

SELECTED BEST PRACTICES CASE STUDY

1. GENERAL INFORMATION

- a. **Case Study name:** BASE INNOVATION
- b. **Location:** 35 rue Thomas Edison – 33610 CANEJAN
- c. **Priority issue:** Logistics

2. CONTACT INFORMATION

- a. **Name:** Véronique Oulha
- b. **Charge:** director of development
- c. **Email:** veronique.oulha@base-innovation.com

3. CONTENT: Information gathering and analysis

a. **Type of practice:**

Extraction

Transformation

Demand

b. **Position in the value chain:** it concerns the drying of the fuel

c. **Structure:**

- o **Size of the company:** about twenty employees
- o **Existence of other business lines:** the company is positioned on the manufacture of solar panels
- o **Required investment:** according to drying needs
- o **Funding sources:**
- o **Task Force:** Base is a private company that sells panels and carries out studies.
- o **Actors involved:** The company and its customers (communities, private companies that manage the storage / drying platforms).

d. **Field of:**

Disadvantaged groups integration

Entrepreneurship and company start up

- Social responsibility of the company**
- R&D Research**
- Equal opportunities between women and men**
- Others:**

e. Implemented business model:

- **Idea / business opportunity:** To guarantee a superior drying quality than open-air drying, thanks to innovative solar solutions allowing the production of a fuel with constant characteristics and adapted to the needs of the boilers. Improve the profitability of Wood energy. Reduce storage as well as weight of the fuel and therefore the transportation costs. To achieve higher calorific value, to reduce wood consumption, to increase boiler lifespan and to generate revenue through photovoltaic production.
- **Marketing model :** Sales to individuals or professionals, service delivery (studies)
- **Costumers profile :** individuals and professionals / communities

f. Economic impact: Cogen'Air panels increase the profitability of dryers and thus reduce the drying cost of biomass to make it more competitive.

g. Degree of innovation:

- **In products or services: Innovative products or services (they do not exist yet).** The company has developed Cogen'Air, the first solar panel thermo voltaic, capable of simultaneously producing electricity and heat. This makes it possible to significantly optimize the drying of biomass on storage platforms.
- **In products or services: Improved products or services.**
- **In organization methods.**
- **In marketing and commercialization.**

4. RESULTS

- a. **Effectiveness or degree of compliance of the objectives:** Very effective
- b. **Effectiveness or degree of compliance in relation to used resources.** Results achieved
- c. **Scope or extinction of the influence of the practice.** The practice has influenced: the profitability of biomass and boilers, which it has allowed to increase.

- d. Efficiency rate:** Very effective: While a conventional solar panel only transforms about 15 to 20% of the solar energy received into electricity, Cogen'Air produces 10% more electricity and 3 times more heat, or a total return of more than 60%. This thermo voltaic panel is therefore 4 times more efficient than a conventional solar panel.
- e. Degree of sustainability:** Very sustainable: the installation of Cogen'Air panels optimizes drying thanks to solar energy which is a 100% renewable energy and thus improves significantly the environmental impact of fuel drying. Moreover a well dried fuel will also optimize the efficiency of the boilers.
- f. Transferability:** Easily transferable. Cogen'Air panels can be installed on almost any fuel drying unit, as long as the amount of fuel to be dried is sufficient. An economic study should be done beforehand to make sure. BASE has already completed more than 20 agricultural or industrial driers. It benefits from a know-how recognized at the national level in the drying applications of agricultural materials (grass and cereals), industrial (wood, biomass...) and waste (green waste, sludge ...).
- g. Products:** a dry fuel with constant characteristics and adapted to the needs of boilers, with a higher calorific value.

5. CONCLUSIONS

a. Impact and utility of the best practice

By optimizing the drying of the fuel, it increases the profitability of the biomass boilers and makes them more competitive compared to other energies.

b. Main lessons learned

Fuel drying is an important step in the value chain, optimizing this step can make biomass more competitive.