






ARBOR

Improving sustainable biomass utilisation in North West Europe (NWE)

With increasing dependency on fossil fuels, **biomass** is a key to ensure the security of supply of sustainable energy. Biomass currently accounts for around half (44-65%) of all **renewable energy** in the EU, meeting 6% of the EU's energy needs. Based on the Renewable Energy Action Plans for NWE Member States in 2010, it is estimated that biomass production for energy in NWE could increase by 69% to 2020, but only if significant improvements to the supply chain are made, e.g. through the energetic use of currently disposed waste streams or the sustainable production of biomass on non-agricultural land.

Trying to reach the ambitious 2020 goals, municipalities and regions across NWE are facing common issues of how to satisfy the increased demand for biomass. On the other hand they are dealing with important regional waste streams going to landfills. A common approach in exploring potentially complimentary life cycles as well as in activating hitherto unused biomass streams can help to resolve these issues.

Therefore, the **ARBOR** project was launched, an **Interreg IVB NWE** project with 13 partners from 6 European regions dealing with the development of technological solutions and regional strategies for improved sustainable biomass utilisation. ARBOR stands for "Accelerating Renewable Energies through Valorisation of Biogenic Organic Raw Material". The project is cofunded by local authorities from the **United Kingdom, Flanders, Saarland, Luxemburg, the Netherlands, and Ireland**. ARBOR is unique in that it is looking at the **whole biomass energy supply chain** from sourcing to energy production.

ARBOR activities

- A state of the art analysis of biomass for bioenergy initiatives and projects in North West Europe
- Pilot and demonstration actions on the use of agro-industrial side streams for bioenergy, closed loop organic residue valorisation by local authorities, industrial synergy parks, low-impact energy crops like short rotation coppice and biomass from marginal land
- A market analysis of biomass equipment providers, manufacturers and investors in North West Europe
- An up-to-date inventory and technology watch on biomass conversion technologies and side stream valorisation options
- An analysis of the political and legal framework conditions on bioenergy utilisation in North West Europe
- An environmental and economic assessment of the developed ARBOR bioenergy implementation schemes
- A strategy development for the ARBOR pilot regions

The ARBOR project will provide intelligence where **transnational co-operation** may help address local biomass supply and demand issues.

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Carbor
Biomass for Energy