The Team
Solar Village

Missouri S&T is the only University in the world with a community of student designed and constructed Solar Homes.
2002 Solar House
Midwest Ranch Style Home
2005 Solar House
Frank Lloyd Wright
Prairie Style Home
2007 Solar House
Modern and Luxurious
The Competition
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<td>2:00 PM - 4:00 PM All-Team Meeting at Hangar 244*</td>
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* Special event requires ticket or invitation to attend

Events in bold are open to the public

Revised 06Jun2012
20 collegiate teams are challenged to design, build and operate solar powered homes.
Competing Teams

Arizona State University and The University of New Mexico
Czech Republic: Czech Technical University
Kentucky/Indiana: University of Louisville, Ball State University, and University of Kentucky
Middlebury College
Missouri University of Science and Technology
Norwich University
Santa Clara University
Southern California Institute of Architecture and California Institute of Technology
Stanford University
Stevens Institute of Technology
Team Alberta: University of Calgary
Team Austria: Vienna University of Technology
Team Capitol DC: The Catholic University of America, George Washington University, and American University
Team Ontario: Queen’s University, Carleton University, and Algongquin College
Team Texas: The University of Texas at El Paso and El Paso Community College
Tidewater Virginia: Hampton University and Old Dominion University
University of Nevada Las Vegas
The University of North Carolina at Charlotte
University of Southern California
West Virginia University
Comfort Zone

[humidity and temperature]

Objective Contests

[Hot Water]

[15 gallon draws 110F minimum]

Appliances

[must wash dishes and clothes]

Home Entertainment

[host a dinner party and movie night]

Energy Balance

[energy used minus energy produced]
Subjective Contests

Communications

[function of aesthetic appeal of design]
The Chameleon System

2013 implementation (beta prototype)

- less than 10% of the cost
- predictive rather than reactive
- can be accessed from any web-enabled device

alpha prototype implemented in 2009
Electrical

9 kW peak generating capacity

Wave™ PV system

Bifacial
Concrete slab used for passive solar and heating techniques
Mechanical

Small-Duct, High-Velocity Ventilation System
Flat Plate Solar Collectors
Energy Recovery Ventilator
Welcome 2013 Teams

Arizona State University
Colorado Technical University
Kentucky Institute of Technology
University of Louisville
University of Michigan
Middlebury College
Missouri University of Science and Technology
Norwich University
Southern California Institute of Architecture and California Institute of Technology
Santa Clara University
Stanford University
Stevens Institute of Technology
Team Albertus Magnus
Team Canada
Team Canada
Team Colorado State
Team Connecticut
Team Delaware State
Team El Paso
Team Florida State University
Team Georgia Tech
Team Great Park
Team Hawaii
Team Indiana
Team Iowa
Team Kansas State University
Team Kentucky
Team Louisiana State University
Team Montana State University
Team Nevada
Team New Mexico State University
Team New York City College of Technology
Team Ohio State University
Team Ontario Queen's University, Carleton University, and Algoma College
Team Texas The University of Texas at El Paso and El Paso Community College
Tidewater Virginia Hampton University and Old Dominion University
University of Nevada Las Vegas
The University of North Carolina at Charlotte
University of Southern California
West Virginia University
Project Costs

One Student for Competition: $1,500
Includes gas, van rental fee, food, and lodging for 26 days

Team Expenses: $160,000
Includes house transportation, marketing materials, team competition costs, travel costs, summer workers, office supplies, etc.

House Construction: $300,000
Includes material and some labor costs

TOTAL PROJECT COST: ~$460,000

We still need $65,000!
How to Give

1. solarhouse.mst.edu/donate.html

2. Mail check to:
   Solar House Team
   1051 N. Bishop Ave.
   116 Kummer Student Design Center
   Rolla, MO 65409

3. Material donation (Gift in Kind)
Bronze Sponsors

Cliff’s Natural Resources
Investment Reality
Kirkwood Stair and Millwork
Microgrid Solar

Green Sponsors

Butler Supply
Cory Brennen
Helene Hardy Pierce
Stephanie Judd