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.

Детальніше

Виклик вирішено

6. Розвиток лісової біоекономіки за рахунок кругового використання та виробництва з доданою вартості

Домен

Дослідження й розробки

Тип рішення

Циркулярна, біо-продукція

Ключові слова

innovative; biomass; pretreatment; pellet

Цифрові рішення

ні

Інновація

Так

Країна походження

Хорватія

Масштаби застосування

Транскордонний / багатосторонній

Початок і кінець року

2020 -

Контактні дані

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REFERENCES AND RESOURCES

Основний веб-сайт

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

Веб-сайт проекту

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

Посилання на проект

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Ресурси

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логотип кращої практики

логотип основної організації

BJELIN

Краща практика розроблена в рамках проекту

Rosewood 4.0

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24 бер 2023

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