

# PROJECT

## Vineyards for Heat

### Viñedos por Calor

### Vinyes per Calor

[www.vineyards4heat.eu](http://www.vineyards4heat.eu)



# Improve pruning vine management



Biomass has traditionally been burned on the vine.

Only a small part has been incorporated into the soil as mulching.



Penedès region has 25.000 hectares of vineyard.

The initial situation, in 2014: aim to improve pruning vine management.

# Objectives (multidisciplinary goals)



- Creating new jobs in the green economy
- Energy diversification (renewable energy source)
- Decrease energy bill (more competitive companies)
- Reduced product footprint
- Low carbon emissions territory

# Value Chain (in the LIFE project)

The project partners represented the entire value chain



# Value Chain (post project)

The project partners represented the entire value chain



# Characterization of biomass

CHARACTERIZATION DATA FOR AGRICULTURAL BIOMASS  
(GAINED FROM VINE PRUNING WASTE), ACCORDING TO  
THE FOREST SCIENCES CENTRE OF CATALONIA:

**4,116.21 kWh/t**

Calorific value (LCV)



**157 kg/m<sup>3</sup>**

Density



**6.32 %**

Ash (dry base)

# Boilers installed

**A 500 KW BOILER IN THE NEW LA GIRADA DISTRICT HEATING NETWORK, WHICH SUPPLIES 4 PUBLIC FACILITIES IN VILAFRANCA.**



**A 130 KW BOILER IN CAVAS VILARNAU, WHICH HAS ELIMINATED THE COMPANY'S DEPENDENCE ON FOSSIL FUELS.**



**We pick up near 300-400 Ha annually to supply La Girada boiler, it depends on the meteorology.**

[Link vídeo](#)

# District heating La Girada



# Results

- More than 150 Tn / year of biomass served in La Girada boiler.
- In the district heating we have saved 153.000 Kwh of natural gas and 12.000 Kwh of electricity.
- In Vilarnau Cavas 100% of diesel has been replaced by biomass.
- The municipal water company is now a municipal services company.
- It's running the extension of the heat network to the Ricard Fortuny Social and Health Center.
- We are working with 100% vine pruning!

# Past, present and future

2016:

Premi '*Ciudad Sostenible*'  
recollit a la seu del Ministeri  
d'Agricultura, Pesca i  
Alimentació.



2018:

Premi BEST LIFE recollit  
a Brussel·les el passat  
mes de maig.

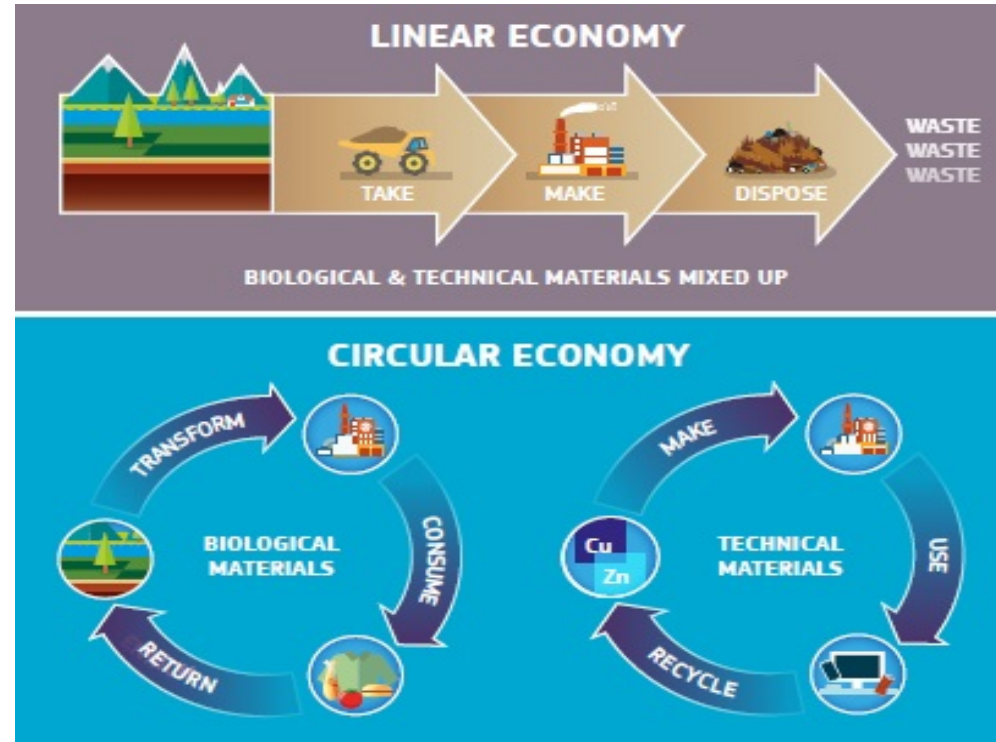


2019:

Premi a la Bona Pràctica en  
la gestió de la biomassa  
agrícola.



# Rethinking the future



**We need to be able to base our energy needs on renewable energy sources, Km0 and using the common sense of the circular economy.**

**CHALLENGES: Prepruning without falling to the ground and more homogeneous biomass (without medium branches).**

THANKS FOR THE ATTENTION

GRACIAS POR LA ATENCIÓN

GRÀCIES PER LA SEVA ATENCIÓ

[www.vineyards4heat.eu](http://www.vineyards4heat.eu)



AJUNTAMENT  
VILAFRANCA  
DEL PENEDÈS



BIOSPHERE  
certified destination

