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.

VEč PODROBNOSTI

IZZIV

6. Napredek krožnega bio-gospodarstva na podlagi dodane vrednosti gozdnih proizvodov

DOMENA

Raziskave in razvoj

TIP REŠITVE

Bio-osnovani izdelki

KLJUČNE BESEDE

innovative; biomass; pretreatment; pellet

DIGITALNE REŠITVE

No

INOVACIJA

Da

IZVORNA DRŽAVA

Hrvaška

OBSEG UPORABE

Čezmejni / Transnacionalni

ZAČETNO IN KONČNO LETO

2020 -

KONTAKTN PODATKI

LASTNIK OZ. AVTOR

Bjelin Otok Ltd

Ines Baričević

ines.baricevic@bjelin.hr

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

POROČEVALEC

Competence Centre Ltd

Ivan Ambroš

ambros@cekom.hr

REFERENCES AND RESOURCES

SPLETNA STRAN

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

SPLETNA STRAN PROJEKTA

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

REFERENCA PROJEKTA

--

VIRI

--

LOGOTIP DOBRE PRAKSE

LOGOTIP GLAVNE ORGANIZACIJE

BJELIN

PROJEKT, V OKVIRU KATEREGA SO BILI ZBRANI OSNOVNI PODATKI

Rosewood 4.0

DATUM OBJAVE

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