Innovative pellets made of forest and/or agricultural biomass



INOPELET

Innovative pellets made of forest and/or agricultural biomass and wood residue to reduce dependence on fossil fuels and contribute to environmental protection through reduction of CO_2 emissions

The main goal of the project is to develop a pellet based on innovative pretreatments of forest and/or agricultural biomass and wood residue from veneer production that would meet the highest qualitative standards and be more energy efficient than pellets that can be found on the market today, and which could be used in heating systems of households and smaller public institutions. Pellets made from biomass, as the most favorable form of solid biofuels, are defined as a compressed cylindrical product with a high calorific value that, when used, provides autonomy similar to natural gas and heating oil. The raw materials that will be used in the project activities are forest biomass of lower quality classes (oak, ash and poplar), harvest residues of agricultural crops (corn, soybeans and sunflower) and wood residues from veneer production. Biomass pretreatment will produce pellets with a reduced content of mineral substances (ash), increased calorific value and better various physical and mechanical properties with the aim of achieving the highest market quality levels. Furthermore, with its improved high-energy properties, inopellets will reduce the mass and volume consumption of the necessary fuel during the heating season, which would consequently reduce transportation costs and the necessary storage space. In addition, the improved pellets would be more resistant to moisture, which would reduce the risk of quality loss and facilitate the conditions for its storage.

Più DETTAGLI

SFIDA RISOLTA

6. Far crescere bioeconomia foresta a base attraverso l'uso circolare e prodotti a valore aggiunto

DOMINIO

Ricerca e sviluppo

TIPO DI SOLUZIONE

Circolari, prodotti a base biologica

PAROLE CHIAVE

innovative; biomass; pretreatment; pellet

SOLUZIONE DIGITALE

No

INNOVAZIONE

Sì

PAESE D'ORIGINE

Croazia

SCALA DI APPLICAZIONE

Transfrontaliera / multilaterale

INIZIO E FINE ANNO

2020 -

CONTATTI

PROPRIETARIO O AUTORE

Bjelin Otok Ltd

Ines Baričević

ines.baricevic@bjelin.hr

https://www.bjelin.com/en/company

REPORTER

Competence Centre Ltd

Ivan Ambroš

ambros@cekom.hr

REFERENCES AND RESOURCES

SITO PRINCIPALE

https://www.bjelin.com/en/company

SITO WEB DEL PROGETTO

https://www.inopelet.hr/hr/

PROGETTO DI RIFERIMENTO

--

RISORSE

--

LOGO DELLE MIGLIORI PRATICHE

LOGO DELLA PRINCIPALE ORGANIZZAZIONE

BJELIN

PROGETTO NELL'AMBITO DEL QUALE QUESTA SCHEDA è STATA CREATA

Rosewood 4.0

DATA DI INSERIMENTO

24 Mar 2023

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

Centro de Servicios y Promoción Forestal y de su Industria de Castilla y León