Wind Powering America (WPA) works with Federal agencies to:
- Increase their understanding of wind resources and assessment;
- Facilitate project development activities through Met tower loans, wind data analysis, and technical assistance; and
- Provide advice on RFP development and financing options.

WPA provides educational opportunities to the Federal sector, as demonstrated by conducting two intensive 3-day workshops (May 20-22, 2008, MMR, Cape Cod, MA and Feb 3-5, 2009, Golden, CO) targeting federal energy managers, facility managers, and site engineers. These workshops engage participants with detailed wind technology information, project development processes, and industry participants/contacts.

Federal Sector Projects are Challenging
The Federal sector has several unique challenges in completing wind turbine projects, including:
- NEPA requirements typically require more investigation than comparable private sector wind projects.
- Radar and airport issues provide siting challenges, especially at DoD bases with radar, an airport, or both.
- Financing mechanisms such as ESPC, appropriations, ARRA, and ECIP have different award metrics and performance requirements.
- Mission conflicts may exist as wind turbine projects detract from accomplishing existing agency mission goals or interfere with training missions at DoD bases.
- Long-term utility contract terms may be difficult to change.

Federal Policy & Agency Drivers:
EPAct 2005
Federal electricity consumption from RE sources must reach:
- 3%: FY 2007 - FY 2009
- 5%: FY 2010 - FY 2012
- 7.5%: 2013 and thereafter.

Executive Order 13423
Renewable energy requirements – at least 50% from new RE, on-site if possible.

Federal Agency Goal Drivers
- DOE: 25% of electricity from RE by 2025
- USCG: 15% energy from RE by 2015.

20% Wind by 2030
Wind industry target for the Federal sector: ~ 4,000 - 5,000 GWh/year of wind generation.

Existing Federal Wind Projects

<table>
<thead>
<tr>
<th>Federal Wind Sites</th>
<th># of Turbines</th>
<th>Turbine Size</th>
<th>Manufacturer</th>
<th>Wind Plant Capacity</th>
<th>Install Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Clemente Island, CA</td>
<td>3</td>
<td>225 kW</td>
<td>NEG Micon</td>
<td>675 kW</td>
<td>2008</td>
</tr>
<tr>
<td>Guantanamo Bay, Cuba</td>
<td>4</td>
<td>950 kW</td>
<td>NEG Micon</td>
<td>3,800 kW</td>
<td>2005</td>
</tr>
<tr>
<td>Warren Air Force Base, Cheyenne, WY</td>
<td>1</td>
<td>2,000 kW</td>
<td>Gamesa</td>
<td>3,200 kW</td>
<td>2009</td>
</tr>
<tr>
<td>Air Force Ascension Island, St Helena, UK Territory</td>
<td>4</td>
<td>225 kW</td>
<td>NEG Micon</td>
<td>2,700 kW</td>
<td>2004</td>
</tr>
<tr>
<td>Victorville Prison, Victorville, CA</td>
<td>1</td>
<td>750 kW</td>
<td>Vestas</td>
<td>750 kW</td>
<td>2005</td>
</tr>
<tr>
<td>Camp Williams, Riverton, UT</td>
<td>1</td>
<td>225 kW</td>
<td>NEG Micon</td>
<td>225 kW</td>
<td>1999</td>
</tr>
<tr>
<td>Marine Corps, Barstow, CA</td>
<td>1</td>
<td>1,500 kW</td>
<td>AAEER</td>
<td>1,500 kW</td>
<td>2008</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td></td>
<td></td>
<td><strong>12,010</strong></td>
<td></td>
</tr>
</tbody>
</table>

New Federal Wind Projects in Progress

United States – Wind Resource Map

Federal Wind Resource Assessment Activities

- Installation of 50-m Met tower by AEI of West Texas A&M at GSA Border Station site in Donna, TX.
- NREL’s Mini-SODAR unit deployed at Fort Carson, CO site. Unit was installed alongside a 50-m Met tower. Mini-SODAR installed by Atmospheric Systems Corporation.

- 60-m Met tower installation at Naval Magazine on ridgeline in western Guam. Installation by DNV-GEC.

- GSA – Alexandria Bay, NY 50-m Met [2009-10]
- GSA – Massena, NY 50-m Met [2009-10]
- AFCEE – Cape Cod, MA Wind study complete [2007] 2.5-MW Turbine [2009]
- Navy Natl Guard – Sea Girt, NJ 600-kW Turbines [2009-10]
- DOE – Idaho Nat Lab, ID SODAR & 50-m Met RFP [2008-9]
- Marine Corps – Barstow, CA 1.5-MW Turbine [2008]
- USCG – Cape May NJ 100-m Met [2007-9] RFP [2010]
- Army Natl Guard – Sea Girt, NJ SODAR & 30-m Met RFP [2008-9]
- Army Natl Guard – Fort Bliss, NM 2 50-m Mts [2008-9]
- GSA – McAllen, TX 50-m Met [2009-10]
- GSA – Donna, TX 50-m Met [2008-9]
- Army – Ft Carson, CO 50-m Met & SODAR [2007-9]
- Air Force – Schriever AFB, CO 30-m Met [2007-8]

- BLM – 14 Western States Numerous Met towers installed; applications for wind project development
- DOE – Sandia Nat Lab, NM 50-m Met [2009-10]
- Army Natl Guard – Sea Girt, NJ 2 600-kW Turbines [2009-10]
- Marine Corps – Barstow, CA 1.5-MW Turbine [2008]
- Marine Corps – Barstow, CA 1.5-MW Turbine [2008]
- Navy – San Nicholas Is, CA 50-m Met [2009-10]
- Navy – TBD, Hawaii 50-m Met [2009-10]
- Navy – Yokosuka, Japan 60-m Met [2009-10]
- Navy – Okinawa, Japan 60-m Met [2009-10]
- Navy – Guam 2 50-m Mts [2008-9]

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