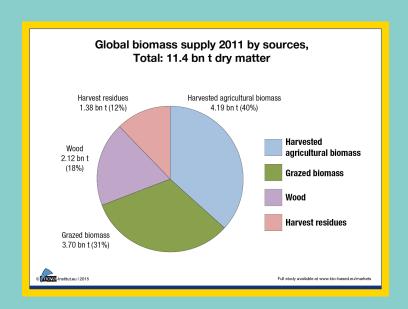
- Ecosystems on land and sea
- Primary production systems agriculture, forestry,
   aquaculture / fisheries incl. waste/side streams
- Food, feed, fibres, bio-based industry, fuels and bio-energy

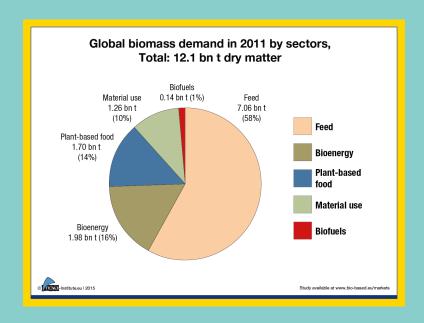








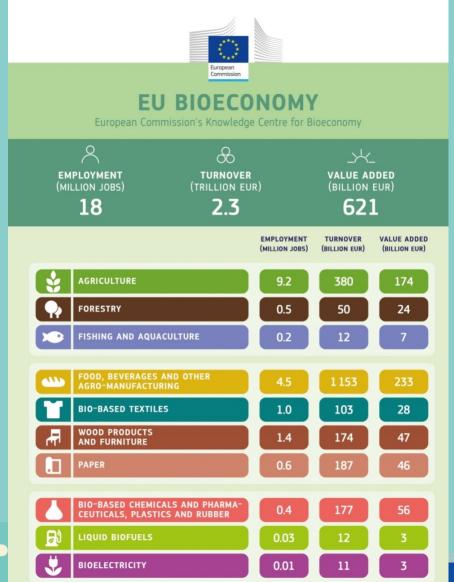








# The European Bioeconomy in numbers







**DATA 2015** 

Source: based on Ronzon & M'Barek, 2018 https://doi.org/10.3390/su10061745



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## CONTEXT

- Communication on Bioeconomy 2012
  - Food security,
- sustainable management of natural resources,
- climate change mitigation,
- reduced fossil-dependence,
- jobs creation and EU competitveness
- Review of Bioeconomy Strategy 2017
- Communication on updated Bioeconomy 2018
- Major initiative under the Commission's 2018 workplan
- Coordination by the Secretariat General and DG Research and Innovation together with the departments for agriculture, environment, marine, industry, energy and others (DGs AGRI, ENV, MARE, GROW, JRC, ENER...)
- Adopted on 11/10/2018









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Scarf prototype, courtesy of METSÄ

Cardoon and products, courtesy of NOVAMONT

**European Commission - Press release** 

A new bioeconomy strategy for a sustainable Europe

Brussels, 11 October 2018

Today the Commission has put forward an action plan to develop a sustainable and circular bioeconomy that serves Europe's society, environment and economy.





# 2017 Bioeconomy Strategy Review – main findings **DELIVERY**

■ BE R&I investment doubled from FP7 to Horizon 2020

Bio-based-industries partnership developing transformative technologies for

circular BE

- Bioeconomy policies taken up in MS, regions, cities
- Bioeconomy Manifesto established
- ... BUT
- Further mobilisation of investment needed
- Better address policy coherence
- Current policy context (CE, SDGs, Paris,..) calls for a sustainable, circular bioeconomy
- Better monitoring and assessment frameworks needed (indicators; biomass supply & demand; ...)





# The updated Bioeconomy Strategy



#### WHAT does the new Bioeconomy strategy aim to achieve....

- Link the sustainable use of renewable biological resources for food, feed, bio-based products and bioenergy, with the protection and restoration of biodiversity, ecosystems and natural capital across land and water.
- Step up action to ensure that the Bioeconomy provides a long-term balance of social, environmental and economic gains.

#### .... and HOW

- A SYSTEM-wide approach,
- expanding beyond research and innovation,
- delivering on policies across sectors, addressing trade-offs
- strengthening CIRCULARITY and SUSTAINABILITY
- delivering for the citizens on jobs, sustainable growth, well being and on planetary health
- in LOCAL contexts, valorising local resources and adapted to local needs





#### DRIVING EU POLICY PRIORITIES

- Job creation e.g. Bio-based industries could create up to 1 million jobs by 2030 (industry estimate), in particular in rural and coastal areas
- Climate mitigation through use of bio-energy/ bio-based materials/ecosystems services; e.g. the use of 1 ton of wood instead of 1 ton of concrete in construction can lead to 2.1 ton CO<sub>2</sub> reduction
- A renewed and strengthened EU industrial base –
  Global leadership position in bio-chemicals and
  substitutes for fossil raw materials (plastics, packaging,
  cosmetics, consumer goods) based on research and
  innovation
- Circular economy e.g. cutting food waste, recycling of high value organic waste
- Healthy ecosystems and biodiversity e.g. through restoring degraded soils









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#### Actions



# STRENGTHEN AND SCALE-UP THE BIO-BASED SECTORS, UNLOCK INVESTMENTS AND MARKETS



Mobilise stakeholders in development and deployment of sustainable bio-based solutions



Launch the EUR 100 million Circular Bioeconomy Thematic Investment Platform



Analyse enablers and bottlenecks for the deployment of bio-based innovations



Promote and develop standards, labels and market uptake of bio-based products



Facilitate the development of new sustainable biorefineries



**Develop new biodegradable products,** including bio-based plastic substitutes







#### Actions



#### **DEPLOY LOCAL BIOECONOMIES RAPIDLY ACROSS EUROPE**



**Launch a Strategic Deployment Agenda** for sustainable food and farming systems, forestry and bio-based products



Launch pilot actions for the development of bioeconomies in rural, coastal and urban areas



**Support regions and Member States** to develop Bioeconomy Strategies



**Promote education, training and skills** across the bioeconomy







#### Actions



#### **UNDERSTAND THE ECOLOGICAL BOUNDARIES OF THE BIOECONOMY**



**Enhance knowledge** on biodiversity and ecosystems



**Monitor progress** towards a sustainable bioeconomy



**Promote good practices** to operate the bioeconomy within safe ecological limits



Enhance the benefits of biodiversity in primary production







## **EU Bioeconomy Conference 2018**



Sustainable & Circular Bioeconomy, the European way.

22 October 2018 Charlemagne building

**Registration:** 

https://ec.europa.eu/research/ bioeconomy/index.cfm?pg=home







# Which one of these is still a dream?

1) A 24 story 'plyscraper'?



**Copyright: Rüdiger Lainer** 



2) A tomato farm in the desert?

**Source: Sundrop Farms** 



fish in one farm?

3) Energy, crops and

**Source: Smart Floating Farms** 







# Thank you!



For more information, please visit our website: https://ec.europa.eu/research/bioeconomy/index.cfm