



SBuilding Challenge

Competition Rules, v. 02-2017

Overview

The CommONEnergy Sustainable Building Challenge is a competition for renovated high performance shopping centres organised in the context of the FP7 European project CommONEnergy. The objective of the competition is to identify and award the European best practices for retrofitted shopping centres to provide examples useful for future renovations, targeted to improve the sustainability of retail buildings.

The SBChallenge competition is managed by iiSBE, the International Initiative for a Sustainable Built Environment, through its European chapter iiSBE Italia. iiSBE organised similar events since 1998 in the context of the Sustainable Building world conferences co-hosted with UNEP, CIB and FIDIC. The competition will be supported by CESBA (Common European Sustainable Built Environment Assessment), the European initiative for the harmonization of building assessment systems in Europe.

The SBChallenge competition

The CommONEnergy SBChallenge will award the two most sustainable and energy efficient buildings as **Best Sustainable Shopping Centres**. The competition is addressed to recently renovated shopping centres, assessed with a recognised sustainability protocol. The competition is articulated in two categories:

- Iper: buildings with a gross area > 5.000 m²
- Super: buildings with a gross area between 500 m² and 5.000 m²

How to participate

To enter the shopping centre in the competition, it is requested to fill out the SB-Challenge Project Datasheet. The Project Datasheet includes the CommONEnergy Performance Card. This describes the building's performance with regards to 6 Key Performance Indicators (KPIs). The indicators have been selected from the CESBA European KPIs (European Passport).

All participants have to provide the Performance Card assessing the value of the 6 KPIs on the base of the building's actual (and/or simulated) performance. The Performance Card will allow to compare the performances achieved by the shopping centres participating to the competition.

The baseline information required in the Project Datasheet is:

- Names of owner, developer and principal design team members;
- Type of Shopping Centre;
- City and country location;
- Heating degree-days and cooling degree-days;
- Gross area above ground, m²;
- Gross area including below-ground area, m²;
- Number of stories above ground;
- Estimated population during normal operating conditions;
- Description of the building (including shell and technical installations);
- Description of refurbishment measures (focusing on strategies for building's sustainability and energy efficiency);
- Assessment report (attached file);
- Functional pattern (attached file);
- Building layout (attached file).

The SBChallenge Key Performance Indicators are:

1. Non-renewable primary energy for all operating end uses, before and after refurbishment [MJ/m² ua per year];
2. Global Warming Potential from delivered energy for all operating end uses, before and after refurbishment [kg CO₂-EQ/m² ua per year];
3. Total weight of materials in the project [kg/m² ua];
4. Annual potable water consumption for all uses [m³/m² ua per year];
5. Indoor CO₂ concentration under normal operating conditions [ppm];
6. Solid Waste collected for separate disposal (% on weight)

*Note: **ua** is the net useable area (i.e. exclude: ext. walls, vertical structure, ducts, corridors, exit stairs, balconies, elevators etc.)*

Practical information

- All requested information (baseline and KPI) is provided through the Datasheet;
- The Datasheet includes instructions for KPI calculation and provides the automatic assessment of PEnr and GWP;
- If both actual and simulated data are available, please provide the Datasheet twice, once for each information set;
- The Assessment Report shall summarise in a few pages the performances evaluated by the assessment system used and the results. Any existing such document can be submitted;
- Submission deadline: 30 April 2017;
- Submit your Datasheet and Assessment Report as attachments via email to sbchallenge@iisbeitalia.org

Award

The SBChallenge Jury will identify the Top 10 shopping centres and will indicate the winner for each of the two categories by May 2017.

The award ceremony will take place in Brussels on the 7th September 2017, in a high profile event attended by key stakeholders at European level.

The two winners will be presented through the projection of electronic presentations and posters in a dedicated session held at WSBE17 Hong Kong. A publication about the award will also be prepared and disseminated in Europe.

All information submitted will remain the property of the proponent, but the proponent(s) will have to agree upon submission for CommONEnergy SBChallenge organizers to make subsequent non-commercial use of the information on the CommONEnergy websites and the award publication.

Selection criteria for the award

- Recently renovated shopping centres with a gross area over 500 m²;
- Provision of a fully compiled Project Datasheet and Sustainability Assessment Report based on a recognised sustainability assessment system;
- The buildings' selection will be based on the performance (KPIs and assessment results) achieved, the innovation of the retrofit solutions and strategies, the architectural quality, the quality of the refurbishment process (e.g. adoption of integrated design);
- The selection will also be based on the replication potential of the implemented renovation solutions;
- Preference will be given to projects with operating data under occupied conditions for a minimum period of three years.

Questions?

For clarifications about the process, or support on providing the requested data and information, contact us at sbchallenge@iisbeitalia.org