Thermovoltaic Biomass Dryer

BASE has developed Cogen'Air, the first Thermovoltaic solar panel, capable of producing electricity and heat simultaneously. While a conventional solar panel converts only about 15 to 20% of the solar energy received into electricity, Cogen'Air produces 10% more electricity and 3 times more heat, for a total efficiency of more than 60%. This Thermovoltaic panel is therefore 4 times more efficient than a conventional solar panel. BASE designs and markets heat and electricity production solutions for agricultural drying activities and biomass drying activities. It also markets solutions for the energy efficiency of buildings: heating support, electricity and domestic hot water production. The main objectives are: - Provide innovative and cost-effective solar solutions to contribute to a sustainable society. - Guarantee a drying quality superior to that of open-air drying and allow the production of a fuel with constant characteristics specific to the needs of boilers. - Improve the value of wood by preserving the resource in particular. - Reduce stocks and the mass to be transported. - Achieve a higher PCI, reduce wood consumption, increase boiler life - Generate income from photovoltaic production. The dryers designed with Cogen'Air Thermovoltaic technology ensure a homogeneous and fast drying of the wood energy. The control system allows the dryer to operate optimally, based on numerous temperature and humidity sensors. These dryers make it possible to recycle wood waste and give it a second life. One of the BASE dryers is intended, for example, for the recovery and drying of crushed strains, dry chips that will then be marketed in supermarkets as firelighters. This product from the Cogen'Air drying process has a high PCI and is ideal for boilers. The electricity is resold and provides additional income to the operator.

DETTAGLI

ORIGINE DEL LEGNO

lavoro Deconstruction

TIPO DI LEGNO

Fusto

TIPO DI LEGNO IN QUESTIONE

Woody biomass, waste

IMPATTO SULL'AMBIENTE E LA BIODIVERSITà

No impact: solar panels are installed at the wood energy processing site

EFFETTO SUL REDDITO

Reduction of logistics costs

POTENZIALE DI SFRUTTAMENTO

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HUB

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IMPATTO ECONOMICO

Additional income from photovoltaic energy production

CONOSCENZE SPECIFICHE NECESSARIE

NA

POTENZIALE DI MOBILITAZIONE

Technological innovation to increase the profitability of wood energy

POTENZIALE SOSTENIBILITà - VALORE

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FACILITà DI IMPLEMENTAZIONE

Easy

FACILITà DI IMPLEMENTAZIONE - VALUTAZIONE

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PREREQUISITI CHIAVE

NA

TIPO DI EVENTO IN CUI QUESTO BPI è STATO PRESENTATO

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EFFETTO SUL LAVORO

NA

I COSTI DI ATTUAZIONE (EURO - €)

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Più DETTAGLI

SFIDA RISOLTA

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DOMINIO

La raccolta, le infrastrutture, la logistica

TIPO DI SOLUZIONE

--

PAROLE CHIAVE

--

SOLUZIONE DIGITALE

No

INNOVAZIONE

Sì

PAESE D'ORIGINE

Francia

SCALA DI APPLICAZIONE

Regionale / sub-nazionale

INIZIO E FINE ANNO

2009 -

CONTATTI

PROPRIETARIO O AUTORE

REPORTER

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REFERENCES AND RESOURCES

SITO PRINCIPALE

http://www.base-innovation.com

RISORSE

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SITO WEB DEL PROGETTO

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PROGETTO DI RIFERIMENTO

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PROGETTO NELL'AMBITO DEL QUALE QUESTA SCHEDA è STATA CREATA

Rosewood

DATA DI INSERIMENTO

27 Set 2019

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

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