



**SOLAR DECATHLON**  
LATIN AMERICA & CARIBBEAN  
CALI **2019**

**REQUEST FOR PROPOSAL**



# 2019

## REQUEST FOR PROPOSAL V3.0

We are proud to announce the second version of the Solar Decathlon Latin American and Caribbean which will be held in december 2019 in Cali, Colombia.

**Issue Date:** March 15<sup>th</sup>, 2017 at 12h00, Colombia [UTC/GMT -5 hours]

**Due date:** October 20<sup>th</sup>, 2017 at 18h00, Colombia [UTC/GMT -5 hours]

**Local language:** Spanish

Technical Questions must be received by e-mail until October 13, 2017 no later than 18h00, Colombia [UTC/GMT -5 hours].

(Please submit technical questions to [competition@solardecathlonlac.com](mailto:competition@solardecathlonlac.com))

Please review the entire document including the attachments in order to respond thoroughly to this RFP.



## Introduction

The Solar Decathlon is an international competition open to all accredited colleges, universities and other post-secondary educational institutions. Teams compete to design, build, and operate highly energy-efficient and completely solar-powered houses. The entire Solar Decathlon project encompasses not only the competition, but also the project's design, development, construction, and commissioning phases necessary to participate in the competition, as well as public exhibition of the houses on a single competition site. Hence, the competition itself is only one of several stages associated with the participation in the project.

The Solar Decathlon is part of a strategy to foster the development and facilitate the adoption of energetically autonomous houses. Thus, it seeks to demonstrate the potential of solar energy harvesting and energy efficient technologies in marketable applications through innovation and key partnerships.

## Solar Decathlon Latin America and Caribbean 2019

The Ministry of Mines and Energy (MME), the regional government of Valle del Cauca of Colombia, the Financial Institute for Valle Development - INFIVALLE and the Universidad del Valle (Cali, Colombia) with the support of the U.S. Department of Energy (DOE) invite you to participate in the Solar Decathlon Latin America & Caribbean - SD LAC2019, in accordance with the requirements and conditions set forth herein.

This call is to request proposals of sustainable and self-efficient houses that are suitable for and primarily designed for tropical regions with socio-economic and geographic conditions similar to those of the Colombian pacific coast.

The Colombian pacific coast is a zone of extraordinary biodiversity, tremendous ecological value, and ravaging beauty. It's also a zone of poverty. Urban settlements in this region present some of the highest levels of unsatisfied social needs in the country.

### Background in Colombia

Economic and social development are tightly bound to electrical energy; *sustainable development is not possible without a sustainable energy supply*<sup>1</sup>. In this context, energy efficiency appears as a means to diminish environmental impact, counter climate change, improve competitiveness and reduce costs for the consumers.

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<sup>1</sup> ASAMBLEA GENERAL DE NACIONES UNIDAS. *Energía Sostenible para Todos: un Programa Mundial de Acción*. 2012. p. 8.



Colombia, committed both to environmental sustainability and to the development of the energy sector, has advanced in the design and implementation of a policy focused on Efficient and Rational Use of Energy and Non-Conventional Energy Sources. Law 1715 of 2014 promotes the Efficient and Rational Use of Energy and Non-Conventional Energy Sources. Warranting a complete and reliable energy supply and promoting the use of non-conventional energy sources with sustainability have become matters of national interest, in order to ensure economic competitiveness and consumer protection.

Based on this law, the *Program for the Rational and Efficient Use of Energy* was created to associate a more diverse and efficient energy supply with development and economic growth for the benefit of the final user. The *Promotion and Use of Non Conventional Energy Sources* sub-program was established among the strategic sub-programs of the “*Plan de Acción Indicativo 2010-2015*”, projected towards the year 2020<sup>2</sup>. Taking the availability and exploitation viability of natural resources into account and promoting the use of adequate alternative technologies, it aims at the transformation of the energy production matrix, in order to provide a more robust energy supply and to extend its coverage to the most remote areas.

Almost a quarter of the final energy consumption is accounted for by the residential sector<sup>3</sup>, which is a strong argument in favor of energy efficiency and the inclusion of renewable energy sources in housing solutions.

In this context, organizing the second version of the Solar Decathlon Latin America & Caribbean - SD LAC2019 in Cali takes a special importance for the Government of Colombia, who considers that the Solar Decathlon Latin America & Caribbean - SD LAC2019 will contribute “*to promote the development and use of non-conventional energy sources, mainly renewable sources, in the national system (...) as necessary means for sustainable economic development, the reduction of greenhouse gases and securing the energy supply*”, as formulated in Law 1715 of 2014.

## Regional Components to consider for SD LAC2019 applications

In addition to the founding principles of the Solar Decathlon, as expressed by the Department of Energy (DoE) of the United States, the SD LAC2019 Organization has decided to focus on the following four (4) components. These four components are key to the SD LAC2019 and the proposals must address each one of them explicitly.

### **1. Social Housing**

The SD LAC2019 Organization deems it crucial to prove that sustainable housing based on alternative energy sources can be accessible to the population at large. To suit this, the proposal

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<sup>2</sup> Resolución No. 180919, June 1st, 2010

<sup>3</sup> 21.7% according to UNIDAD DE PLANEACIÓN MINERO ENERGÉTICA: Avances de la Implementación del Plan Indicativo PROURE 2010-2015. 2013.



should be designed to meet the needs of households of 5 members (at least 3 adults + 2 children, **one of which with reduced mobility (PMR)**), with a total constructed area of 60 to 80m<sup>2</sup> and a direct cost of construction of no more than USD 50,000 per housing unit. It should specifically target social housing, fulfill requirements for **people with reduced mobility** and show awareness of and respect for cultural traditions in its architecture and engineering solutions.

## 2. Density

This edition of the Solar Decathlon will emphasize dense urban areas where most of the population is living. Moreover, denser housing solutions can help minimizing the environmental impact. Consequently, the proposals to SD LAC2019 shall favor optimization of the architectural and urban footprint and should include a conceptual master plan that shows a clear intent to locate at least 120 dwelling units per hectare through collective social housing. If the proposal should include buildings, they are allowed to be up to 5 floors high. The proposal must include strategies to integrate the environment, to manage climate and rain, and must fulfill high standards of accessibility for **people with reduced mobility (PMR)**.

## 3. Rational Use of Environmental Resources

The vast majority of the Latin American population lives in the tropics, enjoying high solar radiation all year long and exceptional availability of water sources (e.g. relatively high precipitation rates with frequent occurrences all year round). The SD LAC2019 competition should encourage design strategies that support an environmental balance that guarantees the permanent availability of these resources. Given these privileged conditions, efficient designs coupled with strategies that promote responsible consumption should allow the SD LAC2019 competition to achieve greater levels of sustainability in energy, water supply and waste management, and increase the awareness of existing sustainable solutions.

## 4. Regional Relevance

The SD LAC2019 embraces the goal of developing and promoting ideas, capacities and technologies that can be implemented for the benefit of the inhabitants of the LAC region. Thus, the competition will prefer the proposals that integrate the cultural, economical and climate conditions of this city of the Colombian pacific coast.

# The Challenge

For the competing teams, the project is designed to increase education and awareness about zero-energy house designs (housing solutions whose renewable energy production matches their total energy consumption) and to accelerate zero-energy house research and development. The competition promotes collaboration among students in the disciplines of architecture, engineering, business, marketing and communications at the outset of their careers to develop and thereby demonstrate that there is a market for residential solutions based on solar and energy efficient technologies. Like the athletic decathlon, the Solar Decathlon will test proficiency in a wide range of skills, through 10 contests. It intends to cover all issues related to sustainable housing for the future. Unlike its athletic counterpart, the Solar Decathlon is a team event, in which the diversity of abilities comes from the composition of the team rather than from a single individual.



The Solar Decathlon is also a public event designed to increase awareness about energy efficiency for residential use. The competition demonstrates that a beautifully and well-designed solar housing solution can generate enough thermal and electrical energy to meet all the needs of a household, including electricity for lighting, cooking, washing clothes and dishes, powering home and home-office electronics and maintaining a comfortable indoor temperature and air quality.

A critical and long-range outcome of the Solar Decathlon project should be the development and demonstration of cost-effective energy efficient and sustainable housing that produces as much electricity as it needs over the course of a year.

Innovations with a high likelihood of success and potential to benefit low-income communities will be highly valued.

The available funding is not expected to cover the entire expense of this project. The offerors should understand that fundraising and team support are required for successful participation in the event and will be part of the evaluation criteria. These criteria also state that industry involvement can and will be considered. However, it should be noted that this involvement shall be collaborative and an industry partner is not intended to be a lower-tier subcontractor.

## **LATE PROPOSALS, MODIFICATIONS, AND WITHDRAWAL OF PROPOSALS**

Proposals or modifications from applicants will not be received after the submission deadline.

If an Applicant experiences technical difficulties with a submission, the Applicant should contact the SDLAC 2019 ONLINE for assistance PRIOR to the submission deadline at:

[competition@solardecathlonlac.com](mailto:competition@solardecathlonlac.com)

Offers may be withdrawn by written notice received at any time before the award. Only withdrawals signed by the chancellor or president of the academic institution will be accepted. Email withdrawal will be acceptable as long as it is sent from the officers' institutional email.

## **PRIZE AWARDED**

It is the intent of INFIVALLE in behalf of Government of Valle del Cauca to award up to Sixteen (16) Post-Secondary Academic Institutions with a fixed amount of money for their participation to the competition. The agreements will contemplate a first period (Phase I) and a final period (Phase II). Money will be wired at the end of each period.

If INFIVALLE and the potential team have not reached an agreement after the proposal evaluation period and INFIVALLE considers that time will be insufficient to reach an agreement, execute it and successfully achieve its completion, INFIVALLE will decide unilaterally regarding the selected team's continued eligibility for the award. If it is decided to terminate a selected team's continued eligibility for the award, INFIVALLE will be free to select and award another



team, as long as it is eligible under the conditions set in this document.

The SD LAC2019 will fund each proposal with up to \$235.000.000 (COP). Payment to abroad teams will be made in US Dollars by international transfer at the current exchange rate of the day of transfer.

Funding will be provided as follows:

- A first disbursement of up to \$100.000.000 (COP) at the end of design phase (Phase I) in February 2019.
- A second disbursement of up to \$135.000.000 (COP) after the competition in December 2019.

Each disbursement will be made by the organization to the Post-Secondary Academic Institution Leader if and only if all the technical merits and requirements are duly fulfilled by the team.

### **Dossier and Transferring Rights**

The Second edition of Solar Decathlon Latin America & Caribbean - SD LAC2019, aims to foster sustainable habitats supported on four principles: Social Housing (multi living-unit building), Density, Rational use of Environmental Resources, and Regional Relevance.

Due to the expected impact of this event for the urban development of our region, the organizing committee wishes to publish an academic dossier about the whole experience. In consequence, the proposal shall include a signed agreement transferring the rights to use of the graphic material and all joint documents prepared for the SD LAC2019 to Government of Valle del Cauca.

## **Instructions to apply**

Further instructions, new documents, and adjustments to the existing draft rules will be made available at our website (<http://www.solardecathlonlac.com>). Teams are advised to constantly visit this website to stay up-to-date with all relevant information.

The competition is open to all Post-Secondary Academic Institutions (**PSAI**). This concept includes Universities and Professional Training and Technological Formation Institutions with government accreditation.

- Teams might be configured by one or several **PSAIs**. In case of alliances, the team must provide signed evidences of an agreement between the institutions. All the members of this alliance must be represented in the team's composition.
- If two or more **PSAI** collaborate in the submission of a single proposal, only one must register as the leading institution.
- The registered institution must choose a Faculty Leader, duly authorized by the chancellor/president of the institution, who will be in charge of signing all required



documents, including the Letter of Commitment.

## APPLICATION PROCESS

The SDLAC 2019 organization will perform an initial review of the applicant submissions to determine whether they meet the eligibility requirements as stated in this Request for Proposals and further available documents.

### FIRST REGISTER YOUR TEAM

To complete the submission, the team should be previously listed in the SD LAC2019 Online registry. We encourage participants to register as soon as possible so they can get a fluent communication with the SD LAC2019 organization during the application process. Information submitted for registration should not contain any proprietary or sensitive business information. The information provided during registration will not be used for evaluation purposes and does not commit applicants to submit an application.

Each Applicant must provide the following information as part of the registration:

- Project Title
- Lead Institution
- The Project Team, includes:
  - The Faculty Leader
  - The Student Team leader
  - Abstract – The abstract provided should be 200 words in length, and should provide a truncated explanation of the proposed project.

Applicants will receive a **Code Number** upon registration for the competition, which should be included in the file name of their Full Application submission (i.e., Reference\_number\_Applicant Name).

All Full Application documents must be marked with the Reference Number issued to the Applicant.

### ONLINE SUBMISSION

All applications must be submitted online as follows:

- Proposals are due October 20<sup>th</sup>, 2017 at 18h00, Colombia [UTC/GMT -5 hours].
- The team should register for the Solar Decathlon LAC 2019 at <http://www.solardecathlon.com> before the due date (acceptance may take up to 48 hours).
- The proposal must be submitted in PDF format to [competition@solardecathlon.com](mailto:competition@solardecathlon.com)
- In order to present a complete proposal, the team shall fill-in and complete in English every form attached in this RFP.
- All pages must be formatted to fit on letter paper with margins not less than 2.5 cm on every side.
- The use of any typeface is allowed, with a black font color and a font size of 12 points or larger (except in figures or tables, which may be 10 points).



- Greek letters or special characters are acceptable but the font size requirement still applies.
- References must be included as footnotes or endnotes in a font size of 10 or larger. Footnotes and endnotes count towards the maximum page requirement.
- Proposals must not exceed the maximum limit of 22 pages, including cover page, charts, graphs, maps and photographs, when printed using the formatting requirements set forth above and single spaced.
- A complete proposal must include a Cost Estimate form. This form does not count towards the page limit and cannot exceed two pages of length.
- If a proposal exceeds the maximum of 22 pages, the SDLAC 2019 organization will review only the authorized number of pages and disregard any additional pages.
- The Code Number must appear on the upper right corner of the header of every page. Page numbers must be included in the footer of every page.
- The current Solar Decathlon draft rules are posted at: <http://www.solardecathlon.com>
- The maximum file size for every attachment cannot exceed 10 MB.
- If a file exceeds 10 MB but is still within the maximum limit of pages specified above it must be split up into parts named as follow:
  - ReferenceNumber\_LeadOrganization\_Project\_Part\_1
  - ReferenceNumber\_LeadOrganization\_Project\_Part\_2, etc.
- All measurements should be given in English and SI units. All artwork should be clean and legible. Keep in mind that some members of the evaluation panel may read the proposals on-screen, while others may prefer to read them on-print. As such, the document should be easy to navigate (e.g. include a hyperlinked Table of Contents) but also print-ready.

## **FULL APPLICATION CONTENT REQUIREMENTS**

Each application must be limited to a single project. Full Applications must fulfill the following requirements:

1. Technical Proposal (PDF format)
  - a. One-page Academic Resumés of all key participants. These pages do not count towards the page limit.
  - b. Cost Estimate form. PDF format and Excel format. (Attachment A)
  - c. Letters of commitment from all Sub-recipient and for support from partners.
2. Summary for Public Release (1 page limit; PDF format; Around 300 words)
3. Letter of commitment signed by the Chancellor, President or maximum authority of the Leading University Organization. Pdf format.

### **1. TECHNICAL PROPOSAL**

The Technical proposal must be submitted in Adobe PDF format. Named as follows: "ReferenceNumber\_LeadOrganization\_TechnicalProposal".

The Technical Proposal to the Full Application may not be more than 22 pages, including:



- **Cover page** (1 page)

The cover page should include the project title, information of contact, names of all team member organizations and sponsorships, and any statements regarding confidentiality.

- **Project Overview** (10% of the Technical proposal)

**Background:** The Applicant should discuss the background of their organization, including the history, successes, and current research and development status (i.e., the technical baseline) relevant to the technical topic being addressed in the Full Application.

**Project Goal:** The Applicant should explicitly identify the targeted improvements to the baseline technology and the critical success factors in achieving that goal.

**Impact:** The Applicant should discuss the impact that this innovative design will have on the current state of the technology in this area.

- **Technical Description** (Suggested 30% of the Technical proposal)

**Relevance and Outcomes:** The Applicant should provide a detailed description of the project. This section should describe the relevance of the proposed project to the goals and objectives of the Request. The Applicant should clearly specify the expected outcomes of the project.

**Feasibility:** The Applicant should demonstrate the technical feasibility of the proposed project and capability of achieving the anticipated performance targets, including a description of previous work done and prior results.

**Innovation and Impacts:** The Applicant should describe the current state of the art in the applicable field, the specific innovation of the proposed project, and the overall impact on advancing the state of the art/technical baseline if the project is successful.

- **Conceptual Urban and Architectural Design** (Suggested 40% of the Technical proposal)

Provide graphics, e.g., sketches, drawings, diagrams, etc., and narrative summarizing the most important elements of the conceptual design solution for urban development and the integration of architectonic project.

- **Resources and Technical Qualifications:** (Suggested 20% of the Technical proposal)

**Expertise and Academic resources:** Describe the Project Team's unique qualifications, previous work effort, patents, results of research, technical innovations.

The proposal must include a description of time commitment of the key team members to support the project.

Provide information to demonstrate that the Institution the Solar Decathlon has been integrated in the academic curriculum and it is clear the organization and planning to achieve the success of project.

Provide list of Team members and Team Crew to the competence without exceeding the evaluation criteria outlined.

Attach one-page resumes for key participating team members as an appendix. Multi-page resumes are not allowed.



Economical resources: The applicant must submit as part of the proposal the cost estimated for a complete and successful participation in SD LAC2019.

Teams shall detail their plan for raising the funds necessary to cover 100% of the project's budget, clearly identifying the allocation of the \$235.000.000 (COP) awarded by the SD LAC2019 Organization.

Also describe the Project Team's existing equipment and facilities that will facilitate the successful completion of the proposed project.

Attach letters of commitment from all Subrecipient / third party cost share providers as an appendix. Letters of commitment do not count towards the page limit.

Attach any letters of support from partners/end users as an appendix (1-page maximum per letter). Letters of support do not count towards the page limit.

## **2. SUMMARY/ABSTRACT FOR PUBLIC RELEASE**

One-page summary/abstract of the project. This must include a concrete idea of the project proposed suitable for dissemination to the public.

It should be a self-contained document that identifies the name of the applicant, the project director/principal investigator(s), the project title, the objectives of the project, along with a description of the project, including the methods to be employed, the potential impact of the project (i.e., benefits, outcomes), and major participants (for collaborative projects). This document must not include any proprietary or sensitive business information.

The project summary must not exceed 1 page when printed using standard Letter or A4 paper with 2.5 cm margins (top, bottom, left, and right) with font not smaller than 11 point. Save the Summary for Public Release in a single PDF file using the following convention for the title "ReferenceNumber\_LeadOrganization\_Summary".

## **3. LETTER OF COMMITMENT**

Applicants are required to provide a scanned copy of a letter signed by the maximum authority of the University leading the team (Chancellor or President) where the institution declares its commitment to participate in the competition and to support the faculty and students during competition.

Save the letter in a single pdf file using the following convention for the title:

"ReferenceNumber\_LeadOrganization\_Commitment".

## **EVALUATION AND SELECTION PROCESS**

Each Proposal must be elaborated by students, with the support of a Faculty Advisor. Graduate



students may participate in the proposal, but it is recommended that most participants be undergraduate students. The proposal will be limited to 22 pages, including any diagrams, charts, or appendices.

Proposals and prototypes that have been selected by some previous Solar Decathlon competition are not eligible.

Houses that are participating or that will participate in other Solar Decathlon competitions around the world prior to the start of the Solar Decathlon Latin America & Caribbean – SD LAC2019 are not eligible as well.

All proposals will be judged on a competitive basis, in two phases:

#### Phase One—Initial Evaluation

- An initial evaluation will be performed to determine if all required information has been provided.
- Applicants may be contacted only for clarification purposes during the initial evaluation at [competition@ solardecathlon.com](mailto:competition@solardecathlon.com)
- Applicants shall be notified if their offer is determined ineligible and the reasons for rejection will be provided. Ineligible offers will be excluded from further consideration.

#### Phase Two—Discussion, Selection and Award

- Proposals will be evaluated to determine which teams have the most promising approach for building a successful project.
- The SD LAC2019 Organizers will announce the teams selected at late december 2017.

### **Evaluation Criteria for Selection**

Evaluation criteria are qualitative and based on the 4 fundamental principles previously defined: Social Housing, Density, Rational Use of Environmental Resources and Regional Relevance, and other documents. Proposals selected will be those that demonstrate the greatest sensibility and projection in a solar social housing solution for low-income communities in the tropics:

#### 20% **Technical Innovation**

- The proposal demonstrates conceptually how it improves the conventional house.
- The proposal involves bioclimatic solutions and technical housing innovation, taking an aggressive, but yet practical approach to the project, arguing its chances of success.
- The proposal is developed including innovations with a high likelihood of success and potential to benefit low-income communities.
- The Institution(s) demonstrate they have the capabilities and qualifications to have high probability of success within the SD LAC2019 competition.
- The Institution(s) demonstrate that the proposed housing is designed for the long term, taking environmental sustainability into account and presenting an adequate plan for garbage and residue disposal, including the construction and competition phases of the



Solar Decathlon. The assembly and disassembly processes will also be taken into account.

**25% Fundraising and Team Support**

- The proposal gives a clear understanding of the costs associated with the project and the need for fundraising.
- Global information regarding fundraising is consistently planned according with the Cost Estimate and Financial Project.
- The proposal demonstrates clearly that innovations applied equipment, instrumentations, appliances and facilities are adequate, obtainable and available.
- Team proposal demonstrates that the Institution(s) have considered involving the project with the industrial sector.
- Expenses described in the Post-Secondary Academic Institution Participation and Release Agreement are part of this evaluation as well.

**20% Organization and Project Planning**

- The proposal demonstrates that the Team understands all the activities involved in the project.
- The activities are planned and organized adequately to ensure successful completion.
- The organization chart and timeline exhibit good planning and understanding of the deliverable schedule.
- How and who will make decisions and how conflicts will be resolved are adequately addressed.
- Unique obstacles, such as long-distance communications/collaboration, overseas house transportation, Colombian customs<sup>4</sup> considerations (for international teams), and academic calendars, are addressed.

**20% Conceptual Urban and Architectural Design**

- Team has submitted conceptual sketches of urban master plan according to the 4 principles described above: Social Housing, Density, Rational Use of Environmental Resources and Regional Relevance.
- Proposal of conceptual urban master plan submitted fulfills the minimum density of 120 dwellings per gross hectare.
- The conceptual urban master plan submitted shows a growth strategy and integration with a possible context, a well-integrated environment with tropical landscape conditions, and sunlight management.
- The conceptual architectural proposal submitted communicates ideas, character, and gives a clear idea of aesthetics, building envelope and solar components, offering a sense of inspiration and delight.
- The proposal demonstrates a potential to benefit professional social housing developers.
- The conceptual architectural design is understood integrated with urban design and not as a stand-alone solution.
- The proposal demonstrates a conceptual net-zero energy housing design at this conceptual design stage.

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<sup>4</sup> [www.dian.gov.co](http://www.dian.gov.co)



15% **Curriculum Integration**

- The proposal demonstrates that the SD LAC2019 project is well integrated into the student's' course work. The Institution(s) fosters top students to make long-term commitments to the project by offering scholarships, independent study credit, paid research assistantships, or other paid or academic compensation.
- Proposal has submitted the complete list of their Team members to the competence following the requirements listed below.

Every Post-Secondary Academic Institution (PSAI) shall consider the list below to conform their respective team (an individual may have multiple titles, every single member will be called 'decathlete team member'):

Faculty Advisor:	Faculty member
Project Manager:	Student
Construction Manager:	Student
Project Architect:	Student or Graduate
Project Engineer:	Student or Graduate
Electrical Engineer:	Student or Graduate
Student Team Leader:	Student
Health & Safety Team Coordinator:	Student or Graduate
Safety Officers:	Student
Site Operations Coordinator:	Student
Contest Captain:	Student
Instrumentation Contact:	Student
Communications Coordinator:	Student
Decathletes (without specific position):	Student
Maximum Decathlete team members:	25 – 40

**Team Crew:** SDLAC Organization allows each team to have a group corresponding to the external advisory composed by the staff of sponsor members and other external assistance involved with a team's project but unaffiliated with the participating team. Maximum Team crew members: 6.

With no exceptions, all team members must present documents proving their relation with the PSAI they represent. Except the Faculty Advisor, in case a team member is a graduate, the graduation date must be from May 1<sup>st</sup> 2017 and onwards.

If the proposal is selected for participation in the SD LAC2019 competition, changes to the proposed team composition will only be accepted in case of calamity or if a team member leaves the academic institution. In such case, the change must be informed and justified in writing to the SD LAC2019 Organization by the person who signed the Registration Form or whoever has assumed his role at the time.

**SPECIAL CONSIDERATIONS**

Other factors such as geographic diversity and technology diversity will be considered for the benefit of the program.



These evaluation criteria are listed in order of importance. Technical reviewers will base their conclusions only on information stated in the proposals. It cannot be assumed that reviewers are acquainted with the Institution or key individuals or any of their prior work or accomplishments.

**Note:** It is recommended to study the past competitions to learn valuable lessons from the experiences of past designs.

## **GREEN SOLAR VILLA FEATURES AND AWARD PLACE**

The solar-world position encourages finding particular solutions depending on the place where the prototype will be built. The city of Santiago de Cali enjoys bright sunlight almost all year round, sunset breezes every day and a regular precipitation regimen focused on April - May and October - November (data on weather conditions call *Climate data* will be available at [www.sd-lac.org](http://www.sd-lac.org)).

A complete description of the *Green Solar Village* will be available on November 2017 at [www.solardecathlonlac.com](http://www.solardecathlonlac.com)

Every lot within the campus will be assigned through a raffle on february 16, 2018. Teams will be randomly assigned a number between 1 to 16. The team with the number 1 will have the opportunity to choose the first lot; the team with the number 2 will have the second choice, and so forth.

## **ATTACHMENT A**

### **Cost Estimate and Financial Project**

#### **Budget preparation instructions**

Each team must present global information "Cost Estimate and Financial Project" (Attachment A), which will be developed in full detail during the competition. It must include Direct Costs and Expenses, General Operation and Administration Expenses, Travel Expenses, Insurances, Taxes and other expenses they may incur until the end of their participation on december 2019. This budget must be presented in two phases according to the "*Preliminary Schedule of Deliverables*" published in the Draft Rules at [www.solardecathlonlac.com](http://www.solardecathlonlac.com). The official currency for elaboration of the "Cost Estimate and Financial Project" is US Dollars (USD).

For a proposal to be considered, its total budget, excluding travel expenses, should not exceed USD200,000. The expenses of awarded teams will be carefully monitored and evaluated. Any deviation from the accepted budget will affect the final score.

Provide in a global manner a project summary budget according with Attachment A (Cost Estimate and Financial Project), in order to ensure that all information provided in the Team's proposal is complete and accurate and includes the necessary documentation to allow SD LAC2019 Organization to perform the required review and evaluations in a timely and efficient manner. It will be necessary to demonstrate that the Post-Secondary Academic Institution (PSAI) knows about how much funds they will need to guarantee the development of the project and the participation in the SD LAC2019 in Colombia.



In addition, the Team's proposal shall include as attachments, enough support information about fundraising managed by the Team in order to achieve success in the SD LAC2019: Letters of intent, investment budget, etc.

1. **Direct Materials:** Are normally purchased parts, purchased items or services (e.g. welding, minor fabrication, etc.), raw materials, standard commercial items, interdivisional transfers at other than cost, etc. Through the application, proposals must include an Attachment A with prices in a global manner in response to the RFP's requirements and must correspond to the proposal developed by the team during the competition in 2019.
2. **Estimated House Furnishing Cost:** Total estimated cost of construction prototype shall include the cost of all-house furnishings.
3. **Assembly, Transport, Disassembly Processes in the Solar Village:** Include any estimated costs related with rental of cranes, bull lifts, scaffolders and others construction machines, necessary to assemble and disassemble the prototype in the competition site.
4. **Other Direct Costs:** Include any direct costs not covered by one of the other cost elements in this area. A detailed list of each cost item including description and estimated budget is required. An example of this type of costs could be general and administrative expenses, indirect expenses, security activities and services, cost of models, communications costs, etc.
5. **Preparatory Construction and Transportation to Final Phase in Santiago de Cali - Colombia:** According with the prototype designed by the PSAIs, it will be necessary to allocate an important amount for the transportation to Santiago de Cali - Colombia, estimated export and import logistic costs including trains, trucks, cranes, scaffoldings, assembly and disassembly of the prototype to make testing at place of origin.
6. **Direct Labor:** Should indicate the hours, hourly rate, and total for each individual or category of labor proposed.
7. **Lower-tier Subcontractors:** Identify each proposed lower-tier subcontractor and obtain a cost proposal containing the same information and in the same format from each proposed lower-tier subcontractor.
8. **Consultants:** Identify each proposed consultant and the estimated budget of their services.
9. **Travel and Transport of Team for Final Phase in Santiago de Cali - Colombia:** The travel costs will be, for some PSAIs, an important item in their budget. The number of team members and the estimated cost of travels, transportation, expenses allowance, lodging accommodations and miscellaneous expenses must be defined.
10. **Insurance Policies:** In response to the RFP's requirements, teams must submit the Post-Secondary Academic Institution Participation and Release Agreement.

During the competition, according with the "Statement of Work" that will be signed between the PSAI and INFIVALLE, their respective officers, directors, employees, agents, contractors, subcontractors, and representatives (the "Released Parties") shall be released from any and all claims, losses, expenses, and demands, including those resulting from injury or death to any person or damage to any property, arising from the PSAI's work on or participation in the Event or any activities incidental thereto. In addition, before the commencement of the Solar Decathlon Latin America & Caribbean 2019 in Colombia, the PSAI shall secure from each of the PSAIs participants prior to the participant's commencement of activities related to the Solar Decathlon, a signed written "Release and Waiver of Liability - Assumption of Risk and Indemnity Agreement" ("Participant's Release"), that releases the Released Parties from any and all claims, losses, expenses, and demands, including those resulting from injury or death to any person or damage to any property, arising from the participant's work on or participation in the Event or any activities incidental thereto. The PSAI shall submit the signed forms to INFIVALLE for all of



its participants upon the acceptance of the PSAI's proposal, to be fully supplemented prior to the commencement of travel to the Event, and will retain the originals of such signed releases for a period of three (3) years, and will make them available to INFIVALLE upon request.

The PSAI warrants that each Participant's Release that is submitted is valid and enforceable and the PSAI will defend and hold harmless the Released Parties for any claims and liabilities arising from its participant's involvement in the Event. Liability Insurance costs, transport insurance, accidents, and medical insurances, must be included in the estimated budget of the project.

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