

2017

Bright Futures Built Here



U.S. DEPARTMENT OF ENERGY

# SOLAR DECATHLON

## VISITORS GUIDE

October 5-15, 2017

61st & Peña Station, Denver, Colorado



# Welcome to Solar Decathlon 2017—a Bright Future Now

What's your vision for a brighter future?

A beautiful home that feels better to live in than you could imagine? Living among your neighbors in a clean, quiet environment? Easy-to-use technology that makes life easier?

These are just some qualities of the bright future the U.S. Department of Energy Solar Decathlon is helping to build.

The Solar Decathlon is a collegiate competition of 10 contests that challenge student teams to design and build full-size, energy-efficient, solar-powered houses. Each team builds a house that showcases cutting-edge materials and strategies, smart home systems, and energy- and water-efficient products that reduce energy and water use without sacrificing the comfort of modern conveniences. The winner of the competition is the team that best blends design excellence and smart energy production with innovation, market potential, and energy and water efficiency.

Solar Decathlon is more than a competition. It's an intensive learning experience for consumers and homeowners as they experience the latest technologies and materials in energy-efficient design, clean energy technologies, smart home solutions, water conservation measures, electric vehicles, and sustainable buildings.

Go see for yourself. Tour the houses and meet the amazing students who have been working hard for two years to compete in the Solar Decathlon and share their work with you. We're confident you'll walk away inspired to envision your very own brighter future.



*Gretchen Miller, a student at Penn State, posts the welcome sign in front of her team's solar-powered house during the U.S. Department of Energy Solar Decathlon 2009 on the National Mall in Washington, D.C. (Credit: Stefano Paltera/U.S. Department of Energy Solar Decathlon)*

# Solar Decathlon Map

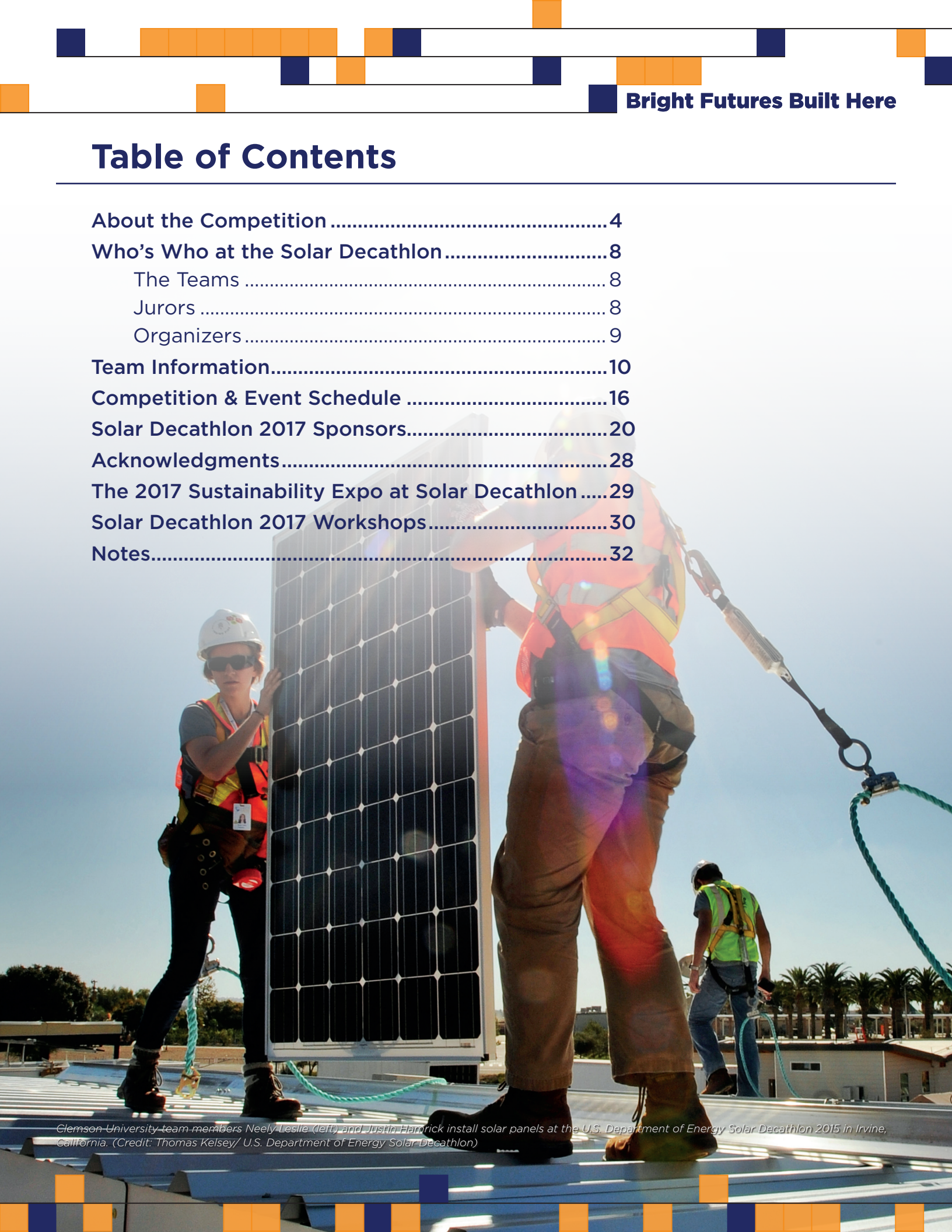


- City and County of Denver Welcome Tent
- Village Entrance
- Water
- Public Parking
- Food
- First Aid
- Walking Route
- Restrooms

| Solar Decathlon 2017 Teams                |  |                                     |
|---|--|-------------------------------------|
| <b>101</b><br>Missouri S&T                | <b>108</b><br>Swiss Team                         | <b>114</b><br>Team<br>Daytona Beach |
| <b>102</b><br>UC Davis                    | <b>109</b><br>Northwestern<br>University         |                                     |
| <b>103</b><br>University of<br>Maryland   | <b>111</b><br>Washington U - St. Louis           |                                     |
| <b>105</b><br>UC Berkeley/<br>U of Denver | <b>112</b><br>Team Alabama                       |                                     |
| <b>106</b><br>Team<br>Netherlands         | <b>113</b><br>University of<br>Nevada, Las Vegas |                                     |

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*Clemson University team members Neely Leslie (left) and Justin Hamrick install solar panels at the U.S. Department of Energy Solar Decathlon 2015 in Irvine, California. (Credit: Thomas Kelsey/ U.S. Department of Energy Solar Decathlon)*

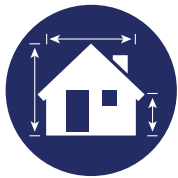
## About the Competition

### Go Teams!

For the teams and their fans, the Solar Decathlon is a competition with a lot at stake. For the first time in 2017, teams are eligible for cash prizes up to \$300,000.

Each contest is worth a maximum of 100 points, for a competition total of 1,000 points. Contests that require the teams to complete specified tasks and ensure their projects perform to specified criteria are called “measured” contests. Contests that are evaluated by expert juries are called “juried” contests.

### The 10 contests for Solar Decathlon 2017



#### 1. Architecture (juried)

A jury of architects evaluates each team’s architectural concept and design approach, the implementation of the design and its innovative features, and required documentation for the project.



#### 2. Market Potential (juried)

Teams design a primary residence for year-round occupancy for a specific target client. A jury of professionals from the homebuilding industry evaluates the overall attractiveness of each team’s design to its selected target client and the market impact potential of the house.



#### 3. Engineering (juried)

A jury of engineers evaluates the engineering design and implementation of each team’s house based on the engineering approach, design, efficiency, and performance.



#### 4. Communications (juried)

A jury of communications professionals evaluates each team’s communication strategies, materials, and efforts to educate, inform, and interest the team’s local communities, visiting public at the event, and diverse online audiences.



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Schneider Electric is proud to support the innovation that the Solar Decathlon represents to our community. We are proud of the students, faculty, and leadership for continuing to support the advancement of renewables in the residential market. We share a mutual passion for continued sustainable energy education. At Schneider Electric, we believe energy efficiency, reliability, and green solutions are the answer to our energy dilemma.

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# About the Competition



## 5. Innovation (juried)

New for Solar Decathlon 2017, a jury of industry professionals evaluates each team's research, approach to sustainability, innovations for the target client, and durability and safety of innovative elements, while also evaluating whether the price is right for the target client.



## 6. Water (juried)

Solar Decathlon 2017 is rewarding smart water solutions for the first time. A jury of industry professionals evaluates each team's approach to water conservation, water use and reclamation, and landscaping water impacts.

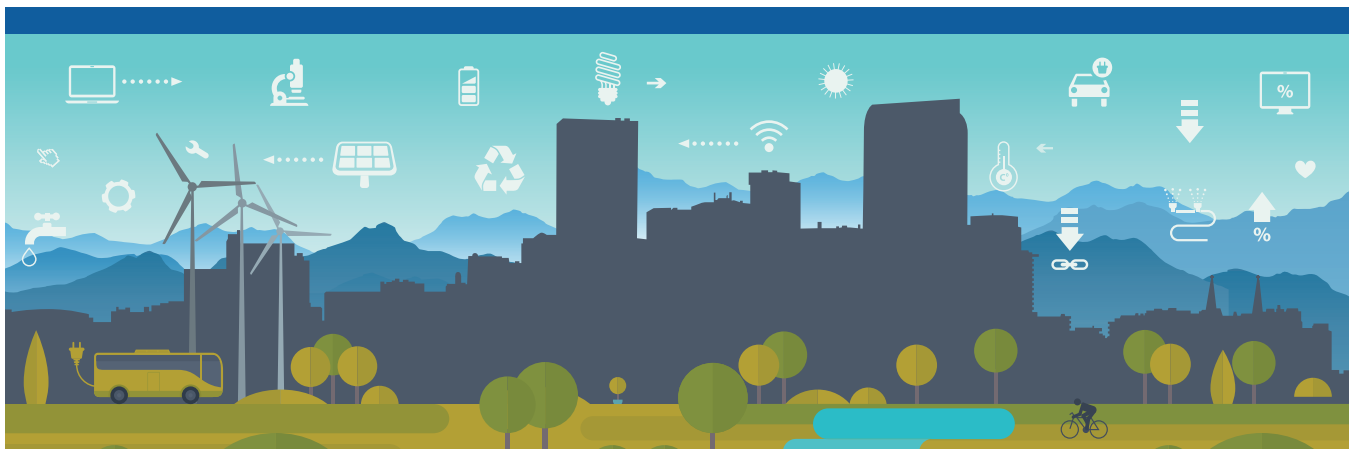


## 7. Health and Comfort (measured)

Team houses must minimize the flow of conditioned air to the outdoors, whether it's cool air in summer or heated air in winter. And they must operate heating and cooling systems that keep temperature and humidity steady, all while maintaining healthy indoor air quality.



The Mile High City is proud to host Solar Decathlon 2017, an effort that aligns with Denver's sustainability and smart city goals.



To learn more about how Denver Smart City is pioneering technology for a mobile, affordable, and environmentally-sustainable city, visit [www.denvergov.org/denversmartcity](http://www.denvergov.org/denversmartcity)



# About the Competition



## 8. Appliances (measured)

The Appliances Contest is designed to mimic the appliance use of an average U.S. home. Teams earn points for operating their refrigerator and freezer, washing and drying laundry, and simulating cooking tasks and hot showers.



## 9. Home Life (measured)

Teams are required to engage in common household activities that use electricity. They cook and share meals with friends and neighbors, watch television, use computers, and host game nights. Lastly, they “commute” for five days at least 25 miles in an electric vehicle charged by the house solar electric system.



## 10. Energy (measured)

The Energy Contest evaluates each team’s energy production and a theoretical value to a utility of the energy each team contributes to and takes from the Solar Decathlon electricity grid. For the first time, this contest includes real-time energy pricing.



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*Melody Bazzle of Clemson University smiles as she and members of her team lay a foundation for their house at Solar Decathlon 2015 in Irvine, California. (Credit: Thomas Kelsey/U.S. Department of Energy Solar Decathlon)*

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Solar Decathlon represents the promise of solar and our commitment to renewables and energy efficiency. That's why we are proud to provide the energy for this event.



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Recharge + Explore

Treat yourself to an enriching stay at The Westin Denver International Airport. Experience restorative sleep in our renowned Heavenly® Bed, invigorating workouts at our WestinWORKOUT® Fitness Studio, energizing SuperFoodsRx™ menu options available 24/7 and seamless service. Just steps from the Jeppesen Terminal at Denver International Airport, enjoy easy access to downtown Denver with the onsite Transit Center.

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DENVER INTERNATIONAL  
AIRPORT



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Driver Troy Anderson and passenger Minh Tran of California State University, Sacramento, wave as they maneuver their electric smart car in front of their house during the Commuting Contest at the U.S. Department of Energy Solar Decathlon 2015 in Irvine, California. (Credit: Thomas Kelsey/U.S. Department of Energy Solar Decathlon)



# Who's Who at the Solar Decathlon

## The Teams

The U.S. Department of Energy Solar Decathlon provides hands-on experience and unique training that prepares the competing students to enter the energy workforce. The competition fosters collaboration among students from different academic disciplines, including engineering, architecture, building science, interior design, business, marketing, and communications. Solar decathletes are required to formulate big new ideas and design what's never been done before. They also must build their designs on time and within budget and ensure that their projects work. By accepting such responsibility and being accountable for their projects from start to finish, solar decathletes gain unparalleled experience to help prepare them for their professional careers.

## Jurors

Solar Decathlon juries are composed of individual jurors at the top of their respective professions. Renowned in their fields of expertise, they bring professional excellence and practical in-the-field knowledge to each of the contests they evaluate. Solar Decathlon organizers value the jurors' contributions and thank them for their work.

### Architecture Contest

- Loraine Fowlow, *University of Calgary*
- Henry Siegel, *Siegel & Strain*
- Brad Tomecek, *Tomecek Studio Architecture*
- Nora Wang, *Pacific Northwest National Laboratory*

### Communications

- Anne Fischer, *Novus Media*
- Louise Holloway, *Energy Endeavor Foundation*
- Amy Vaughn Liles, *National Renewable Energy Laboratory*
- Suzanne Shelton, *Shelton Group*

### Market Potential

- Amy Jiron, *U.S. Department of Energy, Building Technologies Office*
- Ara Massey, *Hord Coplan Macht*
- Jon Previtali, *Wells Fargo*
- Bill Rectanus, *Thrive Homebuilders*

### Innovation

- Alison Kopf, *AgriLyst*
- Anica Landreneau, *HOK*
- Heath May, *HKS*
- Karma Sawyer, *U.S. Department of Energy, Building Technologies Office*

### Engineering

- Anthony Bouza, *U.S. Department of Energy, Building Technologies Office*
- Tom Hootman, *MKK*
- Ed May, *Building-Type*
- Kent Peterson, *P2S*

### Water

- Mary Ann Dickinson, *Alliance for Water Efficiency*
- Gary Klein, *Gary Klein & Associates*
- Bill Wenk, *Wenk Associates, Inc.*
- Stephanie Tanner, *Environmental Protection Agency*

# Who's Who at the Solar Decathlon

## Organizers

### U.S. Department of Energy Office of Energy Efficiency and Renewable Energy

U.S. DEPARTMENT OF  
**ENERGY**

Office of ENERGY EFFICIENCY  
& RENEWABLE ENERGY

*Solar Decathlon Director: Linda Silverman*

The U.S. Department of Energy (DOE) is excited to support the eighth Solar Decathlon in the United States and the first one in Denver. DOE works to ensure America's security and prosperity by addressing its energy, environmental, and nuclear security challenges through transformative science and technology solutions.

Within DOE, the Office of Energy Efficiency and Renewable Energy works closely with industry, manufacturers, national laboratories, and academia to advance the research and development of technical solutions and practices for energy-efficient living and renewable energy production.

The Solar Decathlon supports these efforts through its strong focus on workforce development and innovative building design and use of energy-efficient and solar technologies. The students and faculty participating in Solar Decathlon 2017 have made a considerable commitment to design, build, and operate their energy-efficient, solar houses, resulting in a unique, career-building experience. Competing in the event also provides these motivated students the ability to test and showcase the types of technology DOE has supported for more than 40 years. Additionally, the Solar Decathlon event encourages the public to participate by touring the innovative houses led by enthusiastic decathletes and learn from the information provided in the Sustainability Expo. The students competing in the Solar Decathlon represent our future energy and building design leaders. They inspire us to re-imagine energy use and production in our homes and lives, helping to secure U.S. energy and economic leadership.

[www.energy.gov](http://www.energy.gov)    [www.eere.energy.gov](http://www.eere.energy.gov)

## Energetics Incorporated

*Program Director: Kate Schwartzer*



For the first time in the Solar Decathlon's 15-year history, the U.S. Department of Energy Solar Decathlon 2017 has been organized and implemented as a public-private partnership. Energetics Incorporated is proudly serving as the Project Administrator, in partnership with the U.S. Department of Energy, the City and County of Denver, and many other partners critical to the success of this premier showcase of residential clean energy and sustainable living. We hope the Energetics team's innovative approach to this year's event produces an enjoyable experience for all participants and attendees at Solar Decathlon 2017.

Energetics Incorporated, a subsidiary of VSE Corporation, is a full-service technology and management consulting firm headquartered in Columbia, Maryland. For nearly 40 years, Energetics has helped its clients develop and manage effective research, development, and information programs in the fields of energy, manufacturing, transportation, climate and environment, security and resilience, and energy-efficient buildings. Energetics' success lies in its ability to move novel ideas to impactful solutions through decades of experience aligning technology, market, and policy requirements with our client's strategic objectives.

[www.energetics.com](http://www.energetics.com)

# Team Information

## 101 Missouri University of Science and Technology

The team from the Missouri University of Science and Technology combined traditional farmhouse architecture with state-of-the-art sustainable technologies when designing SILO, their entry for Solar Decathlon 2017. S is for Smart, as in a house that lets occupants control all of its systems using voice commands. I is for Innovative, as in a student-designed system that monitors the house's interior environment. L is for Living, and speaks to farmhouse-inspired lifestyle that encourages gathering and sharing food. And O stands for Oasis, a serene space filled with natural light, fresh air, and greenery—a place where empty-nesters can relax, rejuvenate, and congratulate themselves on a job well done.



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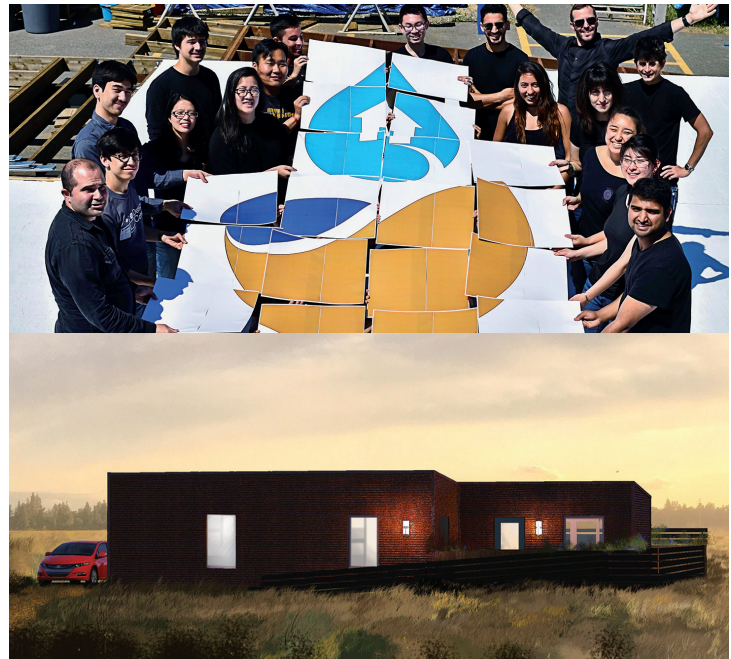


[bit.ly/SD17MST](https://bit.ly/SD17MST)

Photo of the Missouri S&T team members (top) and a rendering of their SILO project (bottom)

## 102 University of California, Davis

In addition to being ultra energy efficient, OUR H2OUSE (pronounced “Our House”) was designed by the University of California, Davis team to dramatically reduce potable water usage. The design is a direct response to the terrible drought that gripped California in recent years and will help residents better prepare for inevitable drought in the future. OUR H2OUSE supplements water and energy-efficient technologies with feedback displays to help occupants improve their own end-use behavior. The feedback also compares usage in OUR H2OUSE to its larger community, thereby proposing a paradigm shift in which sustained resource conservation is the shared goal of the house, its occupants, and the surrounding community.



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[bit.ly/SD17UCDavis](https://bit.ly/SD17UCDavis)

Photo of the UC Davis team members (top) and a rendering of their OUR H2OUSE project (bottom)

# Team Information

## 103 University of Maryland

Team Maryland is eager to debut reACT, its prototype for sustainable, self-sufficient Native American housing. Designed for a young couple living in the Denver area who are registered members of the St. Croix Chippewa Indians of Wisconsin, this “kit-of-parts” modular house is designed to improve connections to diverse local ecosystems. It includes systems that capture solar energy and rainwater and turn waste into useful resources. A central mechanical core manages the flow of water, air, and energy, and a central courtyard extends the living space and doubles as a solar heat collector. With a composting system, hydroponic garden, vegetable garden, and movable “living walls” covered in plants, reACT also demonstrates urban farming.



Photo of the Maryland team members (top) and a rendering of their reACT project (bottom)

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[bit.ly/SD17Maryland](https://bit.ly/SD17Maryland)

## 105 University of California, Berkeley & University of Denver

The UC Berkeley and University of Denver team designed the RISE house specifically for the city of Richmond, California, to support its transition from a city with traditionally suburban neighborhoods to a transit- and community-oriented urban community. Although you'll see a single-family unit at Solar Decathlon, ultimately RISE can, well, rise—up to three stories with five units of multifamily living. The design focuses on practicality and efficiency, resulting in a flexible floor plan with moveable walls and windows that allow ample light into the interior and roof space for outdoor living. It is also designed to be ultra energy efficient, to recycle greywater, and to use innovative materials to improve air quality.

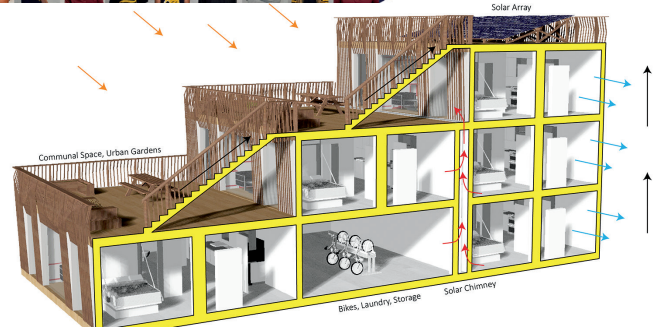


Photo of the UC Berkeley/U of Denver team members (top) and a rendering of their RISE project (bottom)

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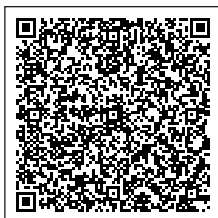
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[bit.ly/SD17UCBerkeleyUofDenver](https://bit.ly/SD17UCBerkeleyUofDenver)

## Team Information

### 106 HU University of Applied Science Utrecht, Netherlands

The team from the Netherlands is inspired to create an affordable house that would fit everyone's needs. Or, as the team likes to say, "a house for everyman." The result is Selficient, a house designed with modular, eco-friendly materials inspired by a familiar toy: the LEGO. Using the wall panels as "blocks," homeowners can tailor a house to fit their needs, whether they need to scale up or down. In addition, many aspects of heating and water circulation are intended to be controlled using smart house features linked to a smartphone, and the entire house is heated and cooled using renewable energy.

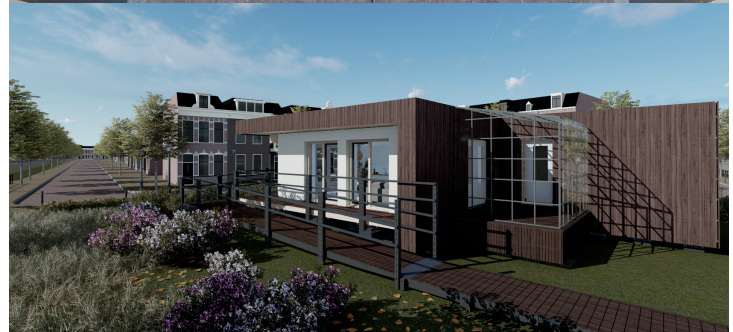


Photo of the Netherlands team members (top) and a rendering of their Selficient project (bottom)

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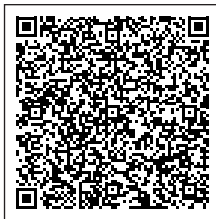
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[bit.ly/SD17Netherlands](https://bit.ly/SD17Netherlands)

### 108 Swiss Team: École Polytechnique Fédérale de Lausanne; School of Engineering and Architecture, Fribourg; Geneva University of Art and Design; and the University of Fribourg, Switzerland

The Swiss Team's project NeighborHub aims to create community spirit by offering a place dedicated to learning and exchanging ideas to create a more sustainable future. The house can be used as a workspace, a conference room, a community dining space, a local market, or a gardening area, as well as provide functional living and sleeping space. NeighborHub's multipurpose spaces are arranged in a layered configuration connected by wide openings to ensure good airflow. The team intends 100% of the house's exterior walls to be used for energy production. Solar panels are integrated on the east, south, and west façades of the building to harvest maximum energy, while the roof is used for water collection and as green space.



Photo of the Swiss team members (top) and a rendering of their NeighborHub project (bottom)

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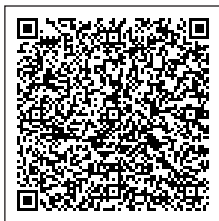
[bit.ly/SD17SwissTeam](https://bit.ly/SD17SwissTeam)

# Team Information

## 109 Northwestern University

To help guide their design for a flexible, appealing house marketed for Chicago's baby boomers, the team from Northwestern University conducted extensive user research to create hypothetical clients: a couple named Michael and Lisa. Knowing that Michael and Lisa value aesthetics and functionality above all, the students wove energy efficiency and sustainability into their modern, sophisticated aesthetic, which they call Enable. Constructed with structural insulated panels (SIPs), Enable also includes roof-integrated solar panels, movable interior walls, and an attached sunroom. And, to help Lisa and Michael maintain their good health as they age, the students added air-filtering technologies and a system that monitors VOCs, CO<sub>2</sub>, dust, and humidity.

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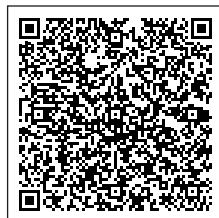


Photo of the Northwestern team members (top) and a rendering of their Enable project (bottom)

## 111 Washington University - St. Louis

With Crete House, the team from Washington University in St. Louis wants to send a message that concrete can be a viable, sustainable—and beautiful—alternative to light wood-frame construction. The students designed the house with precast insulated panels that are manufactured in a factory and assembled on-site. Large gutters extend out from the main concrete structure and offer support for shading materials while creating outdoor living space. The gutters also collect and direct rainwater and serve as vertical planters. This hydroponic system is part of a productive landscape that should enable the occupants to grow food all year round. Durable, stormproof, and fire-resistant, the students believe Crete House will still be standing a century from now.

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[bit.ly/SD17WashU-StLouis](https://bit.ly/SD17WashU-StLouis)



Photo of the Wash U - St. Louis team members (top) and a rendering of their Crete project (bottom)

# Team Information

## 112 Team Alabama: University of Alabama at Birmingham and Calhoun Community College

Team Alabama's surviv(AL) House is inspired by the devastating impact of the 2011 tornado super outbreak on the region. surviv(AL) House is intended to serve as a model for sustainable, resilient housing for severe weather-prone communities. To protect its inhabitants, surviv(AL) House incorporates a safe room with tornado panels designed by engineers at the University of Alabama to withstand 250 mile-per-hour winds—intended to remain intact even if the house is destroyed during a strong storm. The house also offers “quick permanence,” a term the team uses to describe a home that can be quickly rebuilt to provide comfort, security, and energy independence in the aftermath of a disaster.

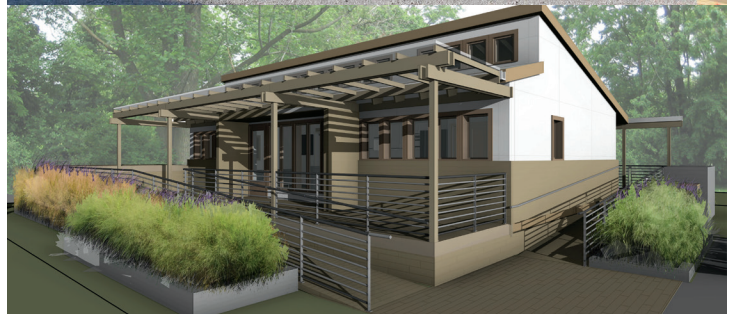


Photo of the members of Team Alabama (top) and a rendering of their surviv(AL) House project (bottom)

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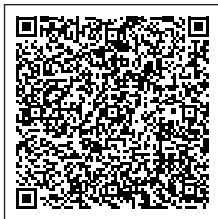
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[bit.ly/SD17TeamAlabama](https://bit.ly/SD17TeamAlabama)

## 113 University of Nevada, Las Vegas

The University of Nevada, Las Vegas team is planning for the future. Team members know the national population is aging rapidly and the need for sustainable housing is urgent. With Sinatra Living they tackled both of these problems at once. The house features classic mid-century design as well as an open layout, adjustable countertops and shelves, slip-resistant flooring, and fall detection sensors to make the house safer for aging in place. Sinatra Living is also designed with a solar thermal system for hot water and radiant floor heating and a greywater reuse, rainwater, and condensate collection system—just two examples of its sustainability.

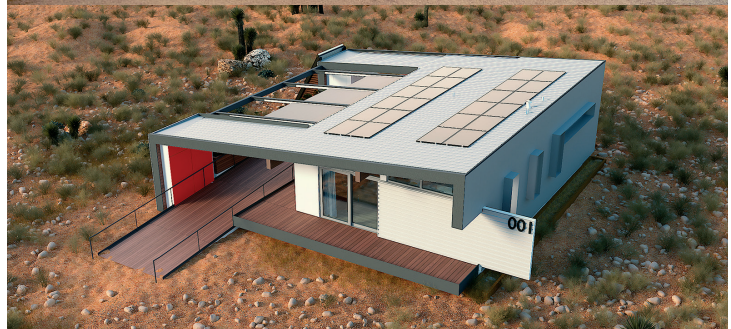


Photo of the Las Vegas team members (top) and a rendering of their Sinatra Living project (bottom)

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[bit.ly/SD17LasVegas](https://bit.ly/SD17LasVegas)

## Team Information

### 114 Team Daytona Beach: Embry-Riddle Aeronautical University and Daytona State College

The oldest “Gen X-ers” will turn 52 in 2017. That’s right, Generation X is rapidly approaching their retirement years, and Team Daytona Beach intends to create a sustainable house designed with retirees in mind, from Americans with Disabilities Act (ADA)-compliant features to a ductless HVAC system designed to keep Florida homes cool using a fraction of the energy. The design also features a hydroponic garden that uses collected rainwater to grow leafy vegetables and herbs without impacting Florida’s water systems. The team designed The BEACH House with inspiration from Ernest Hemingway’s historical home in Key West by incorporating colors and art deco details into the sustainable house design.

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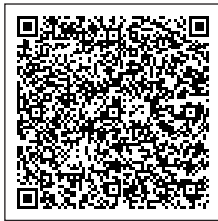
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[bit.ly/SD17TeamDaytonaBeach](http://bit.ly/SD17TeamDaytonaBeach)

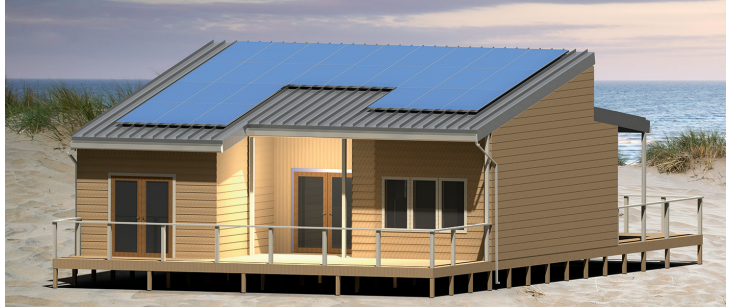


Photo of the members of Team Daytona Beach (top) and a rendering of their BEACH House project (bottom)

### NS Washington State University

In September 2017, just before they were ready to transport their competition house to the event, the team from Washington State University withdrew from the competition. Although the team was not able to finish construction and bring its solar-powered house to Denver, they fully met all the other rigorous competition requirements through multiple deliverable submissions.

The Solar Decathlon organizers appreciate all the hard work the students on the Washington State University team did to just design not just a single house, but an entire sustainable community. Responding to a regional housing crunch and taking cues from the “tiny house” movement, the team’s EnCity project is designed as a “pocket” community for urban infill lots. The community of tiny homes shares infrastructure, including a microgrid that manages collected solar energy and rainwater and distributes these resources among the residents. The tiny homes are constructed using cross-laminated timbers that have been treated with shou sugi ban, a traditional Japanese technique that renders the wood resistant to insects and fire. The decks are made of composite decking boards made from recycled wind turbine blades.




Photo of the Washington State team members (top) and a rendering of their EnCity project (bottom)













# COMPETITION & E

|   | Thursday<br>October 5 | Friday<br>October 6 | Saturday<br>October 7  | Sunday<br>October 8 |
|---|-----------------------|---------------------|--|---------------------|
| <b>PUBLIC EXHIBIT &amp; EDUCATION</b>                 |                       |                     |  |                     |
| <b>Public Exhibit &amp; Sustainability Expo Hours</b> | 11 AM to 7 PM         |                     |  |                     |
| <b>Workshops</b>                                      |                       |                     | <b>Consumer &amp; Homeowner<br/>Workshops</b><br>11 AM to 5 PM |                     |

| <b>COMPETITION</b>  |  |  |  |  |
|---|--|--|--|--|
| <br><b>AWARDS CEREMONIES</b> |  | <b>OPENING<br/>CEREMONY</b><br>9:30 AM |  |  |

**Contests (100 points each)**

|  |  |
|--|--|
|  <b>Architecture</b>         |  |
|  <b>Market Potential</b>     |  |
|  <b>Engineering</b>          |  |
|  <b>Communications</b>       |  |
|  <b>Innovation</b>           |  |
|  <b>Water</b>                |  |
|  <b>Health &amp; Comfort</b> | Indoor temperature, h                        |
|  <b>Appliances</b>           | Refrigerator and freezer temperature measure |
|  <b>Home Life</b>            | Lighting level measurements, home electronic |
|  <b>Energy</b>               | Measurement of e                             |

# EVENT SCHEDULE


| Monday<br>October 9 | Tuesday<br>October 10 | Wednesday<br>October 11 | Thursday<br>October 12 | Friday<br>October 13 | Saturday<br>October 14 | Sunday<br>October 15 |
|---------------------|-----------------------|-------------------------|------------------------|----------------------|------------------------|----------------------|
|---------------------|-----------------------|-------------------------|------------------------|----------------------|------------------------|----------------------|

## ADDITIONAL EVENTS SCHEDULE

|                                       |                                     |               |  |  |   |  |
|---------------------------------------|-------------------------------------|---------------|--|--|---|--|
| 1 PM to 7 PM                          | <b>CLOSED<br/>TO THE<br/>PUBLIC</b> | 11 AM to 7 PM |  |  |   |  |
| Consumer & Homeowner Workshop<br>2 PM |                                     |               |  |  | Consumer & Homeowner Workshops<br>11 AM to 5 PM |  |

## AWARDS SCHEDULE

|  |  |  |   |  |
|--|--|--|---|--|
|  | <br><b>Architecture &amp; Water Awards</b><br><b>10 AM</b> | <br><b>Communications &amp; Innovation Awards</b><br><b>10 AM</b> | <br><b>Engineering &amp; Market Potential Awards</b><br><b>OVERALL WINNER ANNOUNCED</b><br><b>9:30 AM</b> |  |
|--|--|--|---|--|

|  |   |
|--|---|
| <p>Architecture, Market Potential, Engineering, Communications, Innovation, and Water juries visit team houses</p> | <p><b>VIEW THE LATEST SCORES!</b></p> <br><a href="https://bit.ly/SD17Scoring">bit.ly/SD17Scoring</a> |
|--|---|

|  |  |
|--|--|
| humidity, and air quality measurements                           |  |
| laundry, laundry washing and drying tasks, cooking simulations   |  |
| cars and electric vehicle usage, dinner parties, and game nights |  |
| electricity produced and consumed                                |  |

# DEN is proud to be a core partner of the U.S. Department of Energy Solar Decathlon 2017.

## In support of the Solar Decathlon 2017 we're hosting Sustainable BARKitecture Dog House Competition

**TOUR:** Innovative Solar Dog Houses, **VOTE:** Online by October 5th  
**BID:** Online Auction to Benefit the Dumb Friends League

Open Daily through Oct. 9th | Outside on the Plaza Between Jeppesen Terminal and the Westin Hotel



Visit [FLYDENVER.COM/BARK](http://FLYDENVER.COM/BARK) for more information



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**WELLS  
FARGO**

Join  
**Wells Fargo**  
at the  
**Solar Decathlon**  
and See Why We  
Support This Inspiring  
Student Competition!

October 5-15, 2017 • 61st & Peña Station • Denver, Colorado

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prices



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## **ASES SOLAR 2017**

Building a 100% Renewable Energy Community



**46th Annual National Solar Conference**



AMERICAN  
**SOLAR**  
ENERGY SOCIETY

**DENVER**  
October 9-12

Join us at the University of Colorado, Denver  
during the week of the Solar Decathlon!

- Technical sessions
- Forum discussions
- Plenary panels
- Workshops
- Fast-paced ~switch presentations
- Public solar displays
- Various networking events
- Awards celebration including recognition of women in solar energy

**register at [ases.org/conference](http://ases.org/conference)**

## Solar Decathlon 2017 Sponsors

**WELLS  
FARGO**

[www.wellsfargo.com/about/corporate-responsibility/environment](http://www.wellsfargo.com/about/corporate-responsibility/environment)

### Wells Fargo

Wells Fargo is a diversified, community-based financial services company, committed to doing our part to accelerate the transition to a lower-carbon economy, reduce the impacts of climate change, and foster a culture of environmental stewardship in the communities where we live and work.

With nearly 100 million square feet of real estate under management, Wells Fargo is a recognized leader in operational efficiency, and we are on track to meet a number of ambitious sustainability goals, including major reductions in overall water use and greenhouse gas emissions across our footprint, and powering 100% of our global operations with renewable energy by the close of 2017. We are also a leader in financing clean technologies and renewable energy projects, having invested more than \$70 billion in environmentally sustainable businesses since 2012. In 2016, projects owned in whole or in part by Wells Fargo produced more than 8% of all solar photovoltaic and wind energy generated in the U.S.

We focus our environmental philanthropy on nurturing an ecosystem that helps innovative startup companies advance scalable clean technology solutions; supporting environmental education in our communities through STEM education and other programs; and partnering with local nonprofit organizations to engage our customers and communities in volunteer projects that will help them adapt to climate change, conserve resources, improve resource efficiency, reduce energy costs, and create jobs in the global “green economy.”

Wells Fargo is proud to support the Solar Decathlon as a venue for the next generation of sustainability leaders to come together and share their respective visions for a more sustainable future through innovation, technology, and design. We congratulate everyone involved with this one-of-a-kind student competition, and we are grateful for their contributions to the health of our planet and the global clean-technology ecosystem.



A student from the University of Southern California officially marks the opening of Solar Decathlon 2013 in Irvine, CA, along with Puon Penn, Managing Director, Global Cleantech Banking Group, Wells Fargo, and other sponsor representatives and competitors. (Credit: Stefano Paltera/U.S. Department of Energy Solar Decathlon).

# Solar Decathlon 2017 Sponsors



**DENVER**  
THE MILE HIGH CITY

[www.denvergov.org/mayor](http://www.denvergov.org/mayor)

## City and County of Denver

Denver is proud to welcome and support the U.S. Department of Energy's Solar Decathlon 2017. With hundreds of sunny days per year, we are energized to host this solar energy collegiate competition.

Denver has one of the most solar-friendly climates in the country, and has a long history of supporting renewable energy and energy efficiency programs. We have been nationally recognized for our efforts to reduce solar "soft costs," by streamlining solar permitting and offering reduced fees capped at \$50 for solar permits. Most solar projects in Denver are able to get a permit in one day.

Wherever possible, we encourage builders to design and build sustainably. Since 2016, we have raised the bar for development in Denver by ensuring that all new construction meets international standards for energy conservation, which emphasize the design of energy-efficient buildings and the use of energy-efficient mechanical, lighting, and power systems.

We continue to consider ways we can promote greener construction in our city, from devising new incentives for net zero energy buildings to promoting the adaptive reuse of existing buildings.

Denver and Colorado have been leaders in sustainable living, as well as frontrunners in growing the clean energy economy. We're aggressively pursuing our goal of reducing emissions 80% by 2050. We will continue to act with our eyes on the future and support the creation of good-paying clean energy jobs. Solar Decathlon is a great way to showcase these jobs to our residents, not to mention the many sustainable and energy saving technologies on display in the competition houses and at the Sustainability Expo.



*Photo courtesy of City and County of Denver.*

# Solar Decathlon 2017 Sponsors

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[www.FlyDenver.com](http://www.FlyDenver.com)

## Denver International Airport

With an anticipated 60 million plus passengers in 2017 and 189 destinations in 11 countries, Denver International Airport (DEN) is the sixth-busiest airport in the world. DEN is also one of the highest solar-generating airports in the United States, with a long-held commitment to environmental stewardship.

DEN's iconic tented Jeppesen Terminal was designed with sustainability in mind. The structure allows for daylight to enter, greatly decreasing the amount of energy needed to light the interior.

DEN's commitment to the environment doesn't stop with its initial design. The airport is quick to adopt new processes and technologies that can increase its energy efficiency. Control technology is anticipated to decrease the airport's heating and cooling by 8 million kilowatt hours (kWh) per year. In addition, DEN's lighting retrofit projects—which replace outdated lighting technology with new, energy-efficient LED technology—have saved more than 8.3 million kWh annually.

On DEN's expansive 53-square miles of real estate, we have five photovoltaic solar arrays designed to produce more than 19.5 million kWh of energy a year. That's enough to power 2,600 Denver-area homes. DEN is excited and proud to host the U.S. Department of Energy Solar Decathlon 2017 on a site where we are partnering with Xcel Energy and Panasonic on a 1.6 MW solar photovoltaic installation covering the parking lot, which along with Panasonic's rooftop solar array, will power a battery system that will support a microgrid for the Peña Station NEXT Transit-Oriented Development site.

To create additional excitement for the Solar Decathlon 2017, DEN is hosting a Sustainable BARKitecture Dog House competition, which challenges local architecture firms to compete in designing a solar dog house customized to one of the airport's own Canine Airport Therapy Squad (CATS) dogs.

We applaud this year's Solar Decathlon student competitors as the future leaders of the environmental sustainability principles to which DEN is committed.



*Photo courtesy of Denver International Airport.*

## Solar Decathlon 2017 Sponsors



L.C. Fulenwider

[www.penastationnext.com](http://www.penastationnext.com)

As the master developer of Peña Station NEXT, L.C. Fulenwider is excited to host Solar Decathlon 2017. The Solar Decathlon's mission to build real world examples of the best in solar-powered living solutions is a perfect fit with our mission for Peña Station NEXT to become a real world test of "What's NEXT"?



Image courtesy of L.C. Fulenwider.

Strategically located adjacent to Denver International Airport, Peña Station NEXT has been designed with an emphasis on energy-efficient offices, hotels, retail, multifamily, entertainment, and wellness facilities. This master-planned, mixed-use development is bordered on the west by permanent open space and is inspired by the demands of what's next: a self-sufficient community that embraces smart technology, community, clean energy, and mobility. Peña Station Next is further enhanced by ensuring views of the Rocky Mountains to remind residents that while this may be the West, it's the New West.

Life Is On



Schneider Electric

[www.schneider-electric.us/en](http://www.schneider-electric.us/en)

At Schneider Electric, we have a saying that everything we do is based on a core belief that energy is the base of life. As a global specialist in energy management and automation, our 144,000 plus employees serve customers in more than 100 countries, helping them to manage their energy and process in ways that are safe, reliable, efficient, and sustainable. From the simplest of switches to complex operational systems, our technology, software, and services improve the way our customers manage and automate their operations. Our connected technologies reshape industries, transform cities, and enrich lives. At Schneider Electric, we call this Life Is On.



Photo courtesy of Schneider Electric.

One of the biggest challenges the world faces today is that 30% of our population, about 2 billion people, don't have access to reliable energy. Of this, 1.3 billion people don't have any access to electricity. In conjunction with this challenge and our mission, Schneider Electric is proud to continue its support of the U.S. Department of Energy Solar Decathlon since 2009. Schneider Electric designs the electrical connection between the Solar Decathlon village and the utility service to enable a safe and reliable microgrid solution. Schneider is also committed to communities where we live and work, and therefore, is also providing at least 50 employee volunteers to staff the event.

Since 2010, Schneider Electric has also sponsored four international Solar Decathlon competitions, including the Solar Decathlon Latin America and Caribbean competition held in 2015.



## Solar Decathlon 2017 Sponsors



### Regional Transportation District (RTD)

[www.rtd-denver.com](http://www.rtd-denver.com)

As a sustainable, eco-friendly form of transportation, RTD is committed to preserving our natural resources and we believe every effort should be made to use clean fuels, reduce emissions, recycle and always look for ways to reduce our impact on the environment. Public transportation promotes healthy mobility habits, which create healthier cities, cleaner air, and better access to education, jobs, health care, and other goods and services. As a recipient of LEED Gold certification on the building of Union Station and our Commuter Rail Maintenance Facility, we're proud to be partners with Solar Decathlon 2017.



*Photo courtesy of RTD.*



### Xcel Energy

[www.xcelenergy.com](http://www.xcelenergy.com)

Xcel Energy is proud to be a contributing sponsor of Solar Decathlon 2017 and the competition's host utility sponsor.

Headquartered in Minneapolis, Minnesota, every day Xcel Energy powers millions of homes and businesses across eight Western and Midwestern states. Our customers can count on us 24/7 to be there with safe, reliable, and affordable electric and natural gas service.

Xcel Energy's sponsorship provides much of the Solar Decathlon's infrastructure, furnishings, and temporary electrical service interconnection, providing the solar village access to the utility grid.

Also on the event site, visitors can see Xcel Energy's, Panasonic's, and Denver International Airport's microgrid battery pilot project. For Xcel Energy, this project tests the application of battery technologies that can help integrate renewable energy into the grid, provides backup power to Panasonic during an outage, and helps determine how we might offer future battery services to customers.

Xcel Energy is a recognized industry leader in delivering renewable energy and in reducing carbon emissions. We have steadily transformed how we produce, deliver, and encourage the efficient use of energy, all at a low cost to customers.



*Photo courtesy of Xcel Energy.*

# Solar Decathlon 2017 Sponsors

# Panasonic

## Panasonic Enterprise Solutions

[www.PanasonicCityNOW.com](http://www.PanasonicCityNOW.com)

Panasonic Enterprise Solutions Company—based out of Peña Station NEXT, which is home to Solar Decathlon 2017—is a wholly-owned business unit of Panasonic Corporation of North America, based in Newark, New Jersey. Panasonic is a leading technology partner and integrator to businesses, government agencies, and consumers across the region. The company is the principal North American subsidiary of Panasonic Corporation, based in Osaka, Japan, and the hub of Panasonic’s U.S. branding, marketing, sales, service, and R&D operations.



*Photo courtesy of Panasonic Enterprise Solutions.*

Panasonic was featured in Fortune Magazine’s 2016 ranking of 50 companies that are changing the world and doing well by doing good. Specifically cited were its smart and sustainable technologies, including its contributions to smart cities and the electric vehicle revolution. Denver-based Panasonic Enterprise Solutions Company includes CityNOW, Panasonic’s North American smart city initiative, which includes a focus on smart energy solutions with clean, resilient renewable energy. Panasonic is proud to support the U.S. Department of Energy Solar Decathlon.

# beko

## Beko

[www.beko.us](http://www.beko.us)

Beko U.S., Inc. is a subsidiary of Arçelik A.S. whose vision is “Respects the globe, Respected globally.” In June 2016, Beko secured a place in the United States. A sister brand, Blomberg, has been a top choice in premium developments across North America since 2008. In 2017, Beko received the Environmental Protection Agency’s ENERGY STAR® Partner of the Year for its outstanding contributions to protecting the environment through energy efficiency. Beko is pleased to join the distinguished list of Solar Decathlon sponsors.

# CSTL

Center for Science Teaching & Learning

## Center for Science Teaching and Learning

[www.cstl.org](http://www.cstl.org)

The Center for Science Teaching and Learning loves the Solar Decathlon! To us, the Solar Decathlon demonstrates how people should learn. By designing and innovating, the student teams have learned so much about renewable energy, sustainability, and more. And, because this competition is open to the public, all the visitors get to learn in a way that is engaging and exciting too.

## Solar Decathlon 2017 Sponsors

### THE WESTIN DENVER INTERNATIONAL AIRPORT

Westin Denver International  
Airport & PSAV

[www.westindenverairport.com](http://www.westindenverairport.com)

The Westin Denver International Airport Hotel is designed to create a dynamic, urban experience. With 519 soundproof guest rooms featuring panoramic views of downtown, the Rocky Mountains and the airfield, enjoy all the comforts of Westin with our world-class amenities. The Westin Denver International Airport is proud to be a sponsor of the Solar Decathlon. The hotel has received Platinum status under the @LEED program. This prestigious designation makes The Westin Denver International Airport the highest LEED-rated hotel at any major U.S. airport.



AMERICAN  
**SOLAR**  
ENERGY SOCIETY

American Solar Energy Society

[www.ases.org](http://www.ases.org)

Established in 1954, the American Solar Energy Society (ASES) is a 501(c)(3) non-profit that advocates for sustainable living and 100% renewable energy. We share information, events, and resources to cultivate community and power progress in the U.S. and beyond. ASES is hosting our 46th annual conference, SOLAR 2017, October 9-12, in conjunction with the U.S. Department of Energy Solar Decathlon in Denver. ASES is also proud to partner with the Solar Decathlon to produce a series of Solar 101 Consumer Workshops at the Solar Decathlon site on October 7, 8, 14, and 15.

### COLORADO'S DESIGN MAGAZINE MODERN IN DENVER

Modern in Denver

[www.modernindenver.com](http://www.modernindenver.com)

Modern In Denver Magazine is The Rocky Mountain Region's Design Authority, reaching both the creative community and the design enthusiast. For more than nine years Modern In Denver has been uniquely focused on telling authentic stories, fostering thoughtful and purpose driven dialogue, and creating meaningful and unexpected focus. Our aim is to be instrumental in growing, understanding, and building interest in good design throughout the Rocky Mountain region.

### RSMMeans data from GORDIAN®

RS Means

[www.rsmeans.com](http://www.rsmeans.com)

RSMMeans data provided Solar Decathlon 2017 teams with access to the RSMMeans Data Online cost-estimating tool, allowing them access to local and accurate cost data.

## Solar Decathlon 2017 Sponsors

|   |   |
|---|---|
|  <b>DENVER WATER</b> | <p><a href="http://www.denverwater.org">www.denverwater.org</a></p> <p>Denver Water supports the goals of Solar Decathlon 2017 to train, educate, and demonstrate sustainable living and workforce solutions.</p>   |
|                      | <p><a href="http://www.drintl.com">www.drintl.com</a></p> <p>For more than a decade, D+R International has led the Solar Decathlon's Education Days program, showcasing our dedication to advancing energy efficiency for the nation and future generations.</p>  |
|                      | <p><a href="http://www.solarnovus.com">www.solarnovus.com</a></p> <p><i>Solar Novus Today</i>, a leading trade publication serving the solar industry, proudly supports Solar Decathlon 2017—the premiere showcase of solar energy's great potential.</p>   |
|                      | <p><a href="http://www.9news.com">www.9news.com</a></p> <p>9NEWS is home in Colorado, the state with 300 days of sunshine. We embrace innovation that supports and celebrates our community.</p>  |
|                      | <p><a href="http://www.ch2m.com">www.ch2m.com</a></p> <p>CH2M is dedicated to creating pathways for human progress by tackling challenges that make a positive difference for our clients and communities.</p>  |
|                     | <p><a href="http://www.confluencec.com">www.confluencec.com</a></p> <p>Confluence Communications proudly supports Solar Decathlon by providing extensive in-kind strategic communications services. Solar Decathlon aligns with our company's mission to support the advancement of programs that create sustainable solutions for our people, place, and planet.</p> |
|                    | <p><a href="http://www.microplanet.com">www.microplanet.com</a></p> <p>Since 2011, MicroPlanet's low-voltage regulators have allowed energy produced by photovoltaic (PV) solar electricity and wind energy to be integrated into the Solar Decathlon village microgrid.</p>  |
|                    | <p><a href="http://www.oxblue.com">www.oxblue.com</a></p> <p>OxBlue is a leading provider of time-lapse construction camera services. As a proud sponsor, OxBlue is providing time-lapse images and live stream video services directly from the Solar Decathlon 2017 village.</p>  |
|                    | <p><a href="http://www.ThriveHomeBuilders.com">www.ThriveHomeBuilders.com</a></p> <p>Thrive Home Builders, a leader in the design and construction of energy-efficient homes for more than two decades, is proud to support the innovation and leadership promoted by Solar Decathlon 2017.</p>   |
|                    | <p><a href="http://www.VISITDENVER.com">www.VISITDENVER.com</a></p> <p>Sustainability is an essential part of Denver's brand. As the official marketing arm of the city, VISIT DENVER helps Solar Decathlon 2017 with marketing, advertising, and public relations support.</p>   |
| <p><b>WAC LIGHTING</b><br/>Responsible Lighting®</p>  | <p><a href="http://www.waclighting.com">www.waclighting.com</a></p> <p>WAC Lighting proudly joins the Solar Decathlon as an Education Sponsor. A Responsible Lighting Company, WAC provides products progressive in both design and technology with groundbreaking LED innovations.</p>   |
|                    | <p><a href="http://www.ashrae.org">www.ashrae.org</a></p> <p>A proud sponsor since 2005, ASHRAE contributes to the Solar Decathlon to support students in their effort to shape tomorrow's built environment today.</p>   |

# Acknowledgments

The U.S. Department of Energy Solar Decathlon would like to extend a special thanks to the following organizations.

## ***AFFILIATE SPONSORS:***

**Danby Products Incorporated** is awarding compact refrigerators and microwaves to prize-winning educators at the Education Days.

**National Association of Home Builders** is honored to sponsor the Victory Breakfast for the Solar Decathlon competitors and to share its commitment to building high-performance homes and encouraging careers in residential construction.

**WeWork**, where Denver's entrepreneurial spirit thrives, is offering decathletes complimentary access to its dynamic and inspirational workspaces.

**Exelon** is donating the time and expertise of several employees who will provide valuable support to the Solar Decathlon competition management team.

## ***FRIENDS OF THE SOLAR DECATHLON:***

**Liberty Mutual Insurance** is contributing generous financial support for the advancement of smart energy production through design excellence.

**National Children's Theater Group** is providing free performances of *The Resource Force*.

**Nolan Financial Group** is contributing generous financial support to the Solar Decathlon.

**Peet's Coffee** is supplying complimentary, freshly brewed coffee to energize the solar decathletes during assembly of the Solar Decathlon village.

**The Solar Training Network** is sponsoring, planning, and delivering the Solar Decathlon Career Fair.

**Solar Energy International** is working in tandem with the Solar Training Network to produce the Solar Decathlon Career Fair.

**Viva Green Homes** is generously promoting Solar Decathlon 2017 across its media platforms and connecting Solar Decathlon 2017 with Viva Green partners and industry leaders.

**Willis Towers Watson** is contributing generous financial support to the Solar Decathlon.

**EnergyLogic** is donating time and energy to conduct complimentary blower door tests on the Solar Decathlon 2017 competition houses for the Health and Comfort contest.

**Vaisala** is supplying Solar Decathlon 2017 organizers with carbon dioxide sensors at a generous discount.

**REED Instruments** is supplying light meters at a generous discount to the Solar Decathlon 2017 organizers.

**The National Electrical Manufacturers Association** is providing editorial coverage of the Solar Decathlon in their magazine, *electroindustry*.

## ***REGIONAL STAKEHOLDERS:***

**American Institute of Architects**

**American Lung Association**

**Big Brothers, Big Sisters of Colorado**

**Boulder Valley School District**

**Building Codes Assistance Project**

**at The Trust for Conservation Innovation**

**Children's Museum of Denver**

**Colorado Renewable Energy Society (CRES)**

**Colorado School of Mines**

**Colorado Solar Energy Industries Association (COSEIA)**

**Councilwoman Stacie Gilmore's Office**

**Denver Public Schools**

**Denver Regional Council of Governments**

**Domino Strategies**

**Optic Nerve**

**University of Denver**



The Solar Decathlon Organizers would also like to extend a special thanks to the **State of Colorado, Governor John Hickenlooper, and the Colorado Energy Office** for their continued support in bringing Solar Decathlon 2017 to Colorado. Colorado's commitment to renewable energy generation, technical and market innovation, and collaboration between the public and private sectors continues to lead our nation.

*Photo: The corner of Schneider Electric Street and Wells Fargo Way with the house of Missouri University of Science and Technology in the background at Solar Decathlon 2015 in Irvine, California (Credit: Thomas Kelsey/U.S. Department of Energy Solar Decathlon)*

# The 2017 Sustainability Expo at Solar Decathlon



Visitors explore the exhibits at the SunShot Innovation Pavilion adjacent to the U.S. Department of Energy Solar Decathlon 2013 in Irvine, California. (Credit: Stefano Paltera/U.S. Department of Energy Solar Decathlon)

Visit the Sustainability Expo in the Exhibit Tent to learn from companies that develop sustainable products and services like those you see in the Solar Decathlon team houses.

The Expo's hours of operation are the same as those of the Solar Decathlon:

- **Thursday, October 5 – Sunday, October 8, 2017: 11:00 AM - 7:00 PM**
- **Monday, October 9, 2017: 1:00 PM – 7:00 PM**
- **Thursday, October 12 – Sunday, October 15, 2017: 11:00 AM - 7:00 PM**



# Solar Decathlon 2017 Workshops

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## Consumer and Homeowner Workshops

### ***Energy Efficiency and Solar Possibilities for Your Home***

Presented by the City and County of Denver, Environmental Health Department

- **Saturday, October 7, 2017, 11:00 – 11:45 AM**
- **Sunday, October 8, 2017, 11:00 – 11:45 AM**
- **Saturday, October 14, 2017, 11:00 – 11:45 AM**
- **Sunday, October 15, 2017, 11:00 – 11:45 AM**

### ***Home Is Where the Comfort Is***

Presented by the U.S. Department of Energy

- **Saturday, October 7, 2017, 12:00 – 12:45 PM**
- **Sunday, October 8, 2017, 12:00 – 12:45 PM**
- **Saturday, October 14, 2017, 2:00 – 2:45 PM**
- **Sunday, October 15, 2017, 12:00 – 12:45 PM**

### ***In the Renewable Energy Economy, Everyone Wins***

Presented by the Colorado Solar Energy Industries Association (COSEIA) and Solar CitiSuns

- **Saturday, October 7, 2017, 1:00 – 1:45 PM**

### ***Solar 101 Workshop***

Presented by the American Solar Energy Society, sponsored by Ovanova

- **Saturday, October 7, 2017, 3:00 – 3:45 PM**
- **Sunday, October 8, 2017, 1:00 – 1:45 PM and 4:00 – 4:45 PM**
- **Saturday, October 14, 2017, 1:00 – 1:45 PM and 4:00 – 4:45 PM**
- **Sunday, October 15, 2017, 1:00 – 1:45 PM and 4:00 – 4:45 PM**

### ***Solar Opportunities for Businesses and Non-Profits***

Presented by COSEIA and New Energy Colorado

- **Sunday, October 8, 2017, 3:00 – 3:45 PM**

### ***The Making of a Smart City***

Presented by the U.S. Department of Energy's National Renewable Energy Laboratory

- **Monday, October 9, 2017, 2:00 – 3:00 PM**

### ***EPA WaterSense and ENERGY STAR - Saving Energy and Water at Home***

Presented by EPA WaterSense and Energy Star

- **Saturday, October 14, 2017, 12:00 – 12:45 PM**
- **Sunday, October 15, 2017, 2:00 – 2:45 PM**

### ***Colorado's Solar Energy Landscape - How You Can Go Solar***

Presented by COSEIA

- **Saturday, October 14, 2017, 3:00 – 3:45 PM**

### ***The Passive House - No Energy Needed!***

Presented by COSEIA, New Energy Colorado, and Passive House

- **Sunday, October 15, 2017, 3:00 – 3:45 PM**



Top Row (L to R): Photos 1-4: Thomas Kelsey/U.S. Department of Energy Solar Decathlon; Photo 5: Jason Flakes/U.S. Department of Energy Solar Decathlon.  
Bottom Row (L to R): Photos 1-4: Thomas Kelsey/U.S. Department of Energy Solar Decathlon; Photo 5: Stefano Paltera/U.S. Department of Energy Solar Decathlon.







bit.ly/SD17facebook

## People's Choice Award @DOESolarDecathlon

Vote for your favorite Solar Decathlon house to win the **2017 People's Choice Award**. One entry per person may be submitted on Facebook, October 5-14, 2017. Tune into Facebook on October 15, 2017 for the winner announcement!

## ENGAGE WITH SOLAR DECATHLON ONLINE:



# www.SolarDecathlon.gov

#SD2017 #SolarDecathlon  
#SolarDecathlon2017



Take a snap using the Solar Decathlon geofilter and add it to our story!



Free wifi is available throughout the Solar Decathlon village: #Pena Station NEXT

U.S. DEPARTMENT OF  
**ENERGY**

Office of ENERGY EFFICIENCY  
& RENEWABLE ENERGY



The U.S. Department of Energy Solar Decathlon 2017 is brought to you by a public-private partnership between the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy and Energetics Incorporated, with the generous support of the Solar Decathlon 2017 sponsors. By leveraging the power of our collective innovation, we support hands-on learning for the competing solar decathletes and the thousands of visitors to the Solar Decathlon, an event like no other that provides a live demonstration of the latest technologies and materials in energy-efficient design, clean energy technologies, smart home solutions, water conservation measures, electric vehicles, and sustainable buildings.

DOE/EE 1459 • October 2017