



## ÉNERGIE-CITÉS SITE VISITS, FRIDAY 24th APRIL 2009 from 2.30 p.m .to 5 p.m..

*Please enrol as soon as possible as admission is limited.*

### 1/ GREEN CIRCUIT: INTEGRATION BY THE BUILDING INDUSTRY OF GREEN ENERGY PRODUCTION IN URBAN ENVIRONMENTS

As conventional sources of energy – oil, coal – become scarcer and as an awareness of their impact on the environment grows, the future for the production of decentralized renewable energy in urban areas becomes increasingly promising. The future is all the more positive as there are considerable potential resources in towns and cities: e.g.: thousands of square meters of roof surfaces available for solar installations.



#### Résidence La Sauvenière

For the 600 residents of this condominium, environmental awareness was triggered by the combination of energy price rises and the realization that large potential energy consumption reductions were possible by means of centralized heat production systems. The administrators of this block of 350 flats therefore proposed to install ambitious environmental systems including the simultaneous production of heat and electricity from colza oil and thermal solar panels have resulted in big annual energy savings.

#### Comptoir Caméléon - Ariane

Caméléon plans to have a new type of department store built with works starting in Spring 2009: the project involves the construction of a building of +/- 17,500m<sup>2</sup> to house a specialist supermarket, a neighbourhood creche and concierge service. The complex falls within a rationale of explicit sustainable development. Indeed, the project will offer an extensive natural lighting system, a high degree of insulation, materials with a low ecological footprint, natural cooling and ventilation of buildings and car parks, a solar installation (thermal and photovoltaic) and even a wind energy unit.



### 2/ BLUE CIRCUIT: ENHANCED ENERGY PERFORMANCE FOR BUILDINGS COMPATIBLE WITH HERITAGE CONSERVATION



Confronted with energy and environment challenges, the compatibility of sustainable development with heritage conservation becomes absolutely essential. Especially as European cities are characterized by a relatively high building density, equally applicable to our cultural heritage. Initiatives taking up that challenge are becoming increasingly numerous in the Brussels region.

#### Oréal Building flats

In the heart of the historic neighbourhood of Béguinage, in the centre of Brussels, a remarkable renovation-reconversion project is

unfolding: that of the former Oréal office block. Converted into accommodation units, the walls of this well built neoclassical structure have been thoroughly insulated while respecting the historic aspect of the building and neighbourhood.

### Art Déco private residence

The Brussels heritage also includes the thirties. The renovation of Art Déco and its re-use as offices and homes prove that low energy renovations incorporating eco-building criteria for the selection of materials can be seriously considered and are in keeping with the conservation of remarkable heritage buildings. Indeed, a double flow ventilation system was installed without having to change the wooden panels and inlaid marble which are the essential features of the inside wall claddings.



## 3/ RED CIRCUIT: APPLICATION OF A PASSIVE HOUSE HEATING STANDARD

The way any passive structure is designed must be aligned to the absolute minimum of annual heating requirements. The standard is attracting increasing interest mainly in the context of peri-urban residential developments. Even though passive house heating is a relatively new concept, some very good projects are unfolding in Brussels making use of urban density and applying the standard to office buildings.



### Wauters homes

This building, comprising two semi-detached two-floor homes, goes far beyond passive standards by integrating a fan unit linked to a "pit", triple glazing frames, by the great care that is taken in the choice of sustainable materials, by the permeabilization of the inside of the complex with a garden, formerly a car park, and by the recovery of rainwater.

### Blaton Builders' Head Office

Since April 2007, Blaton Builders' head office has become a shop window for passive office developments. It must be said that the Belgian entrepreneur was the first to try out the system in the Brussels Capital-Region thus demonstrating to the building sector that home-functioning techniques can be applied to offices: 9 kWh/m<sup>2</sup> / annum for heating needs, 0.4 Vol/hr for air renewal.



### Aéropolis II office block

Presently under construction, Aéropolis II should become in late 2009 the largest sustainable office complex in Brussels. With its announced low price per sq meter (only 2 to 4% more than for a conventional building), the project shows that over and beyond any militancy, passive building can now forge its way ahead in the market.

Organised on the initiative of Brussels-Environment

