

Summary

ESEK is a non-agricultural (civic) cooperative that utilizes renewable sources of energy - biomass produced as byproduct of cultivations and forestry. Its investment project includes the creation of biomass supply chain, the construction of a solid fuels production unit and the construction of a power station of 500 KW from biomass. ESEK was integrated in the LEADER Programme and financed with 500,000 Euros (subsidy of 50%). ESEK premises include a biomass preparation and pellet packaging production line with a capacity of 2tn/h.



Drivers

Every year 200,000 tn of biomass are produced in Karditsa Prefecture, resulting in air pollution (re: burning) and causing forest fires. The utilization of biomass contributes to environment protection and energy generation as well as in the creation of jobs and incomes locally.

Innovative points

Organizing farmers and forestry cooperatives regarding biomass utilization. Production of products (wood & agro-pellets) from agro and forest residues. Low cost fuel for domestic and industrial use (only for members). Research and cooperation with universities regarding exploitation of biomass (calorific value, ash cont. etc). Application and recording of biomass supply chain for first time. Collaboration between different local parties (cooperatives, local authorities etc)

Timeline- Activities and Results

ESEK was established in July 2010.

April 2012- ESEK purchase its own land 24,000 m².

May 2013- The licensing process was initiated for the pellet factory and the power unit (500kW).

August 2013- A pilot was run

Jan. 2014- Participation of ESEK in SRC plus meeting at Uppsala

Feb. 2014- Participation of ESEK in EIP-AGRI workshop at Lisbon

March 2015- Submission of project proposal within Horizon 2020 -Agricab

Sept. 2015- Submission of project proposal within LIFE -Bioleeiid

Nov. 2015- Presentation of ESEK at the EU parliament in Brussels

Dec. 2015- The pellet factory was built

March 2016- The power unit is still in licensing process.



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