

## Dynamic Solar Illumination of the Pepite

© 3518 Last modified by the author on 19/06/2019 - 18:55



**Year of commitment :** 2018

**Address 1 - street :** 59370 MONS-EN-BARœUL, France

**Green energies :** Photovoltaic solar

**Digital services :** Other



100 000 €

**Builder**  
COLDEFY AND ASSOCIATES URBAN  
ARCHITECTS

### GENERAL INFORMATION

Pepite ... First Dynamic Solar Illumination Project in the World in Mons-en-Barœul in The Hauts-de-France!

An iconic 45-unit building, the Pepite takes its name from the remarkable geographical location on which it is located. At the heart of the eco-district of Mons-en-Barœul (59), the building is fully in line with the urban renewal plan and has become one of its symbols. First intervention of diversification and enhancement of housing supply of the northern city, this iconic achievement imposes itself thanks to its elegant architectural treatment, geometric and dynamic.

Combining concrete structure and metal trellis, The Pepite - which radiates naturally during the day - had to be magnified - in all subtlety and sobriety - at night. The city has therefore launched a call for projects and the agency Noctiluca was chosen for the lighting design of this pearl of the North.

"The light design was done in two stages. A first phase of studies was carried out so that to be approved by the project management, rather

hesitant at the beginning of the project then totally motivated. And in a second impulse, the most appropriate lighting proposal - which turned out to be a 100% solar solution - with Nowatt Lighting's E. Onyx Power product reference on West and South façades, "says Rozenn Le Couillard, founder of Noctiluca.

Strict specifications

No apparent technical element, a lighting perfectly integrated into the architectural design or almost invisible ... these were the watchwords expressed by both the contracting authority and the project management. This, while sublimating the metal mesh, preserving the comfort of the inhabitants and without disturbing the urban environment.

Nowatt Power Onyx Power's 70 elements from Nowatt Lighting are installed - discreetly - on the two façades offering the most visibility - to the building - from the surrounding landscapes.

"By day, natural light ripples on the building. My wish was to succeed in transcribing - at night - this evolution, to transpose the purity of this new building - to the architectural identity very marked - by a lighting that lives in the continuity. The solar lighting Nowatt Lighting resonates with the observed movement of day, it reproduces at night its undulations while densifying them at the corners of the Pepite"note Rozenn Le Couillard, lighting designer, founder of Noctiluca.

The charge in solar energy - restored at night - is a tribute to the heavenly light and the natural light cycle is replayed ... Warm white and cold white evolve at the gentle pace of the 70 elements E. Onyx Power varying intensity in 1 hour.

Solar lighting Nowatt Lighting - implemented on the buttresses with necklaces - reveals the architecture of the void and the double openwork skin sheltering multiple balconies. "The intensive optics for precisely directing the luminous flux as well as the orientation of the LED projectors are - here - essential in order to preserve the night and the sleep of the residents" underlines the lighting designer.

Adjustable LED spotlights: 3 ° optics - dimming from 0 to 700 mA - variation of white shades from 2.700 ° to 5.700 ° K.

A delicate mission

Lighting a residential facade is a challenge ... you have to be visible from the outside without creating nuisance inside!

To realize a project of solar illumination in a city displaying 3 days of sunshine a month in winter ... it is necessary to be a light of the lighting, to know a ray on solar and to believe in its strength of conviction in order to counter all the prejudices!

This challenge, Rozenn Le Couillard raised it hands down relying on a smart product - manufactured by a French company - whose "power of light rendering is impressive" launches the one that castigates "excessive anthropocentrism" and the fact that "we are the only species to want to prolong the day indefinitely and this, to the detriment of nature and our environment! "

Gradation according to the seasons

In any season and at any time of the day or night, the Pepite dialogue - today - with the city. His autonomous solar illumination is revealed as a first successful experience for Mons-en-Barœul. It breathes new life into the city and echoes the eco-responsible urban context. "More than 300 KWh will be saved per year," says Jacques Gouteyron, president of Nowatt Lighting. Autonomous energy, the Nugget is lit 6h in winter and 3h in summer. Programming is via Bluetooth.

## Data Reliability

Self-declared

## Sustainable Development

Attractiveness :

Well Being :

Each projector has an anti-glare device so as not to disturb the tenants at night. They are completely white not to be seen.

Social Cohesion :

Preservation / Environmental Improvement :

Resilience :

Responsible use of resources :

## Testimony / Feedback

*"The light of day, the waves of natural light on the building My wish was to transcribe the night this evolution, to transpose the purity of this new building to the architectural identity very marked by a living illumination in the continuity. Nowatt Lighting's solar lighting resonates with the observed movement of the day, reproducing the wrinkles at night while densifying them at the nugget's sharp corners, "notes Rozenn.*

## Governance

City of Mons en Barœul

Holder Type : Local Authority

COLDEFY AND ASSOCIATES URBAN ARCHITECTS

Builder Type : Other

Agence Noctiluca was in charge of the lighting design.

## Sustainable Solutions

### E. ONYX POWER

Description :

Nowatt E. Onyx power is intelligent lighting that varies the intensity of light according to the environment, latitude, seasons and weather conditions.

- Standalone Solar Power Unit Lumteam 5 ° 4W Projectors (White Dynamic) 8-Wire IP 67 Connection Cable
- Bluetooth connected
- App available on the Play Store
- SunPower solar cells with rear contact
- Battery LiFePo4 20 Ah 3.2 V
- Structure in molded polyurethane - powder coated finish
- Fixing: 2 M6 inserts for suspension device
  
- Renewable energies
- Urban Lighting



Company (es) Website :

Company (es) Website :

### Photo credit

Jacques Gouteyron

## Contest

Building candidate in the category



Grand Prix Infrastructure Durable



Prix du public

