

BHSL Waste to Energy Case Study

Main results / outcomes

This case study tells the story of the sequential development of an innovative fossil energy-free technology for the poultry production sector in west Limerick, in the south-west of Ireland. In the early 2000's, an initial pilot on a local poultry farm, successfully demonstrated the feasibility of this waste-to-energy concept.

Practical recommendations

- **Background:** Developed to address the surplus poultry manure resulting from European legislation restricting its spread due to environmental concerns.
- **Collaborative Effort:** Led by Jack O'Connor, the local poultry producers association partnered with the University of Limerick, local producers, and government agencies, with support from EU partners.
- **Pilot Development:** A pilot project was initiated to explore on-site fluidized bed combustion on local farms in west Limerick.
- **Win-Win Outcome:** The initiative resulted in benefits for "poultry, profits, and the planet," demonstrating a sustainable solution.
- **Case Study:** Details the technology's evolution, challenges encountered and addressed, and the significant benefits it offers.
- **BHSL Development:** Describes the growth of BHSL into a successful Irish agri-tech company, specializing in fossil-energy-free technology.
- **Technology Rollout:** BHSL's on-farm energy production system is highly automated and features remote management for 24/7 monitoring across multiple production units.

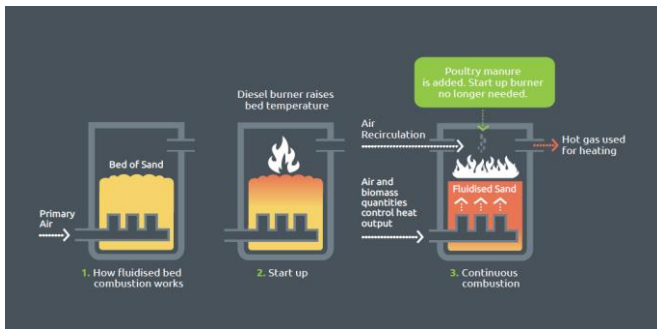


Figure 1: Fluidized bed combustion process maximizes poultry manure combustion efficiency and minimizes emissions



Figure 2: Combustion Chamber

Further information

<https://www.bhsl.com>
<https://www.youtube.com/watch?v=gbLuYkYTkak>

About this abstract

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AgroFossilFree is a H2020 multi-actor project that will evaluate the current status in EU agriculture regarding energy use and assess existing needs, allowing farmers to optimize agricultural production through more efficient energy use and reduced GHG emissions, resulting in economic, agronomic and environmental benefits. AgroFossilFree will create a framework under which critical stakeholders will cooperate to evaluate and promote the currently available Fossil-Energy-Free Technologies and Strategies (FEFTS) in EU agriculture. The project is running from October 2020 to September 2023.

Website: www.agrofossilfree.eu



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