



CTFC



Biomass mobilisation for the emerging bioeconomy. BIO4ECO project.

Brussels, June 7th 2018

Biomass and waste



Biorefinery



Fuel



Chemicals and materials



Feed and food ingredients



"Bioeconomy refers to an economy that relies on biomass to produce food, energy, products and services. The bioeconomy will reduce our dependence on fossil natural resources, prevent biodiversity loss and create new economic growth and jobs in line with the principles of sustainable development."



	Technological approach	Social innovation approach
<i>Focus on</i>	<ul style="list-style-type: none"> • Technological innovations • Large scale investments • Value chain perspective • Sectoral development • Vertical integration 	<ul style="list-style-type: none"> • Social innovations • Small scale • Networks • Cross-sectoral development • Horizontal integration (= forests (and agriculture) as the green infrastructures for rural development)
<i>Input/output diversification</i>	<p>1 or more inputs</p> <p>Diversification in outputs</p>	<p>Diversification in the use of inputs</p> <p>High added value Products & Services</p>
<i>Market power</i>	<p>Increasing role of business owning/controlling the (new) technologies</p>	<p>Role of networks, groups, associations, public-private partnerships...</p>
<i>Model regions</i>	<p>Northern EU (UK, Scandinavian countries)</p>	<p>Mediterranean region</p>

Different approaches to bioeconomy



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Sustainable regional bioenergy policies: a game changer

OBJECTIVES

1. Increase the share of renewable energy in the overall energy mix.
2. Take into account bioenergy and bioeconomy in all planning and decision making.
3. Lay the groundwork for future integrated strategies and programs for regional bioeconomy and carbon neutrality, gaining social acceptance for bioenergy.



Eno cooperative: a good example of successful & environmental friendly solution to achieve oil-free and low-carbon North Karelia

Local forest owners associated	55
Heating plants owned	3
District heating length	11 km
Amount saved during 15 years	4.1 Mio EUR
Oil replaced	12,600 barrel/yr
Reduction CO ₂ emission	5,000 t/yr
Local economy benefits	2 Mio EUR/yr
Additional employment	7-10 man/yr

The main objective is to produce inexpensive district heat for the local community with **local** energy forest biomass.

France - A decision support tool to facilitate and organize a local timber and biomass supply strategy

Target (number of boilers)	1,000
Decisions implemented	52 +3
Local wood boilers installed	537

The main objective is to facilitate and organize a **local** timber and biomass supply.

The largest forest biomass boiler in Catalonia: Terrassa Health Consortium

Forest biomass harvesting for thermal use	3,250 t/yr
Forest biomass for thermal use	750 tep/yr
Improving managed forest area	160 ha/yr
Reduction CO ₂ emission	1,200 t/yr
Equivalent dwellings fed	735

The main objective is to reduce the risk of forest fires through a market development focused on the purchase of **zero mile** forest biomass.

Thanks

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