U.S. EPA Federal Green Challenge
Web Academy

Federal Procurement of Sustainable Photovoltaics
April 24th, 2019

Sustainability Leadership Standard for PV Modules and Inverters

Photo by doe.gov

www.epa.gov/asm
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Electricity generation from natural gas and renewables increases, and the shares of nuclear and coal generation decrease—
Solar generation grows for both utility- and small-scale sectors—

**Solar photovoltaic electricity generation by region (Reference case)**

billion kilowatthours

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**Eastern Interconnection**  **Western Interconnection**  **Texas**
Federal Green Challenge
Federal Agencies Leading by Example in Sustainable Operations

epa.gov/fgc

Presidio Trust, San Francisco
Contents

• What is the Federal Green Challenge (FGC)?
• How to participate.
• Benefits.
• Success!
EPA mission:
To protect human health and the environment.

1971-2016: Cut air pollutants by 70%

93% compliance with drinking water standards.

>9 million tons of virgin materials avoided.
The Federal Government:

• Nation’s largest vehicle fleet operator.
• One of the largest IT purchasers.
• Largest purchaser of goods and services in the U.S.
• Controls a real estate portfolio of more than 330,000 buildings.

US Federal Footprint Data
We can make a difference!
What is the Federal Green Challenge?

- The federal component of EPA’s Sustainable Materials Management Program.
- Meet goals under Executive Order 13834.
- Challenges federal facilities to aim for a 5% annual sustainability improvement in two of six target areas:

- waste
- purchasing
- electronics
- transportation
- energy
- water
How to participate in FGC

1. Sign Up
2. Set Baseline
   - Within 90 Days
3. Do Work
   - Towards Minimum 5% Reduction Goal in Two Target Areas
4. Report Results
   - Annually
5. Get Recognized

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CHANGING HOW WE THINK ABOUT OUR RESOURCES FOR A BETTER TOMORROW

www.epa.gov/smm
## Federal Green Challenge Reporting Form

### Energy Target Area

### Energy Data

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>BASELINE RESULTS</th>
<th>KBTU</th>
<th>GJ</th>
<th>FIRST YEAR'S GOAL (% DECREASE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Consumed (kWh)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Gas Consumed (Cubic Feet)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel Oil Consumed (gallons) (assumption is for #2 fuel oil)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
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</tbody>
</table>

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### ACTIVITY

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>BASELINE YEAR AMOUNT</th>
<th>FIRST YEAR'S GOAL (% INCREASE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable energy purchased or installed on-site (%)</td>
<td></td>
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</tbody>
</table>

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**Renewable energy purchased or installed on-site (%).**
FGC Benefits

- Maximize resources; save $$.
- Measure your facility’s progress.
- Get recognized!
2018 Federal Green Challenge Energy Awardee

- 2017 solar energy produced & sold back to grid, plus renewable energy credits purchased: 20,228,000 kWh.
- 2017 energy used: 13,543,000 kWh.
EPA Recognizes Federal Green Challenge Winners and Their Efforts to Save Resources and Taxpayers’ Money

06/14/2018

Contact Information:
EPA Press Office (press@epa.gov)

WASHINGTON — Today, the U.S. Environmental Protection Agency (EPA) recognizes federal facilities for conserving resources and saving taxpayers’ money as part of the Federal Green Challenge (FGC). These efforts across the federal government have not only resulted in approximately $22 million in cost savings in the last year, but also further the goals of the President’s May 17, 2018, Executive Order (EO) Regarding Efficient Federal Operations.

“Federal agencies nationwide challenge themselves to improve efficiency and minimize environmental impact, and their achievements are saving American taxpayers tens of millions of dollars,” said EPA Administrator Scott Pruitt.
# FGC Contacts

<table>
<thead>
<tr>
<th>Region</th>
<th>Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England (Region 1)</td>
<td>Robert Guillemin <a href="mailto:guillemin.robert@epa.gov">guillemin.robert@epa.gov</a> (617) 918-1814 Anne Fenn <a href="mailto:fenn.anne@epa.gov">fenn.anne@epa.gov</a> (617) 918-1805</td>
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<tr>
<td>Pacific Northwest &amp; Alaska (Region 10)</td>
<td>Theresa Blaine <a href="mailto:blaine.theresa@epa.gov">blaine.theresa@epa.gov</a> (206) 553-8509</td>
</tr>
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</table>
Alcatraz Island, NPS.

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Federal Procurement of Sustainable Photovoltaics (PV): Sustainable Leadership Standard for PV Modules & Inverters

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Garvin.heath@nrel.gov
Web Academy Archives

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<tr>
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| 10/10/2018 | Green Energy Can Save Your Federal Facility Greenbacks  
  • View Webinar Details and Presentations  
  • View the Webinar  [EXIT] (registration required) |         |
| 7/18/2018  | Supporting Monarch Butterflies as Pollinators - A New Mapping Tool and Case Study  
  (pollinators, butterfly, monarch, habitat, milkweed)  
  • View Webinar Details and Presentations  
  • View the Webinar  [EXIT] (registration required) |         |
| 5/2/2018   | EPA and GSA Webinar: E Scrap Management, Computers for Learning and the Federal Green Challenge    |         |
| 4/18/2018  | From Fires to Floods and Everything In Between: How Federal Facilities Can Thrive in an Era of Billion Dollar Weather Events  
  • View Webinar Details and Presentations  
  • View the Webinar  [EXIT] (registration required) |         |
| 3/14/2018  | Simplifying Sustainable Purchasing Through Guidelines and Standards  
  (keywords: Green Purchasing, Ecolabels, Food Composting, Environmentally Sustainable Products and Services)  
  • View Webinar Details and Presentations  
  • View the Webinar  [EXIT] (registration required) |         |