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.

MáS DETALLES

RETO ABORDADO

6. Hacer crecer la bioeconomía forestal mediante el uso circular y los productos de valor añadido

DOMINIO

Investigación y desarrollo

TIPO DE SOLUCIóN

Productos circulares y de base biológica

PALABRAS CLAVE

innovative; biomass; pretreatment; pellet

SOLUCIóN DIGITAL

No

INNOVACIóN

Si

PAíS DE ORIGEN

Croacia

ESCALA DE APLICACIóN

Transfronterizo/multilateral

AñO DE INICIO Y FIN

2020 -

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SITIO WEB PRINCIPAL

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

SITIO WEB DEL PROYECTO

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

REFERENCIA DEL PROYECTO

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RECURSOS

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LOGO DE LA BUENA PRáCTICA

LOGOTIPO DE LA ORGANIZACIóN PRINCIPAL

BJELIN

PROYECTO BAJO EL QUE SE HA CREADO ESTA FICHA

Rosewood 4.0

FECHA DE MENSAJE

24 Mar 2023

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

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