

## 1st advanced architecture contest

### Self-Sufficient Housing

The Institute for Advanced Architecture of Catalonia furthers its support of sustainable development by sponsoring the **Advanced Architecture Contest**. Created for students and professionals to inspire changes in how new buildings are designed and constructed, **the program challenges participants to design a self-sufficient and ecologically oriented dwelling.**

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#### 1 . Summary

##### Self-Sufficient Housing

Architecture does not offer the responses to current environmental issues that might be expected from it. Instead, the enormous influence of its historical legacy shapes thinking around today's design solutions, limiting innovation.

In fact, contemporary buildings might be artificial natures. We believe that housing - where human inhabitation takes place - should take its cues from the trees: it should be tied harmoniously to the surrounding environment, taking only the indispensable resources (energy, water, etc.) and generating recyclable waste that follows natural cycles.

The main goal of this competition is the development of self-sufficient dwellings in which technological elements are essential components of a new architectural concept and not only a reflection of an attachment to conventional ideas about houses.

The building location is open to the designer's choice, so the project can be proposed to accommodate local conditions in any region of the world.

There are two categories:

1. Self-Sufficient Collective Housing
2. Self-Sufficient Single Housing

The competition results and further investigation will be published by ACTAR [www.actar.es](http://www.actar.es)

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## 2 . Theme

### **Scarce Resources**

Human impact on the Earth is a vital contemporary issue.

The intensive consumption of resources continues without introducing effective recycling processes. Resources will someday run out.

### **Population and Consumption**

A small portion of the world population consumes nearly 80% of the planet's resources and produces 80% of its environmental pollution. The global population has increased tenfold over the last hundred years due to scientific developments and technological innovations. This population will increase from today's 6 billion to an eventual 10 billion people, creating more pressure on our decreasing resources

### **Global Disparities**

This situation enlarges the gap between high-tech, wealthy states and lower-tech, poor states. Most high-income countries have near-stable populations, but their resource consumption continues to rise. Battles for food, raw materials, and living space between industrialized and developing countries are becoming increasingly severe.

### **Results**

We will soon reach an impasse as a result of this combination of chaotic growth and development with ecological consequences. We can already see the initial signs.

### **Some Figures**

Buildings are responsible for a large portion of the world's total energy use and raw material consumption and are also responsible for around 25 % of timber harvest and 16 % of fresh water withdrawal. Urbanized areas produce 40 % of the solid waste destined for local landfills. These structures also affect watersheds, habitat, air quality, and community transportation patterns.

### **Sustainable Building Movement**

The environmental impact of building materials, construction techniques, and building operations and maintenance can be reduced. Sustainable building practices attempt to consider the environmental, economic, and social effects of a built project in a holistic way.

### **Future**

The sustainable building movement emerged from solar, energy efficiency, water conservation, land conservation, and indoor air quality interest groups working together to develop a whole systems approach to building. Cooperation from environmental organizations and academic disciplines has become requisite to lead the way toward a sustainable future.

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### 3 . Bases & prizes

#### A. Eligibility & Limitation of Participation

##### Eligibility

The competition is open to all professionals, designers, and students of architecture, urban design, landscape design (Non-architects should be led by an architect or a student of architecture). There is no age limit, and projects may be individual or group efforts.

The number of team members is not limited.

##### Limitation

The following person(s) may not participate in the competition:

- An individual or an organization affiliated with the Promoter as an advisory committee member, or a sponsored researcher; and anyone affiliated otherwise in a continuing professional relationship with the Promoter.
- Members of the Competition Jury, and Staff of organizations in which a Jury member serves as a principal, or an adviser.
- Persons who prepared the Competition Brief in a direct or an indirect way.

#### B. Free Competition Registration.

The participation in this competition does not require any type of payment.

#### C. Awards

Sustainable **COLLECTIVE** Housing Category

- **1st Prize € 3,000. + Master in Advanced Architecture (€10.500)**

The winning design leader will obtain a full scholarship for the Master in Advanced Architecture at the Institute for Advanced Architecture of Catalonia for over (1) one year period to extend the project.

Sustainable **SINGLE** Housing Category

- **1st Prize € 3,000. + Master in Advanced Architecture (€10.500)**

The winning design leader will obtain a full scholarship for the Master in Advanced Architecture at the Institute for Advanced Architecture of Catalonia for over (1) one year period to extend the project.

The winning design will be examined and the possibility of its realization considered by the Institute for Advanced Architecture of Catalonia.

Only (1) one second prize and (1) one third prize will be granted for the both categories

- **2nd Prize € 1,500.**
- **3rd Prize € 1,000.**
- **Honourable Mentions: Net-Delegates:**

In addition, the Institute for Advanced Architecture of Catalonia seeks to develop an international research group, oriented toward the investigation and diffusion of advanced architecture. In order to fulfil this goal, the jury will select a delegate for each country who will receive mention as an Investigator of the Institute.

Each delegate will have the opportunity to participate in collective experiences that will target the integration and development of both this virtual community and its ideas

#### **D. Theme: Self-sufficient Housing**

The program challenges participants to design a sustainable and ecologically orientated dwelling. Competitors may choose between two modalities:

- A. Self-sufficient COLLECTIVE Housing
- B. Self-sufficient SINGLE Housing

**A free-standing, collective or single dwelling unit that creates an ecosystem condition in which biodiversity, renewability, and resource productivity are maintained over time.**

The project may include proposed size of the dwelling unit. Site is not provided; proposals can be located in any part of the planet.

Both dimension and emplacement conditions shall be clearly exposed

#### **E. Required Drawings & Documents**

##### **Contents**

Site plan, floor plan, elevation, section, perspective drawings, photographs of models and axonometric drawings at any scale.

Designers may freely append these requirements with other detailed drawings, charts, or descriptive texts to elucidate their proposals. Descriptive texts should be always English.

**a. Stated Description:** Competitors are urged to concentrate their efforts on providing a clear description of their projects in less than 2 pages DIN A-4. The file must be named "IdentificationCode.description.pdf" and should not be larger than 100Kb.

**b. Graphic Description:** The proposals should be displayed in 3 DIN A-3 panels and be adequate only to the following format:

- Each panel must be presented in a ".pdf" format for later printing in DIN A-3. The size of each ".pdf" file can not exceed the 800Kb and should be named as follows:

IdentificationCode.panel1.pdf,  
IdentificationCode.panel2.pdf,  
IdentificationCode.panel3.pdf

-Every single panel must be also presented as a ".jpg" format image of 700 x 495px. The size each file can not be larger than 200K and should be named as follows:

IdentificationCode.panel1.jpg,  
IdentificationCode.panel2.jpg,  
IdentificationCode.panel3.jpg

**"IdentificationCode"** must be replaced by the code that you received at the time of registration. If you lose your code please contact: [idrecovery@advancedarchitecturecontest.org](mailto:idrecovery@advancedarchitecturecontest.org)

No physical material will be accepted. All the proposals must be digital without exception.

How to make a PDF file: <http://www.adobe.com/enterprise/accessibility/main.html>

## F. Language.

The entries are required to be written in **English without exception**.

## G. Competition Entries Submission.

### Date:

5:00pm Tuesday September 20, 2005. (GMT )

All the projects must be **emailed** NO LATER than Monday September 19, 2005, and MUST ARRIVE no later than Tuesday September 20, 2005.

### Email Destinations

The Submission is digital. Following early submission, each entrant will be provided with a confirmation via email. The competition registration materials, design materials transmission, questions, responses and publication of results shall be provided exclusively through email and the website. Each continent will have a dedicated email address. An electronic communication format will eliminate the necessity for printing and mailing multiple competition entry materials, thus reinforcing the 'green' design qualities intended for this project as well as lowering the cost of shipment.

The material will be submitted digitally via email following the scheme below.

For statistical reasons, we have created different groups of submission directories depending of the location of the competitors.

Please send an email with your proposal to the continent contact that corresponds with your **Country of Citizenship**, following the list below:

EUROPE	<a href="mailto:europe@advancedarchitecturecontest.org">europe@advancedarchitecturecontest.org</a>
AFRICA	<a href="mailto:africa@advancedarchitecturecontest.org">africa@advancedarchitecturecontest.org</a>
ASIA	<a href="mailto:asia@advancedarchitecturecontest.org">asia@advancedarchitecturecontest.org</a>
AUSTRALIA/OCEANIA	<a href="mailto:australiaoceania@advancedarchitecturecontest.org">australiaoceania@advancedarchitecturecontest.org</a>
SOUTHAMERICA	<a href="mailto:southamerica@advancedarchitecturecontest.org">southamerica@advancedarchitecturecontest.org</a>
NORTHAMERICA	<a href="mailto:northamerica@advancedarchitecturecontest.org">northamerica@advancedarchitecturecontest.org</a>

## H. Anonymity

In order to ensure anonymity, all drawings of Design Descriptions will be marked with the Identification Code that was chosen at the time of registration. This code will be placed at the left bottom and corner within a rectangle of 50mm x 10mm.

If you lose your identification code please contact: [idrecovery@advancedarchitecturecontest.org](mailto:idrecovery@advancedarchitecturecontest.org)

## I. Additional information

The entries must never have been made public previously, nor should it be submitted simultaneously for any other competition. Copyrights on the entries remain the property of their designers, but the sponsors of the competition retain the all rights on the announcement of these winning entries.

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## 4 . C a l e n d a r

### Launch

Launch date of the competition (consultation of website including theme, rules, calendar) :

**Monday 16 May 2005**

Closing date for registration:

**Monday 19 September 2005**

### Questions

The answers grouped will be put on the Web site before 15 August 2005.

### Entries

Closing date for submission of entries:

**Monday 19 September 2005.**

Closing date for receipt of entries sent by E-mail:

**Tuesday 20 September 2005.**

### Selection

Selection of the proposals by national juries:

**September - October 2005**

### Results

Announcement of results:

**Monday 24 October 2005**

International presentation of results:

**November 2005**

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## 5 . Jury

### Members

Vicente Guallart, architect, Director. [www.guallart.com](http://www.guallart.com)  
Willy Muller, architect. Development Director. [www.willy-muller.com](http://www.willy-muller.com)  
Manuel Gausa, architect, President of Scientific Council.  
Luis Falcon, architect. Research Director. [www.load.as](http://www.load.as)  
Sheila Kennedy, Kennedy & Viloich, Boston, USA [www.kvarch.net](http://www.kvarch.net)  
Greg Lynn, architect GLForm USA. [www.glform.com](http://www.glform.com)  
Duncan Lewis, architect. France.  
Francois Roche, architect. France [www.new-territories.com](http://www.new-territories.com)  
Jacob van Rijs, architect MVRDV. Rotterdam, Nederland. [www.mvrdv.nl](http://www.mvrdv.nl)  
Marta Male-Aleman, architect, Director of postgraduate digital fabrication.  
Jose Luis Echevarria, architect, Professor.  
Aaron Betsky, architect, Director of Nai. Holland. [www.nai.nl](http://www.nai.nl)  
Dietmar Steiner, architect, Director of Architektur Zentrum. Vienna, Austria. [www.azw.at](http://www.azw.at)  
Manolo Borja, curator, Director of MACBA [www.macba.es](http://www.macba.es)  
José Miguel Iribas, sociologist, Spain.  
Ramon Prat. Publish, graphic Designer, Director of ACTAR [www.actar.es](http://www.actar.es)  
Artur Serra, anthropologist, Coordinator of Internet 2 Catalonia.  
Salvador Rueda, ecologist, Director of Barcelona Ecología.  
Ignacio Jimenez de la Iglesia, economist, Director of Urban Land Institute.  
J.M. Lin, Architect. Taiwan  
Kim, Young Joon, Architect. Korea

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## 6 . Q & A

### Questions from the Competitors

Each registered competitor(s) may submit questions only via internet to the competition email:  
**info@advancedarchitecturecontest.org**

Questions may be submitted once.

The deadline for questions is Monday, August 1, 2005.

The Promoter posts answers to all questions on the Competition website on a continuing basis until Monday, August 15, 2005.

The answers to the competitor's questions are considered as addenda or revisions to the Competition regulations.

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## 7 . Contacts

### **Advanced Architecture Contest**

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Aaron Betsky, critic  
François Ascher, sociologist  
François Barré, consultant  
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The Fundació Privada de l'Institut d'Arquitectura Avançada de Catalunya ([www.iaacat.com](http://www.iaacat.com)) is formed by the Generalitat de Catalunya ([www.gencat.net/](http://www.gencat.net/)) and Metapolis. ([www.metapolis.com](http://www.metapolis.com)) Its president is the Minister of Spatial Planning and Public Works of the Government of Catalonia. The educational program is developed in partnership with the Fundació Politècnica de Catalunya. ([www.fundacio.upc.edu](http://www.fundacio.upc.edu))

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