

**1st meeting of the ENRD Thematic Group
on
Bioeconomy and Climate Action in Rural Areas
25/09/2019**



LOCAL ACTION GROUP (LAG)



ASSOCIATION LEADER RIPOLLÈS GES BISAURA

Territory of action: Ripollès i nord d'Osona (Vall del Ges, Orís i Bisaura).

- Counties: 2 (27 municipalities)
- Population: 33.963
 - Ripollès: 25.700
 - Vall del Ges Orís i Bisaura: 8.263
- Surface area: 1149,3km²
 - Ripollès: 956,6km²
 - Vall del Ges Orís i Bisaura: 192,7km²



ENFOCC PROJECT: ORIGINS AND IMPULSE



2010-2014

Period 2007-2013



2012-2015

Period 2007-2013



Energy and Forest
(EIF)



2016-2019

Period 2014-2020



Energy, Forest and
Climate Change

MOTIVATION AND GOALS



Improve and promote the sustainability of Catalan rural areas .

- Promotion energy and efficiency savings linked to a **change in energy model**.
- Promotion **renewable energies** based on endogenous sources.
- Awareness to rural areas about the need to promote actions to mitigate and adapt to **climate change**
- Promotion of **sustainable forest management**.



CLIMATE CHANGE

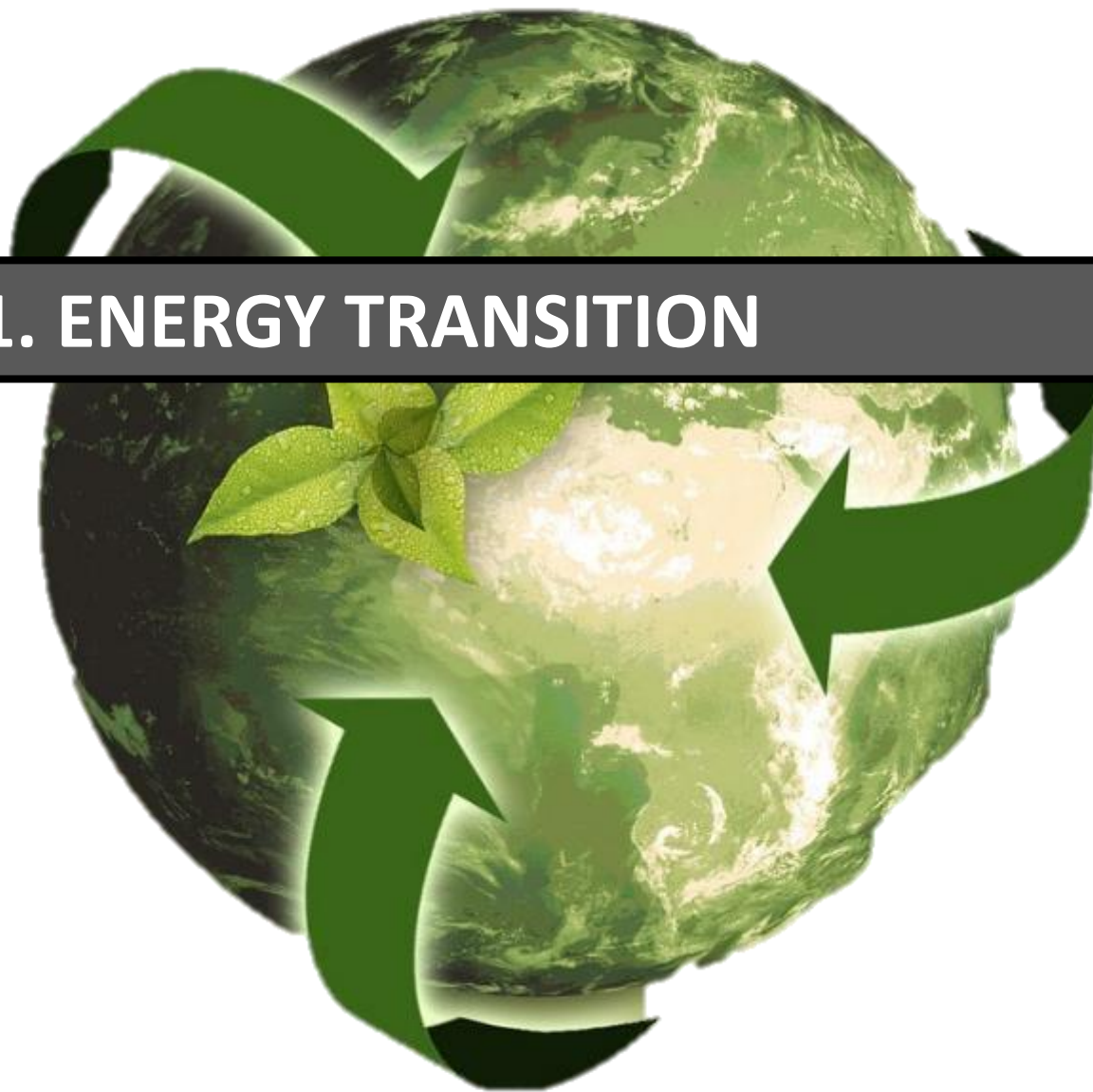
1. ENERGY TRANSITION

2. FOREST MANAGEMENT AND BIOMASS

ACTIONS: MAIN AXES



1. ENERGY TRANSITION

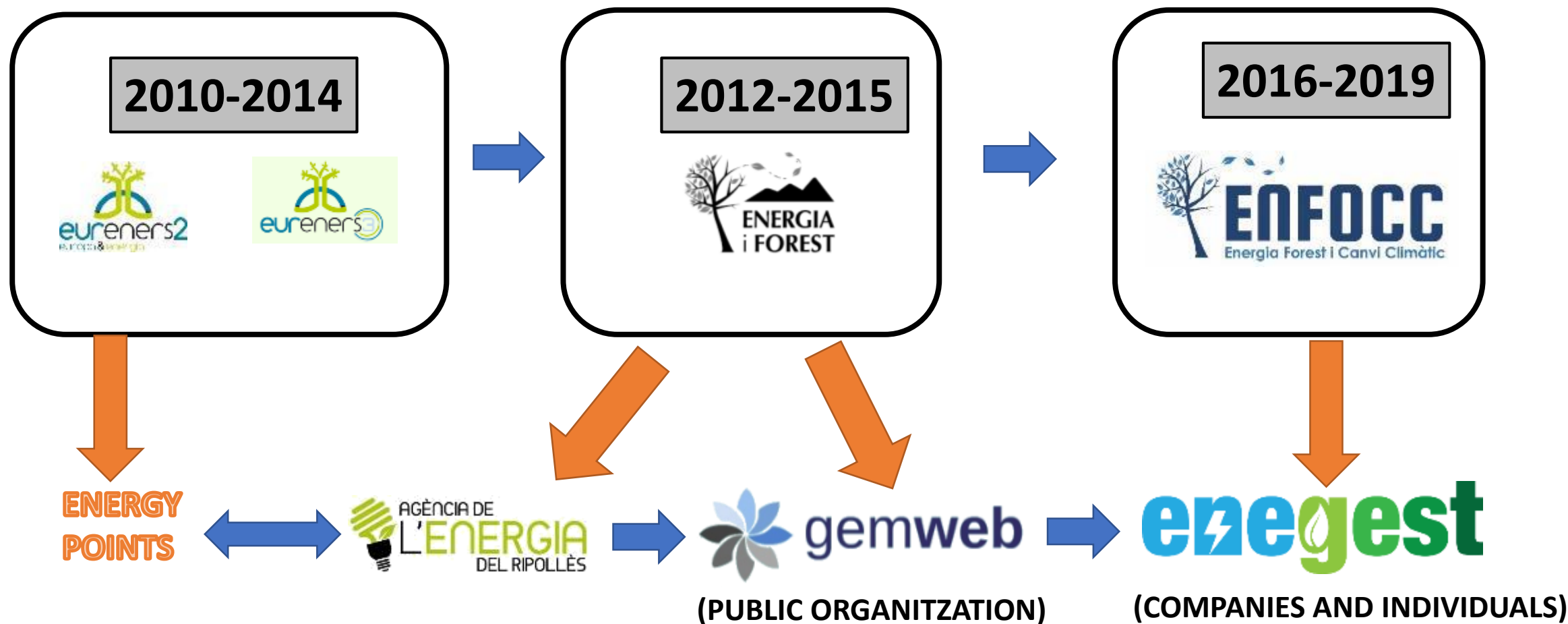


ACTIONS

1. ENERGY TRANSITION



1.1. ENERGY ACCOUNTING: EVOLUTION



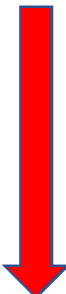


1.1. ENERGY ACCOUNTING

EMPLOYMENT:

- 1 ENERGY AGENCY in Ripollès regions: 2 technicians employed
- 1 ENERGY TRANSITION WORK TABLE (Energy Agency in progress) in Lleida region : 1-2 technicians employed in progress
- 1 ENERGY AGENCY IN PROGRESS in Tarragona región: 1-2 technicians employed in progress
- COPATE, Energy Agency in Terres de l'Ebre : 1 technician

MOTIVATION:

- 
- ECONOMIC SAVINGS
 - ENERGY EFFICIENCY
 - LEGISLATION
 - ENVIRONMENTAL AWARENESS



1.1. ENERGY MANAGEMENT TOOL “ENEGEST”

enegest

<https://enegest.energiaibosc.com>

- **Free and online** energy management tool for companies and individuals
- Integration of **all energy consumption into a single platform**: Electricity, Gas, Butane, GLP, Diesel Oil, Biomass
- Main Functions:
 - Energy accounting ↔ Economic Savings
 - Calculation of consumption and cost ratios
 - Carbon footprint calculation
 - Solar Calculator (viability and amortization)



1.1. ENERGY MANAGEMENT TOOL “ENEGEST”

enegest

<https://enegest.energiaibosc.com>

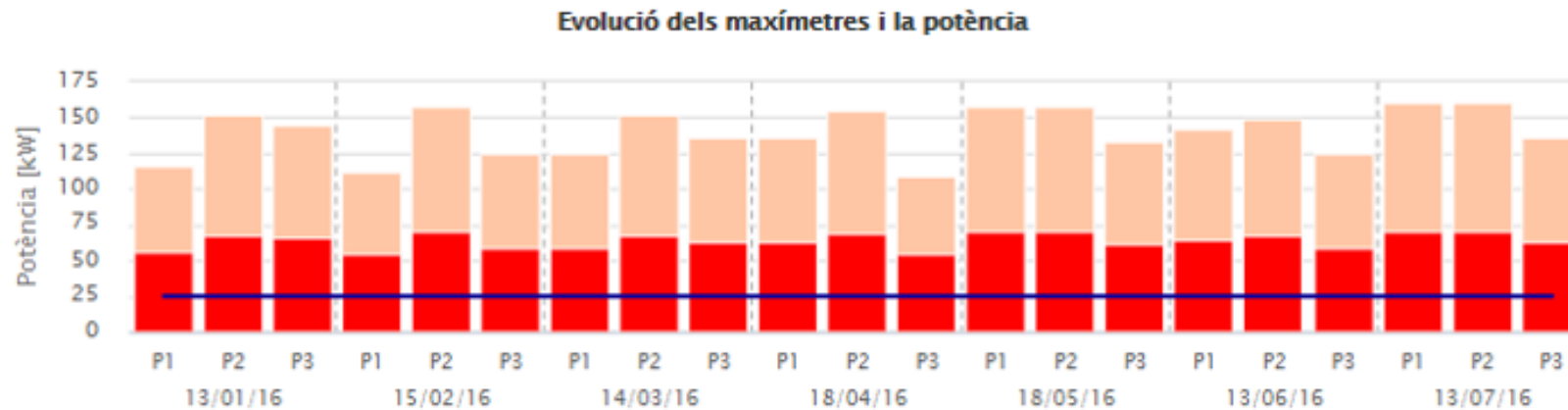
- **Technician support:** wich transmits knowledge and justifies the reason and the need for savings
- In 2018: 97 companies analyzed
78 reports delivered to the companies with real savings or improvements
- Nowadays: 500 registered users.
- Nowadays: 250 frequently users
- During the ended period 2012-2015, **1.367 energy suplies were analized**
- **Sing up into the tool, improve score during Leader Subsidy selection process**



1.1. ENERGY MANAGEMENT TOOL "ENEGEST"

Contracted power was lower than required

Carpentry example



- Contracted power 25 kW.
- Approximated power used 69 kW.
- Maximum power invoiced 156kW.

Annual savings: **7.964,04€**



1.2. ENERGY TRANSITION IN THE 21ST CENTURY (TE21)

<http://transicio.energiaibosc.com/>

TE21
Transició energètica
a municipis i comarques

- Energy Transition: it mainly represents a change in the production of energy, replacing fossil fuels with renewable and local sources
- Ramon Sans Rovira, Industrial Engineer, author of the **TE21 model of calculation**
- SENSIBILITATION AND COMMUNICATION TOOLS:
 - **Reports:** The transitional reports of the different municipalities and provinces of Catalonia are calculated and presented on the web
 - **Communication Flashes:** edited and communicated by social networks
- Actually we are working on an interactive web, with different languages, where data entry is open to everyone. It will give more accurate and realistic information

In collaboration with:

Ramon Sans Rovira, Industrial Engineer
Agència de Desenvolupament del Ripollès





1.2. ENERGY TRANSITION IN THE 21ST CENTURY (TE21)

Catalunya

<http://transicio.energiaibosc.com/>

TE21
Transició energètica
a municipis i comarques



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1.2. ENERGY TRANSITION IN THE 21ST CENTURY (TE21)



The 100% renewable energy transition requires 1.5 new jobs for each nominal electric megawatt that is installed

#3. TRANSICIÓ ENERGÈTICA I OCUPACIÓ

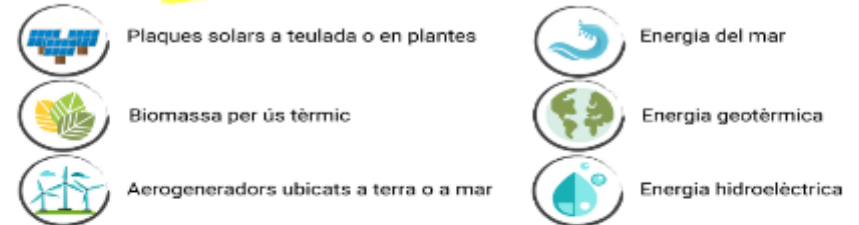
La transició energètica a 100% renovables requereix 1,5 nous llocs de treball per cada megawatt elèctric nominal que s'instal·li.



QUINES PROFESSIONS ES NECESSITARAN?



DE QUINES ALTERNATIVES DISPOSEM?



QUANTS NOUS LLOCS DE TREBALL ES PODEN GENERAR?



Dades: Ramon Sans Rovira i The Solution Project

Imatges: www.freepik.com

TE21
Transició energètica
a mitjans i catalunya

In collaboration with:

Ramon Sans Rovira, Industrial Engineer
Agència de Desenvolupament del Ripollès



2. FOREST MANAGEMENT AND BIOMASS



2.3. CLIMA PROGRAM: STARTING POINT



**STRATEGIC PLAN OF THE BIOMASS IN THE
RIPOLLES AREA**





2.3.CLIMA PROGRAM: STARTING POINT

- FIRST PHASE IN THE STRATEGIC PLAN : 2009

- Forestry study (productive potential in Ripollès)
- Study of consumption (consumption potential in Ripollès)
- Logistics of the production process (adaptation CEINR)

- SECOND PHASE IN THE STRATEGIC PLAN: 2012

- Complete study of the potential of consumption (inventory of boilers to be installed and estimated consumption)
- First price survey of the biomass
- Analysis of economic savings



2.3. CLIMA PROGRAM: STARTING POINT

- 2010:** The strategic plan of the biomass in the ripolles area shows a demand. A public entity (**CEIN**) start to works on **public forest and public boilers**.
- 2012:** As in the rural areas there were boilers it is decided to take part in the Clima Program. BM-Rural 2013-2016
- 2015:** A private company started to supply biomass to private boilers
- 2015:** In collaboration with Biomass Cluster it is decided to expand the Clima Program throughout Catalonia. BM-Cat 2016-2019
- 2016:** The private rural company requests a Leader Subsidy to improve the supply biomass activity
- 2019:** This private company is supplying biomass for public and private boilers (1-2 workers).
- 2010 – 2019: NEW specialized plumbers from the rural areas (new job opportunities)**



2.3. CLIMA PROGRAM

Initiative promoted by FES- CO₂ (Ministry of Agriculture and Fisheries, Food and Environment) in order to reduce CO₂ emissions from Spain and comply with international agreements on climate change

- Catalonia biomass boilers
- Verify the emissions of the boilers.
- Verification economically compensated (depending on the power of the biomass boiler and the hours of operation)

BM-CAT
PROGRAMA DE
CO₂MPENSACIÓ
ECONÒMICA D'EMISSIONS
EN CALDERES DE BIOMASSA





2.3. CLIMA PROGRAM

- The main **objective** of the BM-CAT project is to contribute to the **change** of an energy model based on fossil fuels by another one **based on the biomass, source of renewable, local and clean energy.**
- **We have the need to promote the use of local biomass (best quality) through incentives that are not included in the CLIMA Program.**

BM-CAT
PROGRAMA DE
CO₂MPENSACIÓ
ECONÒMICA D'EMISSIONS
EN CALDERES DE BIOMASSA

ACTIONS 2. FOREST MANAGEMENT AND BIOMASS



CO2 (T) COMPENSATED DURING PERIOD 2013-2018

	Nº BOILERS	Nº Tones CO2 Compensated	€ Equivalents
BM-CAT 2016-2019	20,00	1.548,00	15.015,60
BM-Rural 2013-2016	46,00	8.254,59	55.937,92
TOTALS	76,00	9.802,59	70.953,52

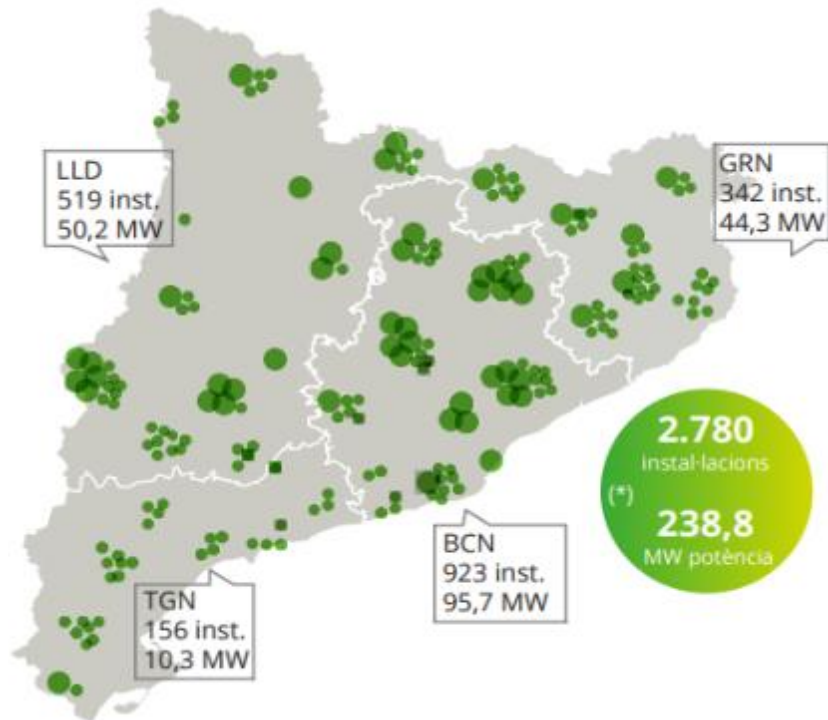
BM-CAT
PROGRAMA DE
CO₂ COMPENSACIÓ
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ACTIONS 2. FOREST MANAGEMENT AND BIOMASS

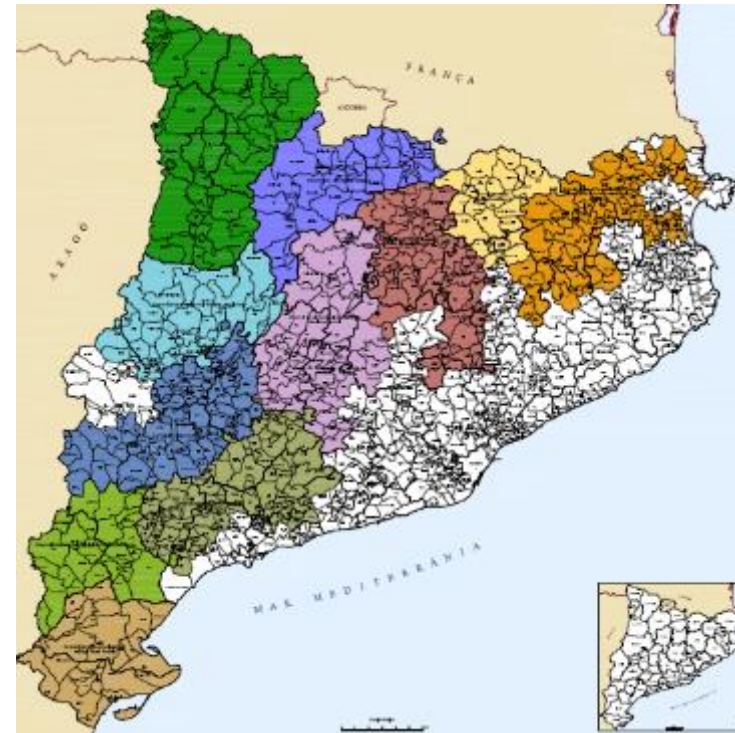


2.3. CLIMA PROGRAM

BIOMASS BOILERS IN CATALONIA (2012-2017)



CATALAN LAG'S SITUATION



32,2% BOILERS FROM INDUSTRY, TERTIARY AND PRIMARY SECTOR

10% BOILERS INSIDE ENFOCC PROJECT

We can not even want to compete with large-scale engineers or boilers

http://icaen.gencat.cat/web/.content/10_ICAEN/17_publicacions_informes/05_infografies/arxius/arxius/20181219_Infografia_Biomassa2018.pdf



THANK YOU SO MUCH!!

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Associació pel
Desenvolupament
Rural de la
Catalunya Central



Associació
DESENVOLUPAMENT
RURAL INTEGRAL
2004-2006-2007-2008-2009-2010-2011-2012-2013-2014-2015-2016-2017-2018-2019-2020-2021-2022-2023-2024



Associació
LEADER
Ripollès Ges Bisaura



LEADER
del Camp



CONSORCI GAL
Alt Urgell - Cerdanya



Cis
Consorci Intercomunal d'Iniciatives Socioeconòmiques



LEADER
CAT CENTRAL



Consorci per al Desenvolupament
del Baix Ebre i Montsià



Associació Leader
de Ponent



LEADER
Consorci GAL Noguera / Segrià Nord



CONSORCI
LEADER
PIRINEU
OCCIDENTAL



LEADER
ILLES BALEARS



TEDER
CENTRO DE DESARROLLO RURAL
DE TIERRA ESTELLA



GAL
CÉVENNES
LEADER



Rd
Ripollès Desenvolupament



Generalitat de Catalunya
Departament d'Agricultura,
Ramaderia, Pesca i Alimentació



Fons Europeu Agrícola de
Desenvolupament Rural:
Europa inverteix en les zones rurals



Diputació
Barcelona



Diputació de Girona