

## Residual biomass for energy, agronomy and breeding use

### Riferimenti

Tipo di progetto

Gruppo Operativo

Acronimo

RBR-EAS

Tematica

Energia rinnovabile

Information

Time frame

2017 - 2019

Durata

33 months

Partners (no.)

4

Regione

Emilia-Romagna

Comparto

Multifiliera

Localizzazione

ITH58 - Forlì-Cesena

Costo totale

€118.999,33

Fonte di finanziamento principale

Programma di sviluppo rurale

Programma di sviluppo rurale

2014IT06RD RP003: Italy - Rural Development

Programme (Regional) - Emilia Romagna

Parole chiave

Animal husbandry and welfare

Soil management / functionality

Agricultural production system

Sito web

<https://progetti.crpv.it/Home/ProjectDetail/34>

Project status

completed



### Objectives

The aim of the project is to evaluate the possibility of using different residual biomass with energy purposes (biofuel production), agricultural (production of fertilizer) and food (dietary supplement) as well as for the reduction of emissions of methane produced in the stable. The solution is the development of a technical system that allows on farm the realization of a solid carbonaceous product (Biochar) that can obtain a soil improver, biofuel, supplement for zootechnical use, both in the animal feed or as an additive in litter from cattle and poultry.

Partenariato

| Role    | Azienda                                                     | Address                                              | Telephone    | E-mail                  |
|---------|-------------------------------------------------------------|------------------------------------------------------|--------------|-------------------------|
| Leader  | CRPV Lab - Settore energia, ambiente e sviluppo sostenibile | Via Tebano 45<br>48018 Faenza RA<br>Italy            | 0546 47169   | rcanestrале@crpv.it     |
| Partner | Azienda Cesare Martini                                      | Via Pantano 70<br>47010 Galeata FC<br>Italy          | 339 232 6385 | rcanestrале@crpv.it     |
| Partner | CNR - Istituto di Biometeorologia<br>IBIMET (Firenze)       | Via Giovanni Caproni, 8<br>50145 Firenze FI<br>Italy | 055 3033711  | f.camilli@ibimet.cnr.it |
| Partner | FONDAGRI                                                    | Via Ravegnana 126<br>47122 Forlì FC<br>Italy         | 0547 313511  | fondagri@agrotecnici.it |

#### Pratiche abstract

##### Description

##### AGRICULTURAL INNOVATION

The agricultural benefits that may derive from the use of biochar in addition or not to animal deities are numerous. Through the planned and described agronomic tests, the benefits of the crop water balance (water reduction for irrigation and increased water resistance) will be revealed and disclosed, increased organic carbon content in the soil, reduction of leaching of nitrogenous nutrients .

##### ZOOTECNIC INNOVATION

The introduction of the biochar into the stable (in the animal diet and in the litterbox) has as its purpose the reduction of methane production (climber gas). Furthermore, thanks to the combined use of the biochar with the soil dampers, high environmental impacts will be valued and recycled, controlling the losses of N.

##### ENERGY INNOVATION

Energy innovation is given by the possibility of obtaining, through the use of a prototype roasting plant, a product with high calorific value and high energy density, but different types of biomass, especially those of lesser value such as the residuals of some processes forestry, urban greenery, agriculture and the agro-food sector.

#### Link utili

| Titolo/Descrizione    | Url                                                                                                         | Tipologia |
|-----------------------|-------------------------------------------------------------------------------------------------------------|-----------|
| Sito web del progetto | <a href="https://progetti.crpv.it/Home/ProjectDetail/34">https://progetti.crpv.it/Home/ProjectDetail/34</a> | Sito web  |

| Titolo/Descrizione                                                                                | Url                                                                                                                                                                                 | Tipologia       |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Articolo - Un alleato per combattere il cambiamento del clima - Ecoscienza 2-2020                 | <a href="https://progetti.crpv.it/File/DownloadFile/445?name=RBREASEcoscienza2020_02.pdf...">https://progetti.crpv.it/File/DownloadFile/445?name=RBREASEcoscienza2020_02.pdf...</a> | Materiali utili |
| Le nuove frontiere del biochar - Newsletter Fondazione Minoprio n. 6-2020                         | <a href="https://progetti.crpv.it/File/DownloadFile/444?name=RBREASnewsletter%20minoprio...">https://progetti.crpv.it/File/DownloadFile/444?name=RBREASnewsletter%20minoprio...</a> | Materiali utili |
| Biochar: soluzione sostenibile Fertilizzanti 2-2020                                               | <a href="https://progetti.crpv.it/File/DownloadFile/443?name=RBREASFERTILIZZANTI%202-202...">https://progetti.crpv.it/File/DownloadFile/443?name=RBREASFERTILIZZANTI%202-202...</a> | Materiali utili |
| Presentazioni Convegno finale Progetto RBR-EAS 11-12-2020 I parte                                 | <a href="https://progetti.crpv.it/File/DownloadFile/408?name=Atti%20convegno%20RBR%20EAS...">https://progetti.crpv.it/File/DownloadFile/408?name=Atti%20convegno%20RBR%20EAS...</a> | Materiali utili |
| Presentazioni Convegno finale Progetto RBR-EAS 11-12-2020 II parte                                | <a href="https://progetti.crpv.it/File/DownloadFile/409?name=Atti%20convegno%20RBR%20EAS...">https://progetti.crpv.it/File/DownloadFile/409?name=Atti%20convegno%20RBR%20EAS...</a> | Materiali utili |
| Video del progetto - Riutilizzo di biomasse residue per uso energetico, agronomico e in stalla    | <a href="https://www.youtube.com/watch?v=UU7E0sRXrfc%29">https://www.youtube.com/watch?v=UU7E0sRXrfc%29</a>                                                                         | Materiali utili |
| Video - Visita Applicazione di biochar in ambito agronomico e in stalla 17-11-2020 - Galeata (FC) | <a href="https://www.youtube.com/watch?v=eZIY8mlpa8w%29">https://www.youtube.com/watch?v=eZIY8mlpa8w%29</a>                                                                         | Materiali utili |
| Video Convegno finale Progetto RBR-EAS 11-12-2020                                                 | <a href="https://www.youtube.com/watch?v=DEgDqZZWJ-4%29">https://www.youtube.com/watch?v=DEgDqZZWJ-4%29</a>                                                                         | Materiali utili |

