

Green Solutions Awards 2020-2021

Rules of the contest – BUILDINGS

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 terms of sustainable development and fight against climate change in the industry of sustainable construction and cities.
- All types of buildings may enter the contest if they are **delivered between 1st of January 2015 and 31st of March 2021**.
- The presented buildings 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, projects apply only for thematic categories. The Grand Prizes will be attributed on the decision of the jury only, to outstanding projects on all dimensions of sustainable development.
 - The application for the Users' Choice is automatic.
- The winners/mentions of former editions are not allowed to participate again with the same project (but the authors are of course allowed to submit several projects).
- Buildings participating in the contest and any item or solution 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 is incorrect or false, if it does not correspond to the reality of the project, the organiser 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 organiser reserves the right to cancel the participation of the candidate concerned, who will have no recourse.

Main steps of the Green Solutions Awards 2020-21

- September 21, 2020: Opening of online registrations
- March 15, 2021: Closing of applications
- April to June 2021: Online votes
- June 2021: Announcement of the national winners
- November or December 2021: Winner's gala in Glasgow during COP26

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 realisation (a solution, the global approach a combination of solutions...) is really new and innovative.

Mandatory fields for BUILDING categories

Mandatory fields for all categories

- Project description
- Label/Certification (if any)
- Owner approach of sustainability
- Architectural description
- Primary energy needs
- HVAC systems
- Urban environment
- At least one solution or a product that illustrates the category in which the building participates

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 (excluding French overseas territories).

Mandatory fields in this category

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

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

- Real final energy consumption/per year + Reference year
- More information about real consumptions and performances
- 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 in this category

- Energy consumption in final use
- Renewable energy annual production (% of the needs of the building)
- Distribution of energy consumptions
- Energy efficiency Systems
- Air tightness and used indicator
- Greenhouse Gas Emissions
- 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
- Cost of renewable energies
- More information on the building envelope and renewable energies



Low Carbon

The case studies presented in this category will be evaluated according to the bio-based and recycled materials used in the construction of the building but also 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 a particular importance will be given to the integration of vegetation and biodiversity in this category (open spaces, roofs & green walls, urban agriculture...).

Mandatory fields in this category

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

Non mandatory fields, but taken into account by the jury

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



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

- Building users opinion
- Air Tightness Value + Indicator
- Proof or testimonies on energy/air tightness performance
- Health & comfort strategy
- Green spaces 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 systems
- 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 Renovation Grand Prize

The case studies presented in this category describe renovated buildings that have drastically reduced their energy consumptions. 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 number of votes from Internet users on the national Construction21 platform on which it applied.

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

Right of distribution

By applying to the Green Solutions Awards 2020-2021, candidates give the right to Construction21 AISBL, its organising chapters of the competition in each country, and to all partners and sponsors, to use all pictures and information published in the case studies in their online and offline communication actions.

Registration fees

Free competition.

The only exception is for projects that are located in China: participation fees are required to be heard by the Chinese jurors. Contact Maolin Liu [liumaolincabr\[at\]126.com](mailto:liumaolincabr[at]126.com) for more information about the price.