



Green Solutions Awards 2018

Rules

Conditions to apply

- All the users with a registered Construction21 account are allowed to participate
- The case studies entering the contest must present high energy and environmental performance and provide innovation in the construction/city sector in terms of sustainable development and fight against climate change
- The presented buildings, eco-districts, infrastructures and their solutions should be reproducible in other places.
- In the case studies entering the contest:
 - All the mandatory fields must be filled in
 - The choice of the category in which you compete must be justified in the field provided for this purpose
 - All the fields specific to the chosen category for the candidacy (cf here-below) must be filled in.
 - A project may apply in different categories (except for buildings in France. Because of the high number of applicants, each building should apply in one category and only one).
 - For buildings and infrastructures, projects apply only for thematic categories. The Grand Prizes will be attributed on the decision of the jury only, to outstanding projects.
- The winners/mentions of former editions are not allowed to participate.
- All types of buildings, new or refurbished, may enter the contest if they are delivered between 1st of January 2013 and 30th of June 2018.
- All types of eco-districts but also eco-student campus, business areas, hospitals... may participate if at least a part of the project is delivered by 30th of June 2018.
- All infrastructures may enter the contest if they are delivered between 1st of January 2013 and 30th of June 2018.
- Solutions, buildings and districts participating in the Contest, and any item mentioned in the case study, must be able to be filmed on site in case of winning candidacy
- If the information on the case studies are incorrect or false, the organizer reserves the right to downgrade the originally nominees.
- The jury may decide not to award any prize for one category in case of insufficient quality of the applicants.
- If one of the here-above conditions is not fulfilled, the organizer reserves the right to cancel the participation of the related candidate.

Main steps of the Green Solutions Awards 2018:

- 15th of March 2018: Opening of registrations & Opening Sessions at MIPIM in Cannes
- 8th of June: Closing of applications
- June 15th to September 1st : online votes
- September: Announcement of the national winners
- December: Winners ceremony during the COP24 / Katowice, Poland

Evaluation criteria

The jury will evaluate the applicants according to the global amount and quality of the information provided and, more specifically, to the following criteria:

- **Sustainability** : do the project and its performances take environmental and social factors in consideration, in regard of sustainable development? Do they favour adaptation to climate change?
- **Replicability**: how easy is it to replicate the solutions implemented in this realisation (process, technology)? Does this project open new trends, new ways of building/developing cities or infrastructures?
- **Cost**: was this realisation done at a very expensive cost or at the standard cost of the market?
- **Innovation**: something in this realization (a solution, the global approach a combination of solutions...) is really new and innovative.

Mandatory fields for BUILDING categories

Building

- Project description
- Label/Certification (if any)
- Owner approach of sustainability
- Architectural description
- Primary energy needs
- HVAC systems
- Urban environment
- At least one solution

Mandatory fields by category

For each category, some specific fields have to be filled in. If not, Construction21 reserves the right to cancel the application of this building.

For numeric fields, no minimal performance is required. But the jury will appreciate the quality of each applicant in respect of the category criteria and the « ways » provided for demonstrating the information (REAL metered data, third party certification...).



Energy & Temperate climates

The buildings competing in this category are located in temperate or cold climates, where a winter heating is required.

The case studies in this category should combine Zero Energy Building Performance (as provided by the [European EPBD](#), "A building whose energy consumption is almost zero is a building that has a very high energy performance. The nearly zero or very low energy required should be covered to a very large measurement of energy produced from renewable sources, on-site or nearby ") and optimal use of renewable energy (through evaluation of installed

systems, the amount of energy produced, the level of innovation systems, efficiency and benefits for the users), and the presence of vegetation to regulate temperature. Europe is entirely included in this category.

Mandatory fields on this category

- Energy consumption in final use
- Renewable energy annual production
- Distribution of energetic consumptions
- Systems energy efficiency
- Air tightness and used indicator
- Greenhouse Gas Emissions
- Heating systems
- Hot water systems
- Cooling systems
- Ventilation Systems
- Renewable energy Systems

Non-mandatory fields, but taken in account by the jury

- Real final energy consumption/per year + Reference year
- More information about real consumptions and performances
- Greenhouse gas emissions in use
- Cost of renewable energies
- Additional information on the building envelope and renewable energies



Energy & Hot Climates

The buildings in competition are located in hot, tropical or arid climates, where the challenge is keeping buildings cool despite high outdoor temperature.

The case studies in this category must combine Zero Energy performance of buildings (as provided by the European EPBD "A building whose energy consumption is almost zero is a building that has a very high energy performance. The amount almost zero or very low energy required should be covered to a large extent by energy produced from renewable sources, on-site or nearby"). Particular attention will be paid to the bioclimatic quality of the buildings and the use of robust, low cost and easily reproducible solutions, as well as the presence of vegetation to regulate temperature.

Mandatory fields on this category

- Energy consumption in final use
- Renewable energy annual production (% of the needs of the building)
- Distribution of energetic consumptions
- Systems energetic efficiency
- Additional information on the building envelope and renewable energies
- Air tightness and used indicator
- Greenhouse Gas Emissions
- Heating systems
- Hot water systems
- Cooling systems
- Ventilation Systems
- Renewable energies Systems

Non mandatory fields, but taken in account by the jury

- Real final energy consumption/per year + Reference year
- More information about real consumptions and performances
- Greenhouse gas emissions in use

- Cost of renewable energies



Low carbon

The case studies presented in this category will be evaluated relative to bio-based and recycled materials used in the construction of the building but also relative to the attention to the whole lifecycle of the building (construction, management and deconstruction). Will also be taken into account the presence of natural and traditional materials. Water consumption and self-sufficiency index will be significant in the evaluation and particular importance will be given to the integration of vegetation and biodiversity in this category (open spaces, roofs & green walls, urban agriculture ...).

Mandatory fields on this category

- Bio-sourced Materials
- Consumption of water, recycled, grey and rain water,
- Greenhouse gas emission in use and methodology used
- Lifetime of the building
- Green spaces
- Urban environment

Non mandatory fields, but taken in account by the jury

- Total greenhouse gas emission from birth to death of the building
- Comments about greenhouse gas emission calculations, calculation methods
- Cost of renewable energies
- Life Cycle Assessment and comments about LCA Diagram
- Greenhouse gas emission before use
- Impact of manufacturing materials on the non-renewable energy consumption



Smart Building

The case studies presented in this category describe buildings where intelligent systems are used efficiently. The evaluation of case studies will be based on how energy efficiency is improved and / or consumption is reduced thanks to these systems, the ability of the building to contribute to the balance of energy networks, as well as the benefits provided to the building's users.

Mandatory fields on this category

- Inhabitants opinion on immotics
- Centralized technical management of the building
- Energy consumption distribution
- Smart metering

Non mandatory fields, but taken in account by the jury

- Real energy consumption /per year
- Additional information on building management system
- Smart Building Label, if any (Wired Score, Ready2Service, ...)



Health & Comfort

The applicant will explain in the following fields how the building can provide a high level of health and comfort to its inhabitants or workers, especially regarding daylight level, light or darkness intensity following the time of the day, relation between indoor and outdoor environment, variation of the indoor environment following nature's cycles, indoor air and acoustics quality, indoor temperature. Quantitative measurements and technical descriptions of solutions implemented in the buildings will be appreciated by the jury.

Mandatory fields on this category

- Owners approach of sustainability
- Building users opinion
- Air Tightness Value + Indicator
- Proof or testimonies energy/air tightness
- Health & comfort strategy
- At least one product/solution contributing to health& comfort
- Green space in common use
- Acoustic strategy
- Measures of the internal air quality

Non-mandatory fields, but taken in account by the jury

- Users' opinion on immotics and domotics
- GHG in use stage
- Indoor CO2 concentration (measured or calculated)
- Thermal comfort (measured or calculated)
- Acoustic comfort
- Daylight factor



Sustainable construction Grand Prize

This category will reward a building considered by the jury as an outstanding new building on all dimensions of sustainable development: carbon impact on the environment, biodiversity, comfort and health of residents, social innovation and replicability.



Sustainable refurbishment Grand Prize

The case studies presented in this category describe renovated buildings that have drastically reduced their energy consumption. They will be evaluated by the jury according to these reductions and the means deployed to achieve this performance, as well as improving the quality of life and the security provided to the occupants, the performance on all dimensions of sustainable development, including carbon footprint, impact on the environment, biodiversity, social innovation and replicability.



Users' choice award (national level only)

Users' choice award is awarded to buildings that received the highest amount of votes from Internet users on the national Construction21 platform it applied.

Case studies directly published on the international platform will benefit from a "other-countries" vote.

Mandatory fields for CITY category



Sustainable city “Grand Prize”

This category awards an urban area or eco-district that have an exemplary approach in its global eco-responsible action, with innovative and performing solutions in several dimensions of sustainable development.

Mandatory Fields

- Type of project
- Geolocation
- Program
- Total area
- Launch / delivery dates
- Progress
- Specific requirements and zoning
- Total investment
- Project holder / project manager
- At least one solution

Non-mandatory fields, but taken in account by the jury

- CO2 emissions and calculation method



Users’ choice award (national level only)

The users’ choice award is dedicated to the eco district/urban area that received the highest amount of votes from Internet users on Construction21 platforms.

Mandatory fields for INFRASTRUCTURE categories

These new Construction21 database and Awards topic include 6 technological fields.



Green energy



Circular economy and waste recycling



Digital services



Water cycle



Responsible mobility



Biodiversity and eco systems

The infrastructures entering the contest may be a product, an installation, a service or a solution which contributes to reduce GHG emissions or energy consumptions and, more generally, to a more sustainable world. The project described in the case study may be an autonomous object or linked to an eco-district.

Mandatory Fields:

- Categories (at least one)
- Progress
- Specific requirements and zoning
- Total cost
- Project builder / project manager
- At least one solution

Non-mandatory fields, but taken in account by the jury

- CO2 emissions and calculation method
- More info about the way this infrastructure contributes to sustainable development goals



Infrastructure Grand Prize

This category awards an infrastructure with an outstanding approach in its global eco-responsible action, with innovative and performing solutions in several dimensions of sustainable development.



Users' choice Award (national only)

The users' choice award is dedicated to the infrastructure that received the highest amount of votes from Internet users on Construction21 platforms.

Rights

By applying to the contest 2018, the applicants give permission to Construction21 AISBL, its chapters, partners and sponsors, to use all information and pictures published in the case studies for any communication actions, on line or off line.