



A Bioeconomy for Europe

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

Implementing the New Bioeconomy Strategy in Europe: Prospects for Baltic

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Building bioeconomy in Europe
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Bioeconomy Strategy And Action Plan



In the framework of **Europe 2020**, the Strategy "**Innovating for Sustainable Growth: a Bioeconomy For Europe**" promotes sustainable production of renewable resources from land and sea and their conversion into food, bio-based products, biofuels and bioenergy.



Bioeconomy: What to do?



INVESTMENTS IN RESEARCH, INNOVATION AND SKILLS

- **Making a better use of funding opportunities, in particular with Horizon 2020**
€4,7 Billions proposed in Horizon 2020 (approx. 150% increase compared with FP7).
Some regions underperforming despite great bioeconomy potential → further support needed for researchers, industries, SMEs to integrate into networks.
- **Developing bio-clusters to support innovation**
Bio-Clusters (e.g., Association Industries et Agro-Resources in Champagne region; Zuid-Holland – Flanders biocluster) are at the crossroads between research and industry: they are key to innovate. Interaction and coordination between industry, universities/schools, local governments is needed.
- **Supporting trainings/entrepreneurial skills development**
Skills Forum Conference (4th quarter 2012/1st quarter 2013)

EU & MS



Joining EU and MS R&I efforts

Joint Programming Initiatives on

- Agriculture, food security and climate change.
- A healthy diet for a healthy life.
- Healthy & productive seas and oceans
- Water challenges

ERA-NETs/ERA-NETs+ 14 active, 13 closed, including

- ERACAPS.
- ERA-IB II.
- Core-Organic II.
- Euphresco II.
- Susfood.

3ERA-NETs, 1 ERA-NETs+

- Being negotiated in WP2012
- 5ERA-NETs, 2 ERA-NETs+, Proposed in WP2013

Strengthening the European Research Area

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EU funded R&I



	FP7	Horizon 2020 proposal
	2007-2013	2014-2020
All FP	€ 53 Billion	€ 80 Billion
	+50%	
Bioeconomy	€ 1,9 Billion for Theme FAFB	€ 4,6 for Bioeconomy Challenge
	+140%	

+ industrial leadership; Marie Curie actions; RSFF; ...

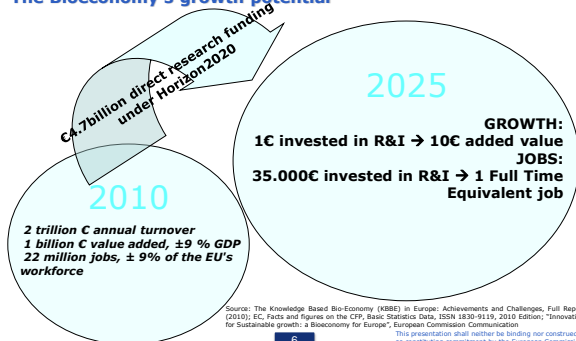
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The Bioeconomy



The Bioeconomy's growth potential



Source: The Knowledge Based Bio-Economy (KBBE) in Europe: Achievements and Challenges, Full Report (2010). EC. Facts and figures on the CFP, Basic Statistics 2010, ISSN 1830-9119, 2010 Edition; "Innovating for Sustainable growth: a Bioeconomy for Europe", European Commission Communication

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Bioeconomy: What to do?



REINFORCED POLICY INTERACTION AND STAKEHOLDER ENGAGEMENT

- **Developing a coherent policy framework and ensuring policy interactions**
European Commission is building an interaction mechanism (Bioeconomy Panel) at EU level.
- **Making a coherent use of all available instruments**
Horizon 2020, Cohesion policy, National fundings, ...
- **Developing smart specialization strategies in the bioeconomy**
Strategies to prioritize investments in R&I in order to develop national/regional comparative advantages.
WP2013 draft topic on "Bioeconomy and Bioregions" will develop tools and methodologies to help regions develop SSS.
- **Support the development of National Strategies**
Some Member States (DE, DK, FI, IE, NL, SE) have already launched national strategies, some others are developing one.

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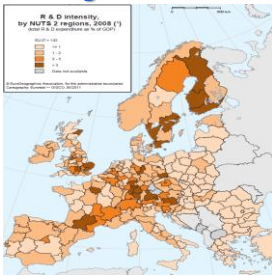
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The Regional dimension



Regions play an increasing role in innovation policy

National and regional R&D investments should move towards the 3% target...



(*) EU-27, Eurostat estimate
Source: Eurostat (online data code: rd_e_gdrng)

... to link **capacity building** and **staircase to excellence** to boost local economy

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Bioeconomy: What to do?



Some Member States already have a National Strategy

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Bioeconomy: What to do?



ENHANCEMENT OF MARKETS AND COMPETITIVENESS IN BIOECONOMY SECTORS

- **Developing biorefineries networks**
Building capacity by facilitating scale-up of (pilot/demo) biorefineries (e.g. Inbicon in Kalundberg, G&M in Crescentino) and creating a network of small and large biorefineries.
Developing supply chains for feedstock (including residues and waste): logistics, collection and treatment plants, facilities in harbours, ...
Supporting the development of bioindustries with dedicated PPPs.
- **Supporting innovative solutions for existing industries, such as the food industries**
Reusing food waste for producing bio-based plastics (e.g. ANIMPOL project), improving resource efficiency of food production processes (e.g. HIGHTECH EUROPE project), becoming more sustainable (e.g. BIONEXGEN project) and reducing food waste, water and energy use (e.g. WP2013 draft topic: reducing water and energy use in food processing).
- **Promoting public procurement targeted at biobased products**
WP2013 draft topic: catalogue of bio-based products (to be used for public procurement)

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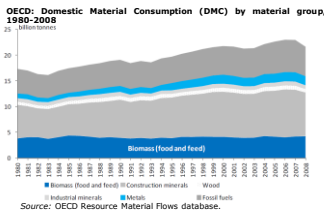
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Innovation-driven growth and jobs



Building competitive Bio-based industries in Europe: Growth and jobs – innovation-driven

Research and Innovation will play its role in balancing European economy de-materialization.



Research and Innovation will enable European Industry to launch new products, improve industrial processes and become more sustainable

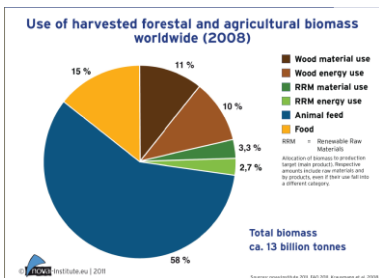
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Biomass uses and production potential



Biomass uses



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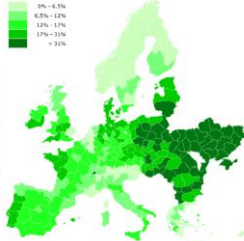
Biomass uses and production potential



Spatial production potential of biomass

Arable land available for dedicated bio-energy crops divided by the total land

EU 27+Ukraine



Potential	Countries
Low potential < 6,5%	NL, BE, LU, AT, CH, NO, SE and FI
Moderate potential 6,5% - 17%	FR, ES, PT, GE, UK, DK, IE, IT and GR
High potential > 17%	PL, LT, LV, HU, SL, SK, CZ, EST, RO, BU and UKR

Wit and Faaij, Biomass and Bioenergy 2010

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More Information



- More info on the Bioeconomy at: <http://ec.europa.eu/research/bioeconomy>
- FP7 FAFB Orientation Paper 2013 now available at: https://ec.europa.eu/research/participants/portal/page/fp7_documentation
→ Orientation papers 2013 → Cooperation
- 10 July: Publication of 2013 Call
- More info on EU2020 and Horizon 2020 at: http://ec.europa.eu/europe2020/index_en.htm
http://ec.europa.eu/research/horizon2020/index_en.cfm
- More info on EU Budget – Myths and Facts: http://ec.europa.eu/budget/explained/myths/myths_en.cfm

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