



Student Architecture Competition 2023 Towards Regenerative Buildings - Call for Submissions -

In conjunction with the World Renewable Energy Congress XXII Conference at Solar Energy Research Institute (SERI), Universiti Kebangsaan Malaysia from 16th to 20th July, 2023, there will be a Student Architecture Competition 2023 with the Theme “Towards Regenerative Buildings” to be held within this international conference.

The following highlight the context and guidelines for the students of architecture to enter this global architecture competition.

Prizes

Prizes will be awarded:

1st Prize

RM 4,000 cash + Waived conference fees for 1 participant and certificate

2nd Prize

RM 2,500 cash and certificate

3rd Prize

RM 1,500 cash and certificate

*All prizes are inclusive of 5 days 4 nights’ hotel stay for 1 participant

The shortlisted entries by the judging international committee based on the design competition criteria will be printed and displayed at the conference for final judging. The prize-giving session will be held during the conference closing ceremony together with a virtual online connection for overseas participants to join.

In addition, the monetary prizes and certificates will be awarded to 3 winners that deserving of special commendation for concentrated effort in specific areas of architectural design set out in the competition criteria.

Entries Submission

All entries must be submitted via the link provided under the “Architecture Competition” in the conference website:

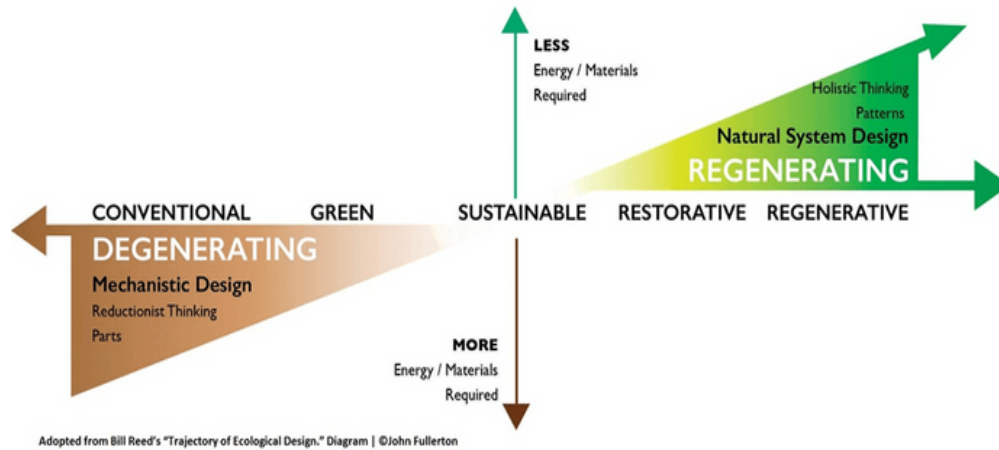
<https://wrec2023.com/architecture-competition/>

Competition Schedule

Announcement of the competition	:	6th April, 2023
Registration of entries	:	30th April, 2023
Briefing	:	30th May, 2023
Submission	:	7th July, 2023
Announce shortlisted entries	:	1st July, 2023
Announcement of winners	:	20th July, 2023

The Context

The competition theme is "Towards Regenerative Buildings." Participants are invited to submit designs for a regenerative building that demonstrates an innovative and sustainable approach to architecture. The building should incorporate features and systems that minimize negative environmental impacts and promote the regeneration of the ecosystem.



Source: Bill Reeds, *Trajectory of Ecological Design*

Designs should prioritize the use of renewable energy sources, sustainable materials, and green technologies such as solar panels, rainwater harvesting, and greywater recycling systems. The building's design should focus on maximizing energy efficiency, reducing waste, and improving indoor air quality and natural light.

Participants are also encouraged to consider the building's adaption and impact on the surrounding environment and ecosystem. The design should incorporate features that support biodiversity and promote ecosystem regeneration, such as green roofs, living walls, and sustainable landscaping.

The design should prioritize creating a comfortable and healthy living or working environment that promotes well-being for the occupants. The building should also be accessible and inclusive, designed to accommodate people of all abilities and ages.

Submission Requirements

Entries will be schematic designs submitted digitally online suitable for printing in A1 size and landscape orientation.

Concepts should include 3D images, and text explaining the design limited to 3 nos of A1 size sheets.

All entries must be presented in English. Each digital file must be submitted in JPEG format at a minimum resolution of 300 dpi corresponding to the actual size.

The digital presentation panels must comprise of design concept descriptions, scaled plans, sections, elevations, construction details and perspectives.

A walk through or fly through video is compulsory.

Presentation panels must contain the name of team members or individual and the university.

Copyright and right of ownership

All entries submitted shall remain the intellectual property of the participants. The competition organizers reserve the rights to use the design and ideas submitted as they deemed fit for other purposes and promotion of the competition and conference.

The design brief

The competition seeks a transformative design idea complete with a net-zero energy approach, and an impressive physical presence that will become a powerful and enduring symbol of how regenerative building operates in the current climate change environment and in line with the circular economy principles. The concept design calls for regenerative architectural designs to create **a multi-storey building** with potential flexibility functions such as residential and commercial (urban farming). The total built up area should be approximately 5,000 square meters to 10,000 square meters depending on the site chosen and context. The participants can choose their own site in their own country for the design. The intent of the design is to reduce the effects of Climate Change, by limiting resource and energy use; and while maintaining the thermal comfort and indoor air quality of the its occupants. The concept should be incorporated into a new building design.

Besides that, the design should incorporate the PAVEGEN technology which converts kinetic movement into energy. Please refer to PAVEGEN website <https://www.pavegen.com/> for further information. The PAVEGEN technology will

be

further explain in the briefing session which will be held online on 2nd May, 2023.

The

time and online briefing platform will be notified to all participants that have registered for this competition.

The design should include:

- PAVEGEN kinetic generation technology
- Innovative use of solar and renewable energy technologies
- Incorporate the passive solar design strategies
- Use of rainwater harvesting system
- Innovative building envelope system
- Use of recycle and indigenous building materials
 - Incorporate use of waste and composting appropriate to the site area selected for the design
 - Architectural design concepts and technological innovation that fits within the brief requirements

Criteria for Assessment

The Jury shall evaluate the entries based on the following criteria:

- Creativity in Architecture Design excellence;
- Originality of ideas
- Innovation in application of Regenerative Concepts;
 - Innovation in the integration of renewable energy applications;
- Construction detailing;
- Clarity of design concepts.

Eligibility

This design is open to all architecture students both in Malaysia and International.

Final Jury

Architecture Competition Director (Convenor)

A Malaysian Award-Winning Architect – Ar. Lok Wooi

ARUP Jururunding Malaysia – Ir. Azril Zainal

Malaysia Green Building Council – Ar. Chan Seong Aun

CK @ Work Sdn Bhd – Mr. CK Tang

IES Singapore – Mr. Sriman NCVK

Spiru Haret University Romania - Ar. Dr. Ruxandra Gherasim Crutescu

University of Lisbon Portugal – Prof. Ar. Manuel Guedes

University of Florence Italy - Prof. Ar. Antonella Trombadore

Disqualification

Failure to comply with rules, requirements and procedures may lead to disqualification.

Late submission may lead to disqualification

The competition committee shall have the sole discretion to accept or disqualify any entry for whatever reasons.

Jury's Decisions

The Jury is the sole arbiter of the competition and its decisions are final and binding.

Exhibition and Publication

The organisers reserve the rights to retain the works for the purposes of exhibition, publicity and promotion, subject to the prevailing Copyright Act.