

## Carnot institutes network

Research and innovation for industry

Partnership with Energies du futur - Leti Carnot Institutes- Bubendorff

# 2 Carnot Institutes work together on consumer-oriented product development

ndustry leader of built-in motorised blinds Bubendorff markets devices designed to automate with no auxiliary voltage supply, even when installed north!

### **Supporting Innovation**

The 'ID2 Autonome' controlled blind automated system comes complete with a blind, batteries and remote control pack offering outstanding energy savings thanks to a 100% solar return.

To ensure consistent system performance even with poor solar insolation a systematic methodology for efficient-energy use was approached so as to optimise a specified set of energy expenses (stand-by mode, radio contact between the blind and the remote control, the blind motor system...). The selection of the appropriate battery type has been decisive to meeting the French manufacturer's Seal of Approval and 7-year warranty. The products have been available to consumers since 2012 and help the company keep its number one position in the French market.



#### The client needs

The small, family-run Alsace-based Bubendorff enterprise has been specialising in the manufacture of roller shutters since 1959. While constantly striving to improve competitiveness, the manufacturer keeps investing substantially in research and development through logistical proficiency and innovative solutions to help each of their clients reduce their environmental impact. It is on this basis that Bubendorff approached and started discussions with LITEN, a section of the "Energies du futur" Carnot Institute, prompting the idea of a useable solar powered blind motorised system to suit one's new or soon-to-be-renovated building/house whatever the light exposure. This requirement means increased efficiency, and optimisation of the entire energy system.

### Partnership

The **"Energies du futur" Carnot Institute** has determined the high-performance battery complying with optimized charging and discharging parameter assessment. **The Leti\*, Carnot Institute**, enables significant gains in energy efficiency by dividing total radio communication consumption by 100, compared to the earlier generations of radio system. Such co-operation with Bubendorff has resulted in the launching of a comprehensive range of sustainable blinds whose energy-efficiency is enhanced when they are controlled according the ratio amount of sunshine / temperature.

\* Research institute for electronics and information technologies

