

in-SHELTER

SB-LAB + Students Award 2017

International Competition for Architecture Students

sb-lab.greenlines-institute.org



Scouts Eco-camp

Barcelos * Portugal



COMPETITION RULES PROPOSALS



COMPETITION RULES

1- Title of the competition

1.1- The competition is entitled “in-Shelter - SB-Lab + Students 2017 Award”

1.2- Information on the competition may be accessed at the following link:

sb-lab.greenlines-institute.org

2- Goal of the competition

2.1- The goal of the competition is to challenge Architecture students to develop sustainable solutions for 2 shelter/bird watching units that will be located in the Scouts Eco-Camp of Barcelos, Portugal.

2.2- Proposals must be developed to meet sustainable principles and goals established by the project coordination (see Proposals).

3- Organiser, executive coordinator, partners and sponsors

3.1- The Organiser of the competition is the **Green Lines Institute for Sustainable Development** and it is the single responsible entity by all issues concerning it, in spite other institutions that will act as partners and sponsors.

3.2- The Executive Coordinator of the competition is **Prof. Rogério Amoêda**, Coordinator of the SB-LAB initiative, who will act as the official contact for issues related to the competition.

3.3. The official institutional partner is the Corpo Nacional de Escutas (CNE), who is the promoter of the Scouts Eco-Camp.

3.4- Other institutional partners will be invited and announced on due course.

3.5- Sponsors will be the companies/enterprises that may join the initiative to support the competition costs.

4- Who may participate

4.1 The competition is open to Architecture students of all countries that might be organised as a **team with a maximum of 5 elements**.

4.2- The competition Teams may include students of different scientific fields, but it **MUST** be always coordinated by an Architecture student, designated as **Team Coordinator**.

4.3- The Team Coordinator will be the corresponding contact regarding issues related to the competition.

4.4- To each Team will be given a **TEAM CODE** that must be mentioned in all correspondence and in the final proposal.

5- Presentation of proposals

5.1- Final proposals must be presented in 3 posters, which must follow the dimensions and layout established by the competition rules.

5.2- Team form filled in and signed by the Team Coordinator;

5.3- Posters must be rolled and sent to the following address:

SB-LAB+ students Award 2017
Prof. Rogério Amoêda
Av. Alcades de Faria, 377 S.12
4750-106 Barcelos
PORTUGAL

5.4- Posters and Team form must also be sent as separated pdf files to the following email:

sblab2017@greenlines-institute.org

6- How to participate

6.1- In order to participate, Teams must be registered in the competition by filling the form available at:

sb-lab.greenlines-institute.org/en/sb-lab_students_registration

6.2- Registration in the competition will have a cost of **€50 (Fifty Euros) per Team until April 30** and a cost of **€75 (Seventy Five Euros) per Team from May 1 until July 31**. Only after the payment of the registration fee, teams will have full access to the competition documents, such as CAD files and layouts of posters presentation.

6.3- If by any reason the competition would be cancelled, registered teams will be refunded of the total fee amount.

7- Jury

7.1- Jury will be composed by the following elements:

- The SB-LAB Coordinator that will act as the Chairman of the Jury;
- A representative of the Scouts Association;
- A representative of the Portuguese Order of Architects;

- 2 invited experts on sustainable buildings;
- Representatives of the sponsors (if applied).

7.2- Jury will have the following competences and tasks:

- Select the 10 best proposals which will take part on the exhibition;
- Select and rank the 5 best proposals by the following order:

1) 1st place;

2) 2nd place;

3) 3 Special Mentions (maximum).

- Publish a final report justifying their decisions.

7.3- In case of a tie in the vote, the tiebreaker shall be made taking into account the casting vote of the Chairman of the Jury.

7.4- There will not be appeal of the Jury's final decision.

8- Dates and deadlines

8.1- Team registration (regular fee): April 30, 2017.

8.2- Later team registration: July 31, 2017.

8.3- Questions and information requests: May 31, 2017.

8.4- Deadline for proposals submission: September 15, 2017.

8.5- Announcement of results and final jury report: October 31, 2017.

9- Prizes

The 5 best proposals will receive the following prize moneys:

- 1st Place: 2500 Euros;
- 2nd Place: 750 Euros;
- Each Special Mention: 250 Euros.

10- Final Publication

10.1- The competition organisers will publish an e-book that will include all the submitted proposals and mentioning all the Teams' participators.

10.2- The publication will include the Jury's final report.

11- Questions and additional information

11.1- Teams may ask questions and request additional information on competition rules and proposals presentation until May 31 2017 by using the competition email address.

11.2- All questions and answers will be compile in a single document that will be sent to all registered teams and made available for download in the competition website.

11- Contacts

11.1- Postal address:

SB-LAB+ students Award 2017
Prof. Rogério Amoêda
Av. Alcades de Faria, 377 S.12
4750-106 Barcelos
PORTUGAL

11.2- Website and email:

sblab.greenlines-institute.org

sblab2017@greenlines-institute.org

PROPOSALS

1- Place and concept

The Scouts Eco-Camp is located at the parish of Aldreu, municipality of Barcelos, in a mountainous area near the Atlantic sea. The Eco-Camp occupies the two sides of the hill, one facing North-West and the other facing South-West.

The site was occupied in the final period of the Neolithic, remaining a few ruins of this human settlement. The fact that there is a natural spring water on the site and a view of the lower lands located by the sea, explains this first human occupation.

At present, the place is considered as a natural landscape, requiring, therefore, a very special care in the planning of the Eco-Camp.

The soil is granitic with a layer of vegetal soil that allows the subsistence of large tree species. The site, which was the place of several forest fires, being the last one on the summer of 2016, is in planning of reforestation with autochthonous species, namely the oak.

The prevailing fauna is characterized by birds of prey and terrestrial species such as partridges and rabbits.

Solar exposure, wind exposure and the existence of a natural spring water make it possible to intervene in this place in a sustainable perspective, creating a facility with near zero environmental impact, being able to be self sufficient in the production of electricity, water supply and natural treatment of waste water.

The construction of shelters/bird watching units must be architectural objects with a low environmental impact, while at the same time being elements that identify the Scouts Eco-Camp in the natural landscape. Its reversibility, modularity and the use of lightweight materials with low environmental impact are some of the main characteristics to be taken into account when developing solutions for the shelters.

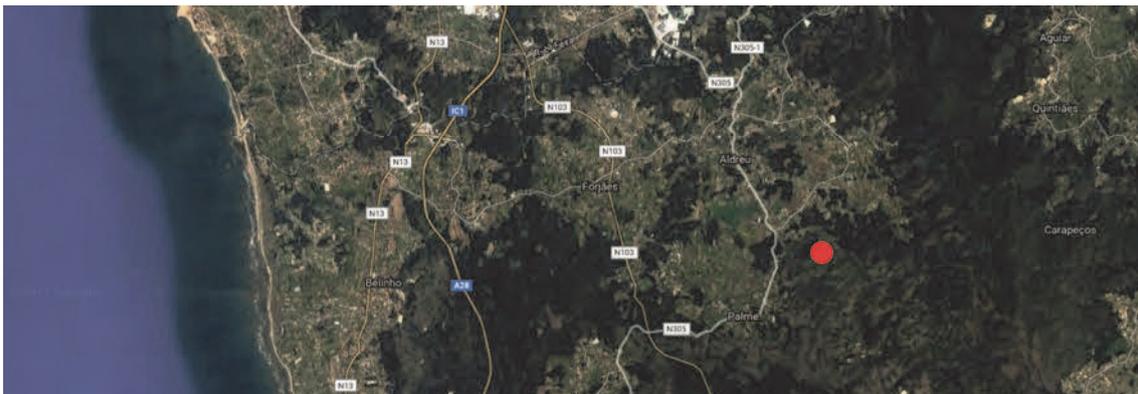


Figure 1: Location of the Scouts Eco-Camp, parish of Aldreu, municipality of Barcelos, Portugal.



Figure 2: Limits of the Scouts Eco-Camp.

2- Shelters location

Shelters will be located on two granitic spots as the following:

- SHELTER 1 at the North side of the eco-camp (see figure 3);
- SHELTER 2 at the South side of the Eco-Camp (see figure 3).



Figure 3: Shelters location.



Figure 4: North-West view with location of Shelter 1.



Figure 5: South-West view with location of Shelter 2.



Figure 6: West view with location of the Neolithic settlement.



Figure 7: East view with location of the natural spring water.



Figure 8: Shelter 1 location view.



Figure 9: Landscape view from Shelter 1 location.



Figure 10: Shelter 2 location view.



Figure 11: Landscape view from Shelter 2 location.

3- Architectural characterization of the shelters

The shelters proposals must consider the following aspects:

- 25 years lifespan;
- Maximum interior area of 30 m²;
- Open space;
- Must be possible to be demountable at any time;
- Must provide views to the surrounding landscape;
- Must provide thermal comfort to the occupants.

4- Sustainability goals

4.1- Shelters must achieve the following sustainability goals for a 25 years lifespan:

- Be demountable and their materials and components possible to be reused or recycled;
- Provide natural ventilation;
- Provide natural light and shade;
- Reduced and easy maintenance;
- Include reused or recycled materials (not mandatory).

4.2- Shelters must minimise the following indicators on a life cycle perspective (materials supply, construction, operation, maintenance and deconstruction):

- Embodied mass (kg);
- Embodied energy (MJ);
- Global Warming Potential (GWP) (kg CO₂e).

4.3- Shelters must maximise the following indicators on a life cycle perspective (materials supply, construction, operation, maintenance and deconstruction):

- Amount of reusable/recyclable mass content (%);
- Amount of reused/recycled mass content (%) (not mandatory).

5- System of Units

Proposals must follow the International System of Units (SI), namely the following:

- Unit of length (meter);
- Unit of mass (kilogram);
- Unit of temperature (kelvin);
- Unit of luminous intensity (candela).

6- Proposal contents

Posters must contain the following information:

- Text explaining the concept of the solution;
- Text describing the technical proposal;
- Text explaining the sustainable goals achieved;
- Tables and graphs (not mandatory);
- General plans, *façades* and sections drawn at the following scale: 1/50;
- Construction detailed sections drawn at the following scale: 1/20;
- Other selected construction details drawn at the following scales: 1/2 or 1/1 (not mandatory);
- Detailed draws must mention construction materials;
- 3D views.

7- Proposals presentation

7.1- The proposal includes:

- The Team Form filled and signed by the Team Coordinator;

- Valid documentation issued by the Department /University stating that the Team elements are students, mentioning their University and Course;

- 3 posters describing the solution.

7.2- About posters:

- Posters must be presented according to the provided poster layout;

- The layout includes mandatory fields that must be edited by the authors, where colours, letter fonts and sizes are not allowed to be changed;

- The layout will include a free space to include texts, drawings, images, figures and tables that better explain the proposal and where authors may use graphic and colour schemes at their choice.

- Posters must be high quality printed in a 150 g/m² uncoated paper (or similar).

7.3- Sending the proposals:

- Team form and students' documentation must be inserted in a closed envelope with the TEAM CODE written outside.

- The envelope and posters must be rolled and sent to the postal address of the competition.

- Team Form, documentation and posters must also be sent as separated high quality pdf files to the competition email.

7.4- Each proposal must include valid documentation stating that the Team elements are students, mentioning their University and Course. These documents must be inserted in a closed envelope with the TEAM CODE written outside.

7.5- Confirmation of delivery will be sent to each Team.

7.6- Incomplete proposals will be asked to be completed on a 15 days deadline after the Competition Secretariat request.