

Publishing a "building" case study on Construction21

The "Buildings" database showcases buildings (tertiary, housing, factories, public, etc.) that have been fully delivered and demonstrate good environmental performance.



Owl Woods Passive House in Australia - ©Tatjana Plitt

What is a sustainable building?

Since it would be difficult to summarize here the characteristics of a sustainable building, here are a few principles generally implemented when designing one:

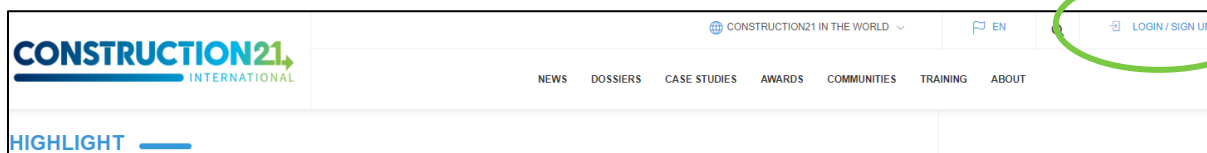
- Renovation and rehabilitation of existing stock: renovating the built environment to improve energy performance is a priority. Some projects go further by rehabilitating unused buildings (old factories, unused car park or office buildings, etc.) by changing their use.
- Combining user comfort with low or zero energy consumption;
- Constructing adaptable buildings (that can change use in the future, for example) from the design phase;
- Opting for the sobriety of resources at all stages: design, operation and deconstruction. The principles of circular economy, low-tech and local and sustainable materials are good indicators of a sober approach;
- Taking into account climate change by designing buildings that are resilient to natural hazards (heat waves, floods, etc.).

Writing a building case study helps enrich the database with various examples of sustainable and exemplary constructions and renovations. It is up to you to fill out the different fields needed to describe the project, but the Construction21 team is here to assist you!

For any question, please contact Mariette Guermonprez (mariette.guermonprez@construction21.fr).

Step 1: create your account or login to Construction21

- ✓ Go to the Construction21 platform corresponding to the country where your project is located: [France](#), [Spain](#), [Belgium](#), [Luxembourg](#), [Germany](#), [Italy](#), [Morocco](#), [Algeria](#) or [International](#) (any country not mentioned previously). Please note that each country has its own official language.
- ✓ Click on "Login / Sign up" at the top right of the screen to create your account.



Like any website, the platform is dependent on the internet connection which can sometimes be limited. Therefore, remember to **save your contributions on your computer before referencing your project** to have a backup of your data. Also, save regularly as you complete your case study.

Step 2: initialise your case study

- ✓ Create your building case study by entering the CASE STUDY menu and clicking on "Add your case study - Building".

To initialise your case study, **you must fill in all these mandatory fields** (you can modify them later): *Building name / Photo / Project description / Address / Building type / Project type / Delivery year*

Once saved, the case study is registered, and you can access the other tabs.

Warning!
You must **save** to preview your page and access the following steps

Save

Main photo:
1. Click on "BROWSE"
2. Click on the upload icon at the right of the text zone
3. Select your picture from your files
4. Click on "ADD"

Click on the disk icon to save your case study


The title of the case study should be concise and representative. In general, the title is the name of the building and/or the operation carried out; for example, [CO2 neutral buildings in CH-Männedorf](#), [Owl Woods Passive House](#), [The Takienta](#).

For the main photo of the case study, choose a real and clear photo (not a model or prototype).

The project description should preferably be written in different paragraphs with subheadings. It should include the key aspects of the project, the constraints encountered and the chosen solutions. It should end with information on the innovative or singular aspects of the construction or renovation process.

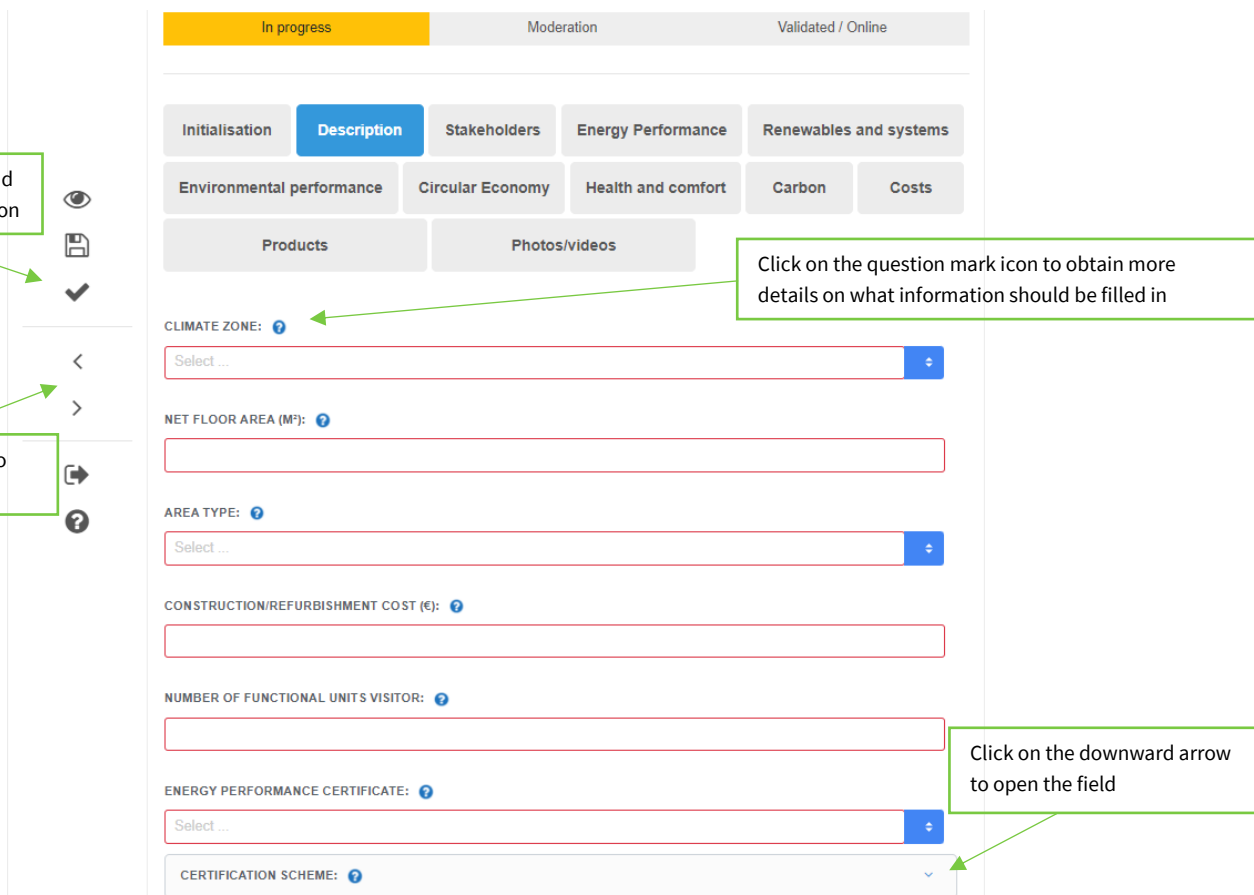
Step 3: fill in the rest of your case study

Complete the case study by filling out the various tabs at your own pace. **You can save and quit at any time.**

 **Some fields appear in red;** this means that they must be completed to validate the case study.

To fill in the tabs:

- ✓ Click on the tab of your choice (initialisation, general info, stakeholders, energy, performance...) and enter the data in the various fields.
- ✓ Save the data (with the disk icon) before going to the next tab.
- ✓ Once you have entered all the information, click on the tick icon below the disk icon.
- ✓ Your case study is then sent to moderation and will be visible on the platform after validation by the Construction21 team.



The screenshot shows a web interface for creating a case study. At the top, there are three status tabs: 'In progress' (highlighted in yellow), 'Moderation', and 'Validated / Online'. Below this, there are several sub-tabs: 'Initialisation', 'Description' (selected), 'Stakeholders', 'Energy Performance', 'Renewables and systems', 'Environmental performance', 'Circular Economy', 'Health and comfort', 'Carbon', 'Costs', 'Products', and 'Photos/videos'. On the left side, there are navigation icons: an eye, a disk, a checkmark, and left/right arrows. A green box with an arrow points to the checkmark icon, containing the text 'Click on the tick icon to send the case study to moderation'. Another green box with an arrow points to the left and right arrows, containing the text 'Click on the < and > icons to navigate between the tabs'. The main form area contains several fields, each with a red border indicating it is required. These fields are: 'CLIMATE ZONE:' with a dropdown menu and a question mark icon; 'NET FLOOR AREA (M²):' with a text input field; 'AREA TYPE:' with a dropdown menu and a question mark icon; 'CONSTRUCTION/REFURBISHMENT COST (€):' with a text input field; 'NUMBER OF FUNCTIONAL UNITS VISITOR:' with a text input field; 'ENERGY PERFORMANCE CERTIFICATE:' with a dropdown menu and a question mark icon; and 'CERTIFICATION SCHEME:' with a dropdown menu and a question mark icon. A green box with an arrow points to the downward arrow of the 'CERTIFICATION SCHEME' dropdown, containing the text 'Click on the downward arrow to open the field'. Another green box with an arrow points to the question mark icon next to the 'CLIMATE ZONE' field, containing the text 'Click on the question mark icon to obtain more details on what information should be filled in'.

Mandatory fields to fill in to validate your case study

Description tab:

- ✓ Climate zone (open the map by clicking on the question mark icon to determine the climate zone of your building)
- ✓ Net floor area (m²)
- ✓ Area type
- ✓ Construction/refurbishment cost (€)
- ✓ Number of functional units
- ✓ Energy performance certificate (select "none" if there isn't such measure in the country your building is in)

Stakeholders tab:

- ✓ Contractor
- ✓ Construction manager
- ✓ Add the other actors and firms involved in the project

Energy performance tab:

- ✓ Primary energy consumption
- ✓ Calculation method (country related)
- ✓ *For a renovation project: initial consumption*

Renewables and systems tab:

- ✓ Heating system
- ✓ Hot water
- ✓ Cooling system
- ✓ Ventilation system
- ✓ Renewable systems

Photos/videos tab:

- ✓ Several photos of the building
- ✓ Photo credit



Don't forget to indicate the photo credit, without which the case study cannot be published. If you took the photos yourself, please indicate your name and surname in the "photo credits" field.

Optional but recommended fields to fill in

By browsing the tabs, you will find a multitude of other fields that are not mandatory but useful to highlight the aspects of the project that make it an exemplary sustainable building. **Focus on the most relevant fields for your project**, no need to fill in everything! Below are the most appreciated fields by our readers.

Description tab:

- ✓ Certification scheme
- ✓ If you had to do it again?
- ✓ See more details on this project: you can add a link to a web page giving more information on the project

- ✓ Other information about this project: you can upload PDF files about the project (with the prior agreement of the project leaders)

Energy performance tab:

- ✓ Breakdown for energy consumption
- ✓ Envelope performance
- ✓ Real final energy consumption

Environmental performance tab:

- ✓ Mitigation actions on soil and biodiversity
- ✓ Urban environment

Circular economy tab:

- If the project has been the subject of re-use of materials, equipment and/or products, this tab allows you to specify what has been reused, in what quantities, their origin, etc.

Carbon tab:

- ✓ GHG emissions or Life cycle analysis

Products tab:

- In this tab, you can highlight an installation, a material, a system, a specific approach with a sustainable interest implemented during the project. For example, for [the CO2 neutral buildings in CH-Männedorf](#), solar modules were installed to produce decarbonised energy. For [the Old Holloway straw passivhaus](#), prefabricated straw/ timber panels allow to insulate the building with biosourced materials.

Step 4: modify your case study

To access your case study:

- ✓ Log in to your Construction21 account.
- ✓ Move the mouse over your avatar in the top right corner of the screen and select "My contributions".
- ✓ In the list of your contributions, find your building case study and click on the "Edit" button.
- ✓ Once you're done modifying, save and publish your case study.

Here are some examples of well completed case studies for inspiration:

- <https://www.construction21.org/case-studies/h/the-takienta.html>
- <https://www.construction21.org/case-studies/h/antonio-brancati-middle-school.html>
- <https://www.construction21.org/case-studies/h/modular-office-renovation-prototype.html>
- <https://www.construction21.org/case-studies/h/humanscapes-habitat.html>