



European Union European Regional Development Fund

Biogas Lagada – power generation from organic waste

Circular Waste Management series I: Meeting the biowaste challenge

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Biogas Lagada

Power and heat generation plant in the Region of Central Macedonia, Greece

- <u>Good practice</u> on Circular Economy identified within CESME project
- <u>Biogas Lagada S.A.</u>: Owner of the plant started in 2016
- <u>Initial budget</u>: 4.500.000€
- Operational budget (per year): 2.000.000 €
- <u>Process</u>: combustion of biogas produced by anaerobic digestion of organic raw materials
- <u>Sources</u>: Treatment of 60% of generated livestock waste in the area



Results

- Waste treatment: 240 t/day 400.000 t treated so far
- Livestock waste (65%): cattle and poultry manure
- Waste from crops (20%): corn silage, olive oil and fruit waste
- Cheese production (10%) cheese whey
- <u>Power generation</u>: 8.400 MWh/year and 42.000 MWh so far
- <u>Residue</u>: used for the fertilization of 800 ha of agricultural crops in the near area
- <u>Transferability</u>: 8 similar plants operating in the Region and 40 in total in Greece. Large volume of livestock waste untreated.







Anaerobic digestion plant





2 Digesters

2 Storage tanks



Anaerobic digestion plant



Panoramic photo of Biogas Lagada





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Thank you!



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Questions welcome