

### Goal of the project:

The overall objective of the project is providing a reliable solution for substituting the fossil fuels used as energy sources for District Heating (DH) systems by sustainable and harmless alternatives through promotion and dissemination, aiming to set up new regional Short Rotation Coppice (SRC's) to DH chains.

### Short description of the project:

Alternative sources of energy with potential enough for substituting fossil fuels are urgently required. Amongst all existent Renewable Energy Sources (RES), bioenergy is considered as the most promising source of sustainable and secure energy in Europe. Its availability is not a problem as in the fossil fuels case, and it is flexible enough to be applied to a wide range of services, being heating and cooling some of its most important applications.

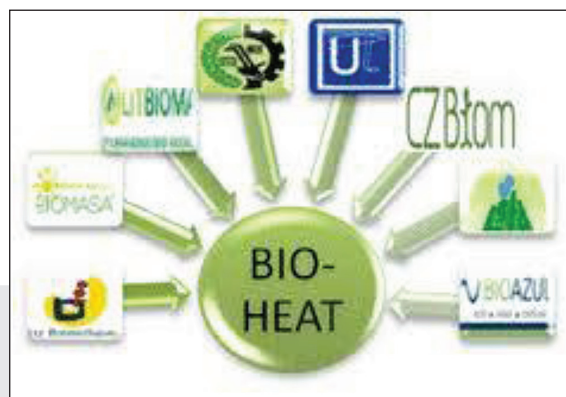


As heating systems are the most energy consuming in Eastern European countries, the utilisation of biomass as combustible instead of fossil fuels would mean an important reduction in the emissions of these countries, which could significantly contribute to fulfil the EU targets. However, biomass-based RES are not currently being used as much as it would be desirable. Despite its potential, the lack of knowledge and know-how about its possibilities amongst other important barriers are hindering its use.

The project aims to promote the use of biomass from SRC's as a source of energy for DH systems in Central and Eastern European countries (concretely Czech Republic, Romania, Poland, Slovakia and Lithuania), showing potential future end users (DH professionals, established municipal energy suppliers and land owners) and stakeholders (local authorities or policy makers) the advantages of using biomass from SRC's as a source of energy and its applicability on DH systems.

### Project implemented by:

The Department for Mechanic Machines, Equipment and Transportation from UPT in partnership with BIOAZUL S.L. from Spain (project coordinator), TTZ Bremerhaven (Germany), Czech Biomass Association (Czech Republic), Polish Association of Research and Applied Agriculture Specialists (Poland), Lithuanian Biomass Energy Association (Lithuania), Slovak Biomass Association (Slovakia), Lithuanian District Heating Association from Lithuania.



### Implementation period:

01.09.2010 - 31.08.2012

"If you want to find the secrets of the universe, think in terms of energy, frequency and vibration."

Nikola Tesla

### Main activities:

- Analysis of the state-of-the-art of DH applications, biomass and other RE sources used for energy supply;
- Identification of barriers for the extensive use of SRC's as a source of energy for DH purposes;
- Compilation, review and socio-economical assessment of available success stories and best practices;
- Preparation of suitable training material and development of dissemination strategies;
- Organization of training workshops for DH plants managers, DH plants constructors and engineers, municipal energy suppliers, land owners and farmers and other professionals of the sector.
- Organization of training seminars for local and regional authorities and decision makers (banks, power plants financing and owners, sales organizations, SRC's planners and consultants, etc.);
- Formation of SRC's clusters in each country;
- Development of dissemination activities within the project duration and even once it ends.

### Results:

- Development of suitable training and dissemination strategies according to the country addressed, adapting the strategy to the specific characteristics of each one;
- Raising awareness of potential end users and relevant stakeholders, leading to the creation of 5 new & working regional value-added chains on SRC's in combination with DH applications.;
- Creation of dissemination material and translation of the items produced into the targeted countries language;
- Creation and maintenance of a project website, including a marketplace joining professionals of all involved sectors,
- a section for downloading the

project materials and other relevant documentation, information on other finished and on-going initiatives and on interesting events, a public forum, etc.

- Creation of energy clusters (at least one per target country, including sub-clusters for different target groups) by farmers and other professionals of the energy sector in order to establish closer collaboration between the energy production (DH, co-firing) and farming (SRCs growing) sectors.

**Fields of interest:** bioenergy, renewable energy sources, heating systems, biomass, energy clusters.

### Financed through/by:

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### Research team:

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