



## What is AVIENERGY?

AVIENERGY is a **Supra-autonomous Operative Group** that promotes a **more efficient use of resources in the poultry sector** by applying a strategy based on the fundamentals of the circular bioeconomy, enabling a more efficient use of the waste generated in the poultry activity to improve competitiveness and the environmental impact of the sector.

AVIENERGY focuses on the **recovery of the manure generated in poultry farms** for its use as an input to obtain a **renewable energy source and fertilizer materials for the use of nutrients in the soil**. Poultry manure, chicken manure and manure represent some of the most abundant and problematic waste in the sector and this solution is an efficient and environmentally sustainable tool for reducing greenhouse gases and improving competitiveness of the sector.

The project **will value the chicken manure and turkey manure thermo-chemically (combustion)** with a burner specially adapted to this type of waste that will allow the obtaining of **thermal energy** that can be used to satisfy the demand for heat on the farms. The ashes produced during combustion will be considered a valuable by-product that can be applied directly to the soil to take advantage of existing nutrients, favoring crop growth. Additionally, the feasibility of implementing a micro-cogeneration system to obtain **electricity** will be analysed. This innovative solution would make it possible to **reduce the energy dependency of farms**.

## What are the Supraautonomic Operative Groups?

The Operational Groups, main actors in the implementation of the AEI-Agri (European Association for Innovation in Productive and Sustainable Agriculture), are one of the key tools in the execution of the **National Rural Development Program 2014-2020 to promote innovation in the agri-food and forestry sector within the European sphere**. This is the grouping of agents with different profiles with common interests, such as farmers, ranchers, companies, research or training and dissemination centres, who come together to launch an innovation project in order to provide a joint response and multisectorial to a problem or need.

Do you want to know more about AVIENERGY?

You can send an email to [info@avienergy.es](mailto:info@avienergy.es) or call + 34 669 166 618

More information about the project on its website [www.avienergy.es](http://www.avienergy.es)

The AVIENERGY Operative Group is responsible for this content.



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PNDR  
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# avienergy

GRUPO OPERATIVO SUPRAAUTONÓMICO

From waste to resource:  
**Circular economy in the poultry sector  
by harnessing energy of the droppings**

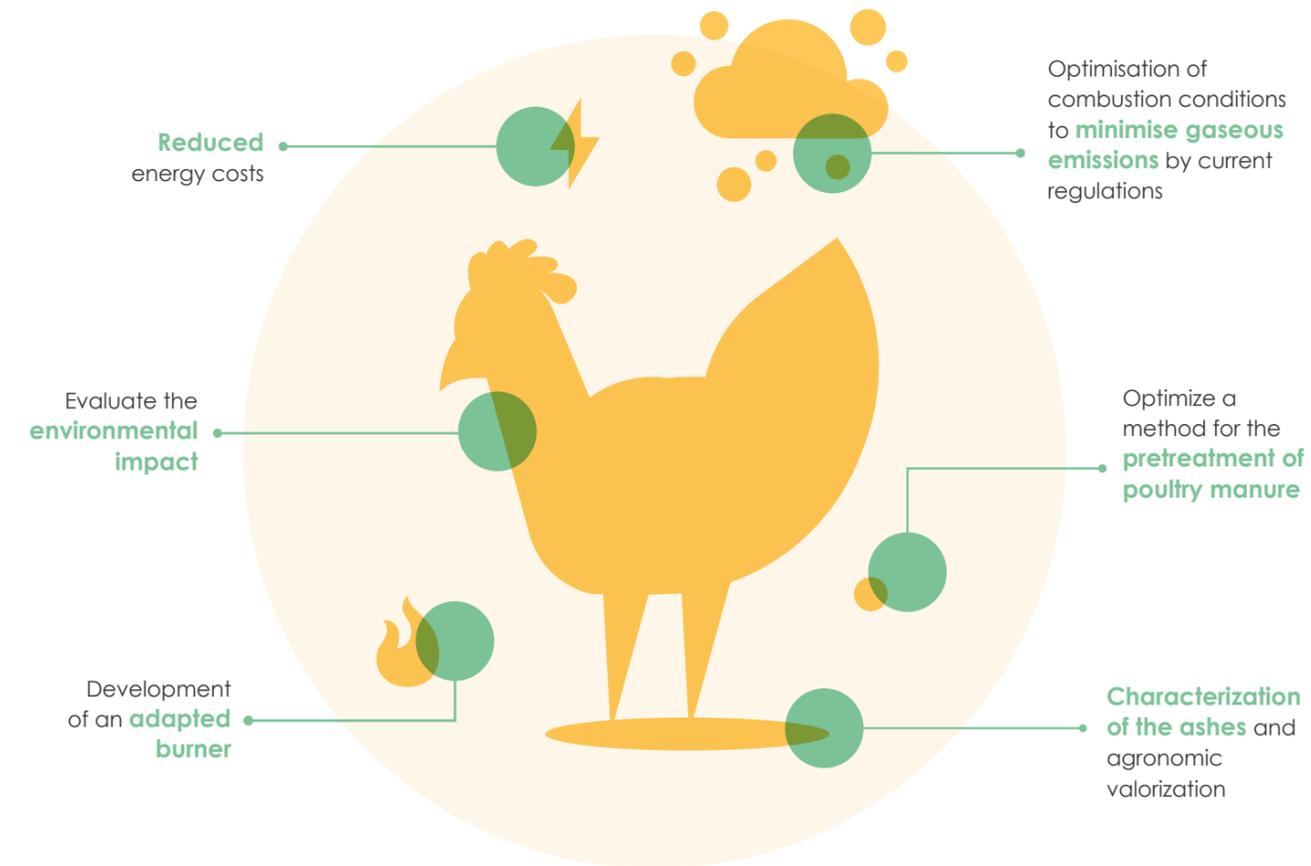
Total project budget: €583,672.84

Total grant: €565,872.84

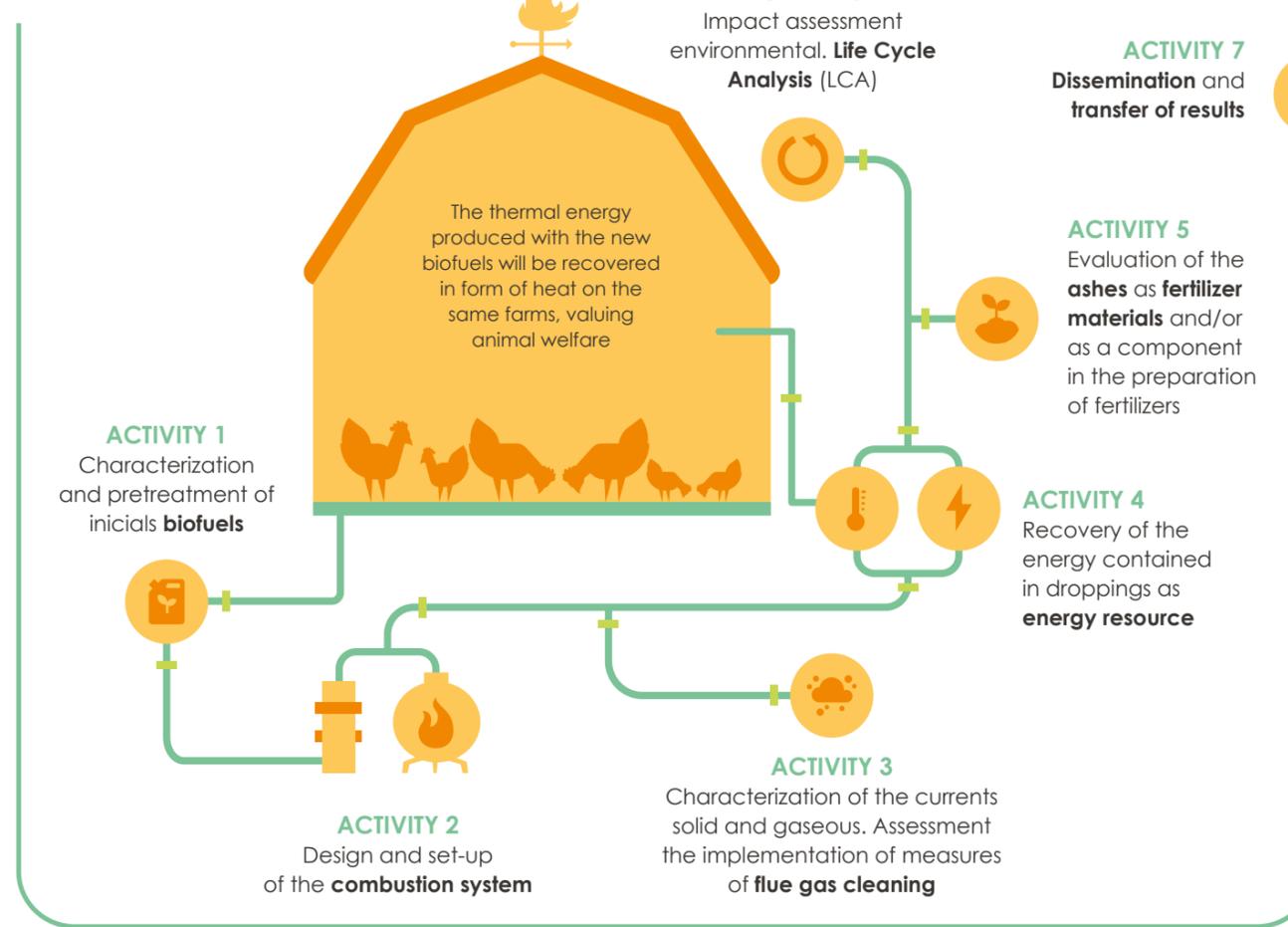
Innovation project co-financed 80% by the European Agricultural Fund for Rural Development (EAFRD) of the European Union and 20% by the Ministry of Agriculture, Fisheries and Food, within the framework of the National Program Rural Development 2014-2020. The General Directorate of Rural Development, Innovation and Agrifood Training (DGDRIFA) is the authority in charge of applying said aid.

## What objectives does AVIENERGY have?

AVIENERGY's main objective is to enable a more efficient use of the waste generated in the poultry activity to improve competitiveness and impact environment of the sector. Specific:



## AVIENERGY Activities



## What results are expected?

The results to be achieved by the AVIENERGY project are the following:

- 20 %** of reduction in the moisture content of the starting biofuel
- Minimum 50%** of recovery of contained thermal energy in the droppings
- Get an optimized combustion system** from the technical, economic and environmental point of view, in order to use in the poultry sector
- 50%** of reduction in heating costs in the farms and evaluation of the % of global costs energy savings sources using droppings to obtaining electricity
- Generate a protocol** of agricultural use of the ashes produced in the combustion
- Quantification of the environmental impact** of the solution proposed in the project

## Who makes up AVIENERGY?

The Supra-autonomous Operative Group AVIENERGY includes the Autonomous Communities of **Galicia, Castilla-León** and **Murcia**.

### Beneficiaries

The project is coordinated by the Galician Enterprise-University Foundation (FEUGA), and has the participation of EnergyLab, Demaux Manufacture S.L., José Antonio García's Farm, Superior Council of Scientific Research through the Center for Edaphology and Applied Biology of the Segura (CEBAS-CSIC), University of Vigo through the Technology Group Energy (GTE), Poultry El Charcón and Alimentos del Mediterráneo S. Coop (ALIMER).



### Collaborating members

UVESA and the Alimer Foundation.



## Who are the recipients of AVIENERGY?

The AVIENERGY project directs its results towards all agents of the agri-food sector:



Farms, cooperatives and poultry farms



Companies related to the energy sector



Farmers, cooperatives and farms



Technology centers, research centers and universities



Technological platforms



Public administrations related to agriculture, the environment and/or rural development



End consumers and general public

In order to maximize the impact of the results and the transfer of the solutions to be developed in the AVIENERGY project, intense work will be carried out outreach at regional, national and European level (articles, informative sessions, workshops, web).