

# 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.

## DETALHES

---

### ORIGEM DA MADEIRA

Trabalhos de desconstrução

### TIPO DE MADEIRA

Tronco

### TIPO DE MADEIRA EM CAUSA

Woody biomass, waste

### IMPACTE NO AMBIENTE E BIODIVERSIDADE

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

### IMPACTE NAS RECEITAS

Reduction of logistics costs

### POTENCIAL DE EXPLORAÇÃO

--

### HUB

--

### IMPACTE ECONOMICO

Additional income from photovoltaic energy production

### CONHECIMENTOS ESPECIFICOS NECESSÁRIOS

NA

### POTENCIAL DE MOBILIZAÇÃO

Technological innovation to increase the profitability of wood energy

### SUSTENTABILIDADE POTENCIAL - VALOR

--

### FACILIDADE DE IMPLEMENTAÇÃO

Easy

### FACILIDADE DE IMPLEMENTAÇÃO

--

### PRE-REQUISITOS CHAVE

NA

### TIPO DE EVENTO EM QUE ESTE BPI TEM SIDO APRESENTADO

--

### IMPACTE NO EMPREGO

NA

### CUSTOS DE IMPLEMENTAÇÃO (EURO - EUR)

--

## MAIS DETALHES

---

### DESAFIO ABORDADO

--

### DOMÍNIO

Cortes, infraestruturas e logística

### TIPO DE SOLUÇÃO

--

### PALAVRAS-CHAVE

--

### SOLUÇÃO DIGITAL

Não

### INOVAÇÃO

Sim

### PAÍS DE ORIGEM

França

### ESCALA DE APLICAÇÃO

Regional/ sub-nacional

### ANO DE INÍCIO E FIM

2009 -

## DADOS DE CONTACTO

---

### PROPRIETÁRIO OU AUTOR

### REPÓRTER

[veronique.oulha@base-innovation.com](mailto:veronique.oulha@base-innovation.com)

## REFERENCES AND RESOURCES

---

### WEBSITE PRINCIPAL

<http://www.base-innovation.com>

### RECURSOS

--

### WEBSITE DO PROJETO

--

### REFERÊNCIA AO PROJETO

--

---

PROJETO NO ÂMBITO DO QUAL A FOLHA DE DIVULGAÇÃO FOI CRIADA

Rosewood

DATA DE ENTRADA

27 Set 2019

---



Link to Rosewood 4.0



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



□