Search	
--------	--

Campus + Environment + Science & Technology

Published: March 5, 2018

# MSU'S SOLAR CARPORT RECEIVES THE SMART ENERGY DECISIONS ONSITE RENEWABLE ENERGY AWARD

Contact(s): Wolfgang Bauer

Michigan State University's solar carport project received high praise at the Smart Energy Decisions Innovation Summit 2018. During the inaugural innovation awards event MSU was the co-recipient of the Onsite Renewable Energy award for "The Largest Carport Solar Array in North America."

The Smart Energy Decisions press release of the award ceremony explains:

MSU's solar carport array is constructed on five of the university's largest commuter parking lots and covers 5,000 parking spaces. Created through a PPA, the project provides a renewable power production and energy consumption reduction showcase on campus, where the university's students can study solar photovoltaic and inverter technology, as well as their integration into the micro-grid. The judges called the project audacious and impressive, with innovative finance and execution.

Wolfgang Bauer, senior consultant in the Office of the Executive Vice President for Administrative Services, and one of MSU's project leaders, attended the ceremony in Austin, Texas, on February 27 to receive the award on MSU's behalf.

MSU's solar carport project is part of the MSU Energy Transition Plan path of emissions and fossil fuel consumption reduction and integration of renewable power sources, with the eventual goal of a campus powered at 100 percent from renewable energy sources.

The solar carports are designed to deliver a peak power of 10.5 Megawatts and an annual energy of 15 million kilowatt-hours, which is enough to power approximately 1,800 Michigan homes.

The carport project was realized through a power purchase agreement with Inovateus, a solar company based in Indiana, and Alterra, a Canadian renewable energy company. Because of this innovative financing, MSU did not have to provide the capital for the construction of the solar array. This results in approximately \$10 million savings in electricity costs for MSU integrated over the 25-year duration of the power purchase agreement contract.

 $For a complete \ list of the awards see: \ https://www.smartenergydecisions.com/blog/2018/03/01/inaugural-innovation-awards-presented \ and \ blog/2018/03/01/inaugural-innovation-awards-presented \ blog/2018/03/01/inaugural-innovation-awards-presented$ 

Contact Information
Privacy Statement
Site Accessibility

Call MSU: **(517) 355-1855** Visit: **msu.edu** 

MSU is an affirmative-action, equalopportunity employer. Notice of Nondiscrimination SPARTANS WILL. © Michigan State University



Search
--------

Campus + Science & Technology

Published: Nov. 9, 2018

# CARPORT SOLAR ARRAY RECEIVES 2018 INNOVATIVE PROJECT AWARD

Contact(s): Wolfgang Bauer, Tracy Anderson

Michigan State University's solar carport project received the 2018 Innovative Project Award from the U.S. Green Building Council of West Michigan. The award recognizes exemplary projects in the region exhibiting features that above and beyond the status quo.

MSU's solar carport array is constructed on five of the university's largest commuter parking lots and covers 5,000 parking spaces. Created through a power purchase agreement, the project provides renewable power production and reduced energy consumption on campus, also offering engineering students the opportunity to study various solar technologies and their integration into the micro-grid.

"We are thrilled to honor the MSU solar project and highlight that the benefits of solar go far beyond economics" said Cheri Holman, executive director of U.S. Green Building Council of West Michigan.

In presenting the award, U.S. Green Building Council of West Michigan noted how the solar carport project blends innovation, hands-on learning and sensible money management. The excellent land-use design saves approximately 45 acres of precious agricultural land.

While generating electricity for the city-sized campus year-around, the array shades the vehicles from seasonal weather conditions. Students, faculty and staff park vehicles under the solar panels and can take a quick shuttle to campus, thereby decreasing traffic congestion within the university and reducing on-sight air pollution.

Most importantly, the U.S. Green Building Council of West Michigan feels the array ultimately serves the highest purpose of the university – to educate students.

"MSU is internationally recognized as one of the top-100 universities in the world; as such, we have to lead in the field of renewable energies," said Wolfgang Bauer, senior consultant in the Office of the Executive Vice President for Administrative Services and one of MSU's project leaders. "With this project, we have shown that environmental sustainability and financial sustainability can be achieved at the same time. The green electricity that our new solar array produces is actually cheaper than fossil-fuel generated electricity that we could buy off the grid."

#### About USGBC-WM

The U.S. Green Building Council of West Michigan, organized in 2004, is a program-based, committee-driven non-profit dedicated to transforming the way buildings and communities are designed, built and operated, in a way that improves the quality of life in Michigan. The organization accomplishes its mission through education, advocacy, programs and competitions including the <u>Grand Rapids 2030 District</u>, <u>Michigan Battle of the Buildings</u> and the <u>Energy Assistance Program</u>.

Contact Information
Privacy Statement

Site Accessibility

Call MSU: **(517) 355-1855** Visit: **msu.edu** MSU is an affirmative-action, equalopportunity employer. **Notice of Nondiscrimination SPARTANS WILL.**© Michigan State University



Campus + Environment + Science & Technology

Published: Oct. 10, 2018

## FPA SALUTES MSU GREEN ENERGY

Contact(s): Jessi Adler, Wolfgang Bauer

The U.S. Environmental Protection Agency today recognized Michigan State University's renewable energy programs with a <u>2018 Green Power Leadership Award</u> at the 2018 Renewable Energy Markets Conference in Houston, Texas.

The annual awards recognize America's leading renewable power users' commitment and contribution to helping advance the nation's voluntary green power market, meaning electricity generated from environmentally preferable renewable resources such as wind, solar, geothermal, biogas, biomass and low-impact hydro. Michigan State was one of only five organizations saluted in the <u>direct project engagement</u> category.

"MSU is proud to be recognized by the Environmental Protection Agency for our commitment to addressing renewable energy," MSU Director of Sustainability Amy Butler said. "Our portfolio of renewable energy sources, combined with the university micro-grid, serves as a test bed for research in optimizing grid operations, as well as being a training and education platform to advance the integration of renewables for both business and institutions. Installing renewable systems on campus that can save the university money while also helping the environment is a highly visible demonstration of our priority to minimize our footprint."

MSU generates up to 2.4 million kilowatt-hours of green power annually from an on-site anaerobic digestion system, which converts waste from campus farms and dining halls into energy. In addition, green energy generation on campus this year will increase 600 percent thanks to MSU's new solar carport array, the largest in the country. The array covers 5,000 parking spaces on parking lots spanning 45 acres, generating power less expensively than purchasing off the grid.

Overall, on-campus renewable energy production is expected to be about 17.4 million kWh of renewable power annually, enough to meet 7 percent of MSU's electricity use and up to 18 percent of its peak power demand.

MSU ranks No. 20 on the EPA's <u>list</u> of top on-site green power partners. MSU also was recognized as part of the EPA's <u>College and University Green Power Challenge</u> earlier this year.

 $Other\ \underline{sustainability\ services}\ on\ campus\ include\ MSU\ Recycling,\ MSU\ Bikes,\ the\ MSU\ Surplus\ Store\ and\ more.$ 

Contact Information
Privacy Statement
Site Accessibility

Call MSU: **(517) 355-1855** Visit: **msu.edu** MSU is an affirmative-action, equal-opportunity employer. **Notice of Nondiscrimination** 

SPARTANS WILL.
© Michigan State University



An official website of the United States government.

We've made some changes to EPA.gov. If the information you are looking for is not here, you may be able to find it on the EPA Web Archive or the January 19, 2017 Web Snapshot.

Close



## News Releases from Headquarters > Air and Radiation (OAR) EPA Honors 2018 Green Power Leaders

10/10/2018

Contact Information:

(press@epa.gov)

**WASHINGTON** — Today, the U.S. Environmental Protection Agency (EPA) announces its 18th annual Green Power Leadership Awards, recognizing 10 Green Power Partners across the country, including Google, Microsoft, Procter & Gamble, Starbucks, T-Mobile, and University of California.

"The 2018 Green Power Leadership Award winners have proven real leadership, demonstrating to American businesses that through their investments they can together not only grow America's renewable energy market, but also reduce air emissions and protect the environment," said EPA Assistant Administrator for Air and Radiation Bill Wehrum.

The award winners are being recognized for their efforts in advancing the nation's voluntary green power market. From using enough green power to meet 100 percent of electricity needs to signing long-term contracts that enable new green power project development, these organizations are demonstrating leadership by furthering the case for accessible, affordable green power use.

## The winners for each of the three award categories are:

## **Green Power Partner of the Year**

• Microsoft Corporation (Redmond, WA) increased its green power use by 36 percent in the past year and is on track to reach its goal to increase the number of data centers powered by local, directly-connected renewable generation facilities up to 50 percent by the end of 2018.

#### **Direct Project Engagement**

- Jackson Family Wines (Santa Rosa, CA) procures nearly 37 million kilowatt-hours of green power, 9 million of which is onsite solar generation, for 100 percent of its annual electricity usage.
- Michigan State University (East Lansing, MI) hosts the largest solar photovoltaic carport system in the United States through a long-term power purchase agreement (PPA) and operates an anaerobic digestion system that turns dairy farm and dining hall food waste into renewable energy.
- The Procter & Gamble Company (Cincinnati, OH) procures 743 million kilowatt-hours of green power annually utilizing multiple supply options, including an onsite biomass PPA, a financial wind PPA, wind REC contracts, and onsite solar generation.
- T-Mobile US, Inc. (Bellevue, WA) is the first major U.S. telecommunications company to commit to 100 percent green power (by 2021), and signed a financial PPA for 625 million kilowatt-hours annually -- the largest wind power investment to date made by a wireless company.
- University of California (Oakland, CA) increased its voluntary green power use by 40 percent system-wide, completed twelve new onsite solar projects, hosts more than 40 MW of onsite solar capacity with photovoltaic systems at every campus, and has a goal to be the first major research university system to achieve carbon neutrality by 2025.

### **Excellence in Green Power Use**

• Anheuser-Busch Companies, LLC (St. Louis, MO) procures more than 727 million kilowatt-hours of green power for 55 percent of its annual electricity use, which includes a 15-year financial PPA with a wind farm that generates nearly 603 million kilowatt-hours annually.

- Equinix, Inc. (Redwood City, CA) was the first data center company to publicly commit to a goal of 100 percent renewable energy use across its global footprint and achieved a 42 percent green power use growth rate year-over-year.
- Google Inc. (Mountain View, CA) expanded its green power procurement to 53 percent of its electric load in the United States utilizing varied green power products and supply types ranging from onsite landfill gas and solar to utility green power products to long-term PPAs.
- Starbucks Coffee Company (Seattle, WA) increased its green power use more than 81 million kilowatt-hours last year, and by more than 474 million kilowatt-hours since 2014.

The U.S. Environmental Protection Agency (EPA) established the Green Power Partnership (GPP) in 2001 to protect human health and the environment by increasing organizations' voluntary green power use to advance the American market for green power and development of those resources. The program provides a framework that includes credible usage benchmarks, market information, technical assistance, and public recognition to companies and other organizations that use green power.

The Green Power Leadership Awards are sponsored by EPA's Green Power Partnership Program in collaboration with the Center for Resource Solutions. Full list of EPA 2018 Green Power Leadership Award winners: <a href="https://www.epa.gov/green-power

LAST UPDATED ON OCTOBER 10, 2018