A Bioeconomy for Europe

Using resources from land and sea for a post-petroleum economy

Davide Amato
Policy Officer - Work Programme Coordinator
Bioeconomy Strategy Unit – DG RTD
Agenda

The EU Bioeconomy strategy and Action Plan

Synergies between funds

Suggestions for the future
"The Bioeconomy encompasses those parts of the economy that use **renewable biological resources** from land and sea to produce food, bio-materials, bio-energy and bio-products."

*EU bioeconomy strategy, 2012*
The Bioeconomy and Societal Challenges

- Ensuring food security
- Managing natural resources sustainably
- Reducing dependence on non-renewable resources
- Mitigating and adapting to climate change
- Creating jobs and maintaining European competitiveness
Production of biomass

- Agriculture
- Forestry
- Fishing
- Aquaculture
- Industry

Biomass as a residual stream

Use of biomass

Biobased economy

- Food (food/feed)
- Processing of bio-based materials and products

Conversion into biobased energy

Other biobased (industrial and environmental technology) processes

Source: Vlamse Overheid (2013:9), based on Minaraad and SALV recommendation ‘Sustainable use of biomass in a bioeconomy’ (2012)
Source: Horizon2020 project AGROCYCLE: www.agrocycle.eu
EU Bioeconomy Strategy & Action Plan

**Investment in R&I**
- **Horizon 2020 (€3,8b SC2)**
- Increase multi-disciplinary & cross-sectoral R&I
- ESIF - Smart Specialisation
- EFSI

**Policy interaction & stakeholder engagement**
- EU Policy coherence
- Development of regional and national bioeconomy strategies
- Bioeconomy Panel
- Bioeconomy Observatory
- International cooperation

**Enhancement of markets & competitiveness in bioeconomy**
- Sustainable intensification of primary production
- Expansion of new markets
- Increase EU competitiveness
- BBI JU
Global production increases for maize, wheat and rice from closing yield gaps to 50%, 75%, 90% and 100% of attainable yields.

Primary production must be modernized to capture opportunities while preserving competitive advantages: R&I needed!

Regional Innovation Scoreboard 2017

Significant disparities both between and within Member States...

➢ No "One-size-fits-all" approach possible

... however, under the bioeconomy strategic framework there are common competitive advantages for Bioeast Countries: opportunity for synergies and transnational cooperation!
The Communication 'Strengthening Innovation in Europe's Regions' identifies four challenges for boosting innovation-led growth:

- Reforms of R&I Systems
- Innovation investments across regions
- Less-developed and industrial transition regions
- Synergies and complementarities between EU policies and instruments

S3 as a response, the Bioeconomy one of the frameworks
Bioeconomy development in EU regions: recommendations

A) More and better bioeconomy strategic planning and governance at national and regional level
B) Support to value chain/cycle development and engaging SMEs
C) Develop R&I on technologies, knowledge transfer and new bioeconomy skills
D) Coordinate funding and synergies between instruments (H2020 - ESIF)
E) Raise public awareness and acceptance

Key Messages

The macro-region’s homogeneity and complexity could provide the framework conditions favourable to development of a sustainable circular bioeconomy.

The traditional primary production and processing sectors must be modernized through a robust research and innovation initiative in bioeconomy.

ESIF and the Societal Challenge 2 Work Programmes for 2014-2020 respond to some of the key challenges our planet is facing for the years to come and represents an opportunity for investments in those areas.
Thank you for your attention!

Find out more: www.ec.europa/research/horizon2020