



FEASR



REGIONE DEL VENETO



PSR  
VENETO

FONDO EUROPEO AGRICOLA PER LO SVILUPPO RURALE - L'EUROPA INVESTE NELLE ZONE RURALI



## EIP AGRI Operational Group: CAREGA

Local charcoal as strategic tool for bioeconomy in "Vicenza Piccole Dolomiti (North-east Italy)" area

*Marco Grendele – Project manager*

**2020** Forest  
Innovation  
Workshop

15-16 January 2020/FLORENCE  
Sant'Apollonia Auditorium - Via San Gallo 25

# Where did we leave off?



## The Project idea

The idea consisted in revitalizing marginal territories through the creation of new business opportunities based on the sustainable exploitation of local wood.

The adopted approach foresaw the inclusion of the whole chain of *Castanea* wood, from the wood production to valorization/marketing of goods, in a unique integrated strategy.

This approach meets modern consumption trends that enhance local made products (Km0 strategy).





# Some quick information...



The Piccole Dolomiti mountains are located in the prealpine area of Veneto Region. Their valleys are rich of *Castanea sativa* (Chestnut) woods, mainly managed as coppice.

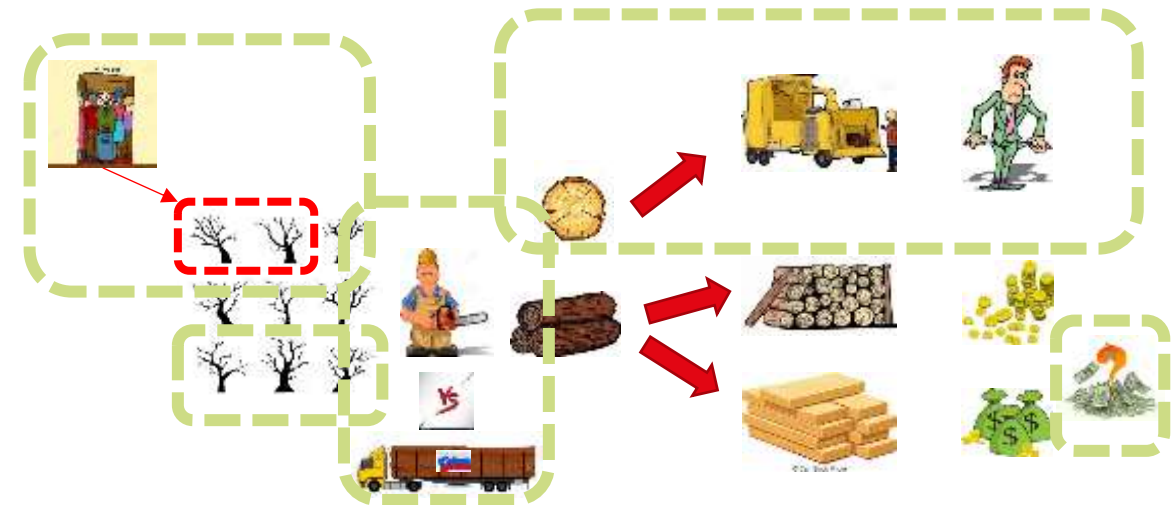
Traditionally chestnut was a relevant part of the local economy but in the last 50 years it has totally lost its economic role.

The *Castanea* wood has largely been used in the past to produce poles, furniture, fixtures (windows/doors) and handcraft objects.

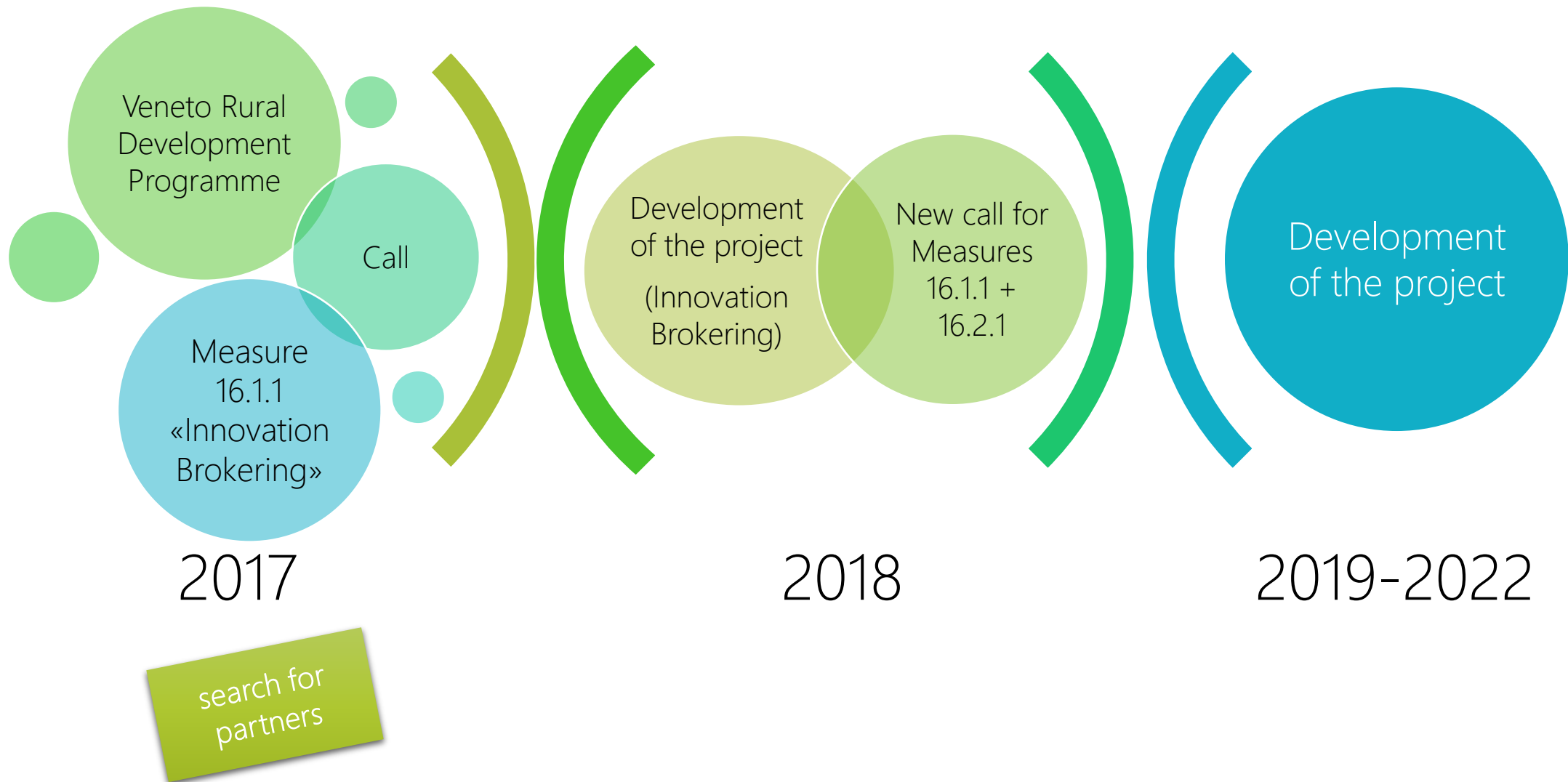
*Castanea* wood is part of local natural/cultural heritage.

## The challenges

- property fragmentation
- lost of value/market of the traditional *Castanea* wood products
- phytosanitary problems & hydrogeological instability
- foreign competition
- wood market not so transparent

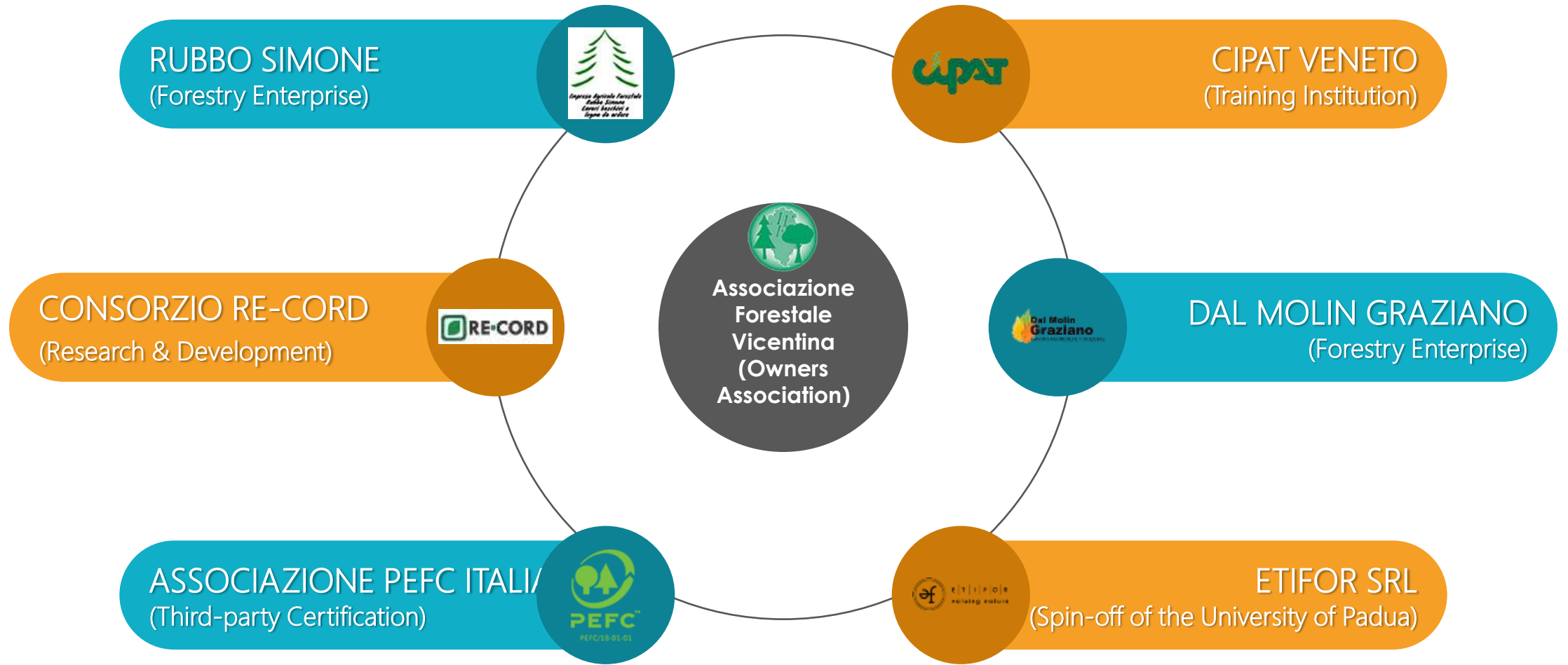


# Strike up the band...



# Who we are

 **carega Operational group:**



# Abstract



CAREGA aims increase and boost the quality and value of wood products and at the same time to improve forest management.

## KEY-WORDS:

- ✓ Forestry
- ✓ Waste, by-products and residues management
- ✓ Farming/forestry competitiveness and diversification

## Actions implemented:



Promotion of the zero-value scrap material, by transforming it into charcoal (forest-wood-energy chain). An innovative demonstration plant to produce charcoal will be implemented



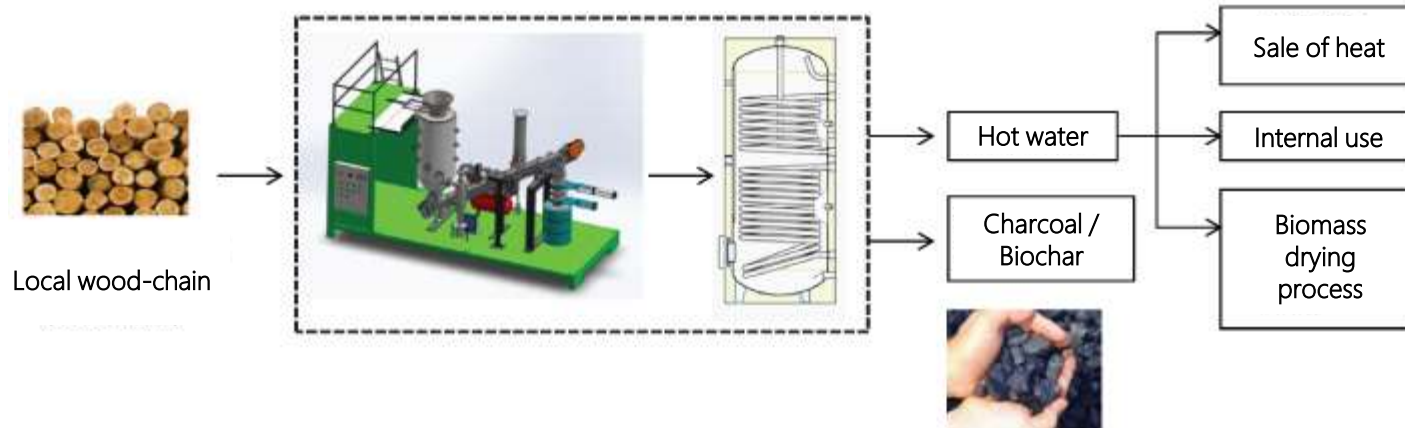
Market information and awareness raising to communicate the high quality of the charcoal product and to increase awareness of potential buyers



Aggregation of forestry parcels through innovative contractual forms

# Abstract

## CarbON plant



CarbON is the results of R&D efforts of RE-CORD for a more eco-friendly and efficient production of charcoal.

CarbON collects and burn-off all the gaseous products, avoiding emission of undesired compounds in the atmosphere

CarbON offers the possibility to recover the excess heat to the benefit of adjacent installations.

CarbON can be operated up to a capacity of around 50 kg/h of feed with large wood chips, through a process known as "oxidative carbonization".

CarbON is a continuous process, in which the biomass is heated and maintained at the desired process conditions to produce a solid carbonaceous material that almost retain the shape and size of the original biomass.

# Work Packages



## OPERATIONAL GROUP MANAGEMENT

Project meetings, activities monitoring, activities reports, economic reporting



## ANIMATION, COMMUNICATION AND DISSEMINATION OF RESULTS

Web communication (website and Facebook page), 6 open events, 1 final event, activities with primary school, product promotion, participation at EIP-Agri events



## PROTOTYPE DEMONSTRATION PLANT FOR COAL PRODUCTION

Project, construction and test of the demonstration plant



## CARBON MARKET ANALYSIS

Market analysis, identification of market standard, research of potential buyers



## INCREASED MANAGED FOREST AREA

Study and test of innovative forest management contracts for the project area



## TRAINING

Training for forestry workers



[www.progettocarega.it](http://www.progettocarega.it)

[www.facebook.com/progettocarega](https://www.facebook.com/progettocarega)



# Work Packages



OPERATIONAL  
GROUP  
MANAGEMENT

€ 29,814.00



ANIMATION,  
COMMUNICATION  
AND  
DISSEMINATION OF  
RESULTS

€ 25,314.60



PROTOTYPE  
DEMONSTRATION  
PLANT FOR COAL  
PRODUCTION

€ 242,006.00



CARBON MARKET  
ANALYSIS

€ 29,917.95



INCREASED  
MANAGED FOREST  
AREA

€ 28,075.20



TRAINING

€ 12,400.00



**Tot**  
**€ 367,527.75**

**100% funded by Veneto Rural  
Development Programme**



# Project analysis

## HELPFUL

## HARMFUL

### INTERNAL ORIGIN

#### STRENGTHS

- › Presence of experienced partners
- › Carbonization technology already successfully tested on the Apennines
- › Relationships between partners already established
- › Project area with strong forest culture
- › Quality wood supply chain already activated

#### WEAKNESSES

- › Poor knowledge of the product “coal”
- › Poor interest of the population on forestry issues
- › High property fragmentation
- › Phitosanitary problems & hydrogeological instability
- › Small size of forestry enterprises

### EXTERNAL ORIGIN

#### OPPORTUNITIES

- › Presence of certified areas with sustainable forest management
- › New signals of dynamism of the supply chain
- › Rediscovery of the energy use of wood

#### THREATS

- › Some untransparent businesses put forestry enterprises in bad light
- › Competition of foreign products
- › Inadequate forest planning





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*Thank you!*



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