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.

DéTAILS

ORIGINE DU BOIS
Travail de démolition

TYPE DE BOIS
Grume

TYPE DE BOIS CONCERNé
Woody biomass, waste

IMPACT SUR L'ENVIRONNEMENT ET LA BIODIVERSITé
No impact: solar panels are installed at the wood energy processing site

EFFET SUR LE REVENU
Reduction of logistics costs

POTENTIEL D'EXPLOITATION
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HUB
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IMPACT éCONOMIQUE
Additional income from photovoltaic energy production

CONNAISSANCES SPéCIFIQUES REQUISES
NA

POTENTIEL DE MOBILISATION
Technological innovation to increase the profitability of wood energy

POTENTIEL DE DURABILITé - VALEUR
--

FACILITé D'IMPLéMENTATION
Easy

FACILITé D'IMPLéMENTATION - ÉVALUATION
--

PRéREQUIS CLéS
NA

TYPE D'éVéNEMENT Où CETTE ICPE A éTé PRéSENTéE
--

EFFET SUR L'EMPLOI
NA

COûTS D'IMPLéMENTATION (EURO - €)
--

PLUS DE DéTAILS

DéFI CONCERNé

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DOMAINE

Récolte, infrastructure, logistique

TYPE DE SOLUTION

--

MOTS-CLéS

--

SOLUTION DIGITALE

Non

INNOVATION

Oui

PAYS D'ORIGINE

France

ECHELLE D'APPLICATION

Régionale/subnationale

DéBUT ET FIN D'ANNéE

2009 -

INFORMATIONS DE CONTACT

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RAPPORTEUR

REFERENCES AND RESOURCES

SITE WEB PRINCIPAL

http://www.base-innovation.com

SITE WEB DU PROJET

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RéFéRENCE DU PROJET

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RESSOURCES

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PROJET SOUS LEQUEL CETTE FICHE D'INFORMATION A éTé CRééE

Rosewood

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