

## Innovative solid biofuel production mechanisms and processes for the reduction of emissions from biomass boilers

### Summary

Analyse improvement proposals for the production of solid biofuels to increase their quality and thus reduce the impact of their emissions. First, data will be generated on the quality of emissions of different compounds produced by the combustion of woodchips under controlled and parameterised conditions, for different combustion conditions and fuel characteristics, for the species sold in Catalonia. Also, new woodchip production processes will be proposed to reduce emissions of unwanted compounds.

### Objectives

The aim of the project is to generate knowledge on the emissions derived from the combustion of Aleppo pine and vine shoots in order to provide recommendations and qualities of solid biofuel that minimise the impact derived from the emissions generated in the combustion process.

The other objective is to establish which innovative production mechanisms or processes should be applied by companies producing these biofuels.

### Description of the actions planned in the project

1. Definition and set-up of an emission measurement system.
2. Integration of the combustion test bench.
3. Monitoring of scientific-technical information on the treatment, equipment and emissions of pine and vine shoots.
4. Study of the physical-chemical characteristics of the biomasses covered by the project depending on the treatment to which they are subjected.
5. Feasibility study.

### Expected results and practical recommendations

The main contributions to knowledge will be a detailed study of emissions according to quality and type of material for which there is currently insufficient data. This knowledge will increase the added value of these biofuels, helping their market penetration and contributing to boosting the country's bioeconomy.

### Leader of the Operational Group

ORGANISATION: BOSCAT FUSTA, SL

### Coordinator of the Operational Group

ORGANISATION: CATALONIA BIOENERGY CLUSTER

### Other members of the Operational Group (grant recipients)

ORGANISATION: CELLER COOPERATIU I SECCIÓ DE CRÈDIT LA GRANADA, SCCL

ORGANISATION: ASSOCIATION FOR THE MANAGEMENT OF THE GES BISAURA RIPOLLÈS LEADER PROGRAMME

### Other members of the Operational Group (not recipients of the grant)

ORGANISATION: EURECAT FOUNDATION

**Subject area(s) of application**

<input type="checkbox"/>	Agricultural production system
<input type="checkbox"/>	Agricultural practice
<input type="checkbox"/>	Agricultural equipment and machinery
<input type="checkbox"/>	Livestock farming and animal welfare
<input type="checkbox"/>	Vegetable production and horticulture
<input checked="" type="checkbox"/>	Landscape / Territorial management
<input type="checkbox"/>	Pest and disease control
<input type="checkbox"/>	Fertilisation and nutrient management
<input type="checkbox"/>	Soil management
<input type="checkbox"/>	Genetic resources
<input type="checkbox"/>	Forestry
<input type="checkbox"/>	Water management
<input checked="" type="checkbox"/>	Climate and Climate Change
<input checked="" type="checkbox"/>	Energy management
<input checked="" type="checkbox"/>	Waste and by-product management
<input type="checkbox"/>	Biodiversity and environmental management
<input type="checkbox"/>	Food quality/processing and nutrition
<input type="checkbox"/>	Supply chain, marketing and consumption
<input type="checkbox"/>	Competitiveness and agricultural and forestry diversification
<input type="checkbox"/>	General

**Geographical area(s) of application**

PROVINCE(S)	REGION(S)
Catalonia	Catalonia

**Dissemination of the project (publications, conferences, multimedia, etc.)**

Participants' websites and newsletters.  
 Participants' social media.  
 Specialised press (RETEMA, Industria Ambiente, etc.).

**Project website****More information on the project**

PROJECT DATES	TOTAL BUDGET
<b>Starting date:</b> July 2021	<b>Total budget:</b> €165,678.00
	<b>DACC funding:</b> €76,618.26
<b>Current status:</b> Under way	<b>EU funding:</b> €57,799.74
	<b>Own funding:</b> €31,260.00

**With funding from:**

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*Order ARP/113/2021 of 20 May, approving the regulatory bases for grants for cooperation for innovation by promoting the creation of European Association for Innovation operational groups in the areas of agricultural productivity and sustainability and the execution of innovative pilot projects by those groups, and Resolution ACC/1660/2021, of 27 May, announcing the call for the grant.*



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