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.

MAIS DETALHES

DESAFIO ABORDADO

6. Fomentar a bioeconomia baseada na floresta através do uso circular e de produtos de valor acrescentado

DOMíNIO

Investigação e desenvilvimento

TIPO DE SOLUçãO

Produtos biodegradáveis e reutilizaveis

PALAVRAS-CHAVE

innovative; biomass; pretreatment; pellet

SOLUçãO DIGITAL

Não

INOVAçãO

Sim

PAíS DE ORIGEM

Croácia

ESCALA DE APLICAçãO

Além fronteiras/ multilateral

ANO DE INíCIO E FIM

2020 -

DADOS DE CONTACTO

PROPRIETáRIO OU AUTOR

Bjelin Otok Ltd

Ines Baričević

ines.baricevic@bjelin.hr

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

REPóRTER

Competence Centre Ltd

Ivan Ambroš

ambros@cekom.hr

REFERENCES AND RESOURCES

WEBSITE PRINCIPAL

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

WEBSITE DO PROJETO

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

REFERêNCIA AO PROJETO

--

RECURSOS

--

LOGOTIPO DA BOA PRáTICA

LOGOTIPO DA ORGANIZAçãO PRINCIPAL

BJELIN

PROJETO NO âMBITO DO QUAL A FOLHA DE DIVULGAçãO FOI CRIADA

Rosewood 4.0

DATA DE ENTRADA

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