



## **THE LVOV PROJECT GUIDELINES**

The guidelines are designed to maximize the number of concepts sought, the efficacy of these concepts in reducing residential operating costs by at least 40% while improving energy efficiency, air quality, comfort and ventilation.

The competition will be a Two-Stage Process wherein all registered participants can submit for the First Stage of the Competition. No more than 10 short-listed participants will be invited to proceed to the Final Stage of the Competition.

### **PRIZES:**

There will be prizes in the amount of \$1,000,000, with a First Place Prize of \$500,000, a Second Place Prize of \$300,000 and a Third Place Prize of \$100,000, to be awarded to the three Teams whose Final Stage entries receive the three highest aggregate scores as tabulated according to the scoring criteria below. Short-list participants will each receive \$10,000 each.

### **ELIGIBILITY:**

Teams are encouraged to be multi-disciplinary. Current employees of The Scott Petinga Group or any of its group of companies may neither participate in nor have financial interest in any team. The Competition is void in those countries where prohibited or restricted by law.

### **REGISTRATION:**

The registration fee is US \$1,000 per entry for each competition, payable in U.S. Dollars only. To register visit <http://www.thinkdifferent.org/IntentForm>

Deadline to register is on **December 15, 2015 at noon (Central Standard Time, GMT -5:00)**. Only registered participants will be given access to the Competition Kit.

### **TIMELINE:**

- Registration Deadline: December 15, 2015 at noon (Central Standard Time, GMT -5:00).
- First-Stage Submissions Deadline: May 15, 2016 at 3 PM (Central Standard Time, GMT -5:00).
- Announcement of Short-listed Entries: June 30, 2016.
- Final-Stage Submissions Deadline: November 30, 2015 at 3 PM (Central Standard Time, GMT -5:00)
- Announcement of Winner: January 31, 2017

### **JUDGING CRITERIA:**

The winners of The LVOV Project will be the team that reduces residential operating costs by at least 40% while improving energy efficiency, air quality, comfort and ventilation. In both judging phases, the judges will score the entries under review based on five criteria:

1. Matrix Criteria Evaluation (Reliability, Flexibility, Maintainability) (50%)
2. Low Life Cycle Cost (15%)

3. Comfort and Health (15%)
4. Environmental Impact (10%)
5. Originality (10%)

The minimum team goal is to meet and exceed ENERGY STAR certification requirements. ENERGY STAR certified new homes are designed and built to standards well above most other homes on the market today, delivering energy efficiency savings of up to 30 percent when compared to typical new homes. A new home that has earned the ENERGY STAR label has undergone a process of inspections, testing, and verification to meet strict requirements set by the U.S. Environmental Protection Agency (EPA), delivering better quality, better comfort, and better durability. Teams shall include illustrations of projected annual building energy consumption (including plug load), this annualized energy consumption shall be shown in Energy Use Intensity (EUI) value units of kBtus/ft<sup>2</sup> or Mj/m<sup>2</sup>.

Teams shall illustrate their mechanical and electrical systems of choice such that examples of energy efficiency are included. Demonstration of acceptable Indoor Environmental Quality shall also be included; examples could include (but are not limited to) human comfort, ventilation effectiveness, and building air pollutant control.

### **OPERATING COSTS**

Teams will be responsible for funding their own proposal and presentation development costs.

### **JUDGING PANEL**

The judging panel for The LVOV Project will include experts in sustainability, architecture, energy and water conservation, business and commercialization of technologies.

### **SUBMISSION REQUIREMENTS**

#### **First Stage Submissions: For ALL Registered Participants**

Each submission entry will be assigned an alpha-numeric code. Submission Requirements must have NO identifying names, marks or logos. Submissions with Identifying names, marks; or logos will be automatically DISQUALIFIED.

Incomplete submissions will be automatically **DISQUALIFIED**. *NOTE: Upon submittal of registration application, THINK DIFFERENT will issue each participant an alpha-numeric code that must appear on each component (ex: 101A.pdf)*

#### **A. One (1) Project Report in PDF Format (Portrait Orientation)**

Maximum of 50 pages and must include the following:

- An executive summary of the Project Proposal, beginning with a paragraph highlighting the key features of the project. As part of the executive summary, include a 1-2 page table that lists as bullet points the significant elements in which the Project Proposal meets each of the five judging criteria.
  - Matrix Criteria Evaluation (50%)
  - Reliability
  - Flexibility
  - Maintainability

- Low Life Cycle Cost (15%)
  - Identify annual savings for energy and operation costs
- Comfort and Health (15%)
  - Describe how you are reducing leaks and drafts by providing comprehensive air sealing, quality-installed insulation, and high performance windows and doors to minimize warm and cold spots.
  - Describe and depict how are you providing more consistent temperatures by providing a high efficiency heating and cooling system, designed and installed for optimal performance, ensures better comfort in every room, year-round:
    - schedules for all major equipment components selected;
    - mechanical floor plans showing general equipment layout and single line duct size and layouts, piping sizes and layouts, terminal units, diffusers, grilles, registers, thermostats, humidistats and any other pertinent devices or equipment.
    - Schematic flow diagram indicating components and accessories and piping sizes and examples of how this system is designed in accordance with ENERGY STAR standards.
    - Heating and Cooling Load Calculations: Provide checksum reports for each System, design cooling and heating block load reports for selection of cooling and heating plants
    - Summary table of ventilation calculations
  - Describe how you will provide better durability by providing a comprehensive water management system, including flashing, moisture barriers and heavy-duty membranes, protects roofs, walls, and foundations from moisture damage (needed?)
  - Describe how you are improving indoor air quality by providing a fresh-air system that provides a controlled amount of outdoor air. Combined with a high-performance filter, what do you propose to improve indoor air quality, reduce dust, pollen and other allergens.
- Environmental Impact (10%)
- A comprehensive water management system, including flas
- Originality (10%)

## B. Filled-up and Signed Forms and Declarations

C. One (1) USB containing the PDF formats of Requirements A to B and the Excel files of the Initial and Detailed Financial Analysis.

### **Second Stage Submissions: For Short-listed Participants Only**

Names, logos and other identifying marks are now ALLOWED.

A. An audio-visual presentation, maximum of 2 minutes that summarizes the features of the Project Proposal.

B. A slide presentation to go along with the 15-minute live presentation. The presentation must highlight how significant elements of the Project Proposal meet each of the 5 judging criteria.

C. Revised Project Report in PDF Format (Portrait Orientation), Maximum of 50 pages, seven (7) colored copies

D. A Signed and Filled-up Forms and Declarations

E. One (1) USB containing all the file formats of Requirements A to D.