

Offshore Wind Services



Guiding you through offshore wind development.

AWS Truepower has been an international leader and innovator in renewable energy consulting for over 25 years and is the leading consultancy for offshore wind in North America. Our staff of engineers, meteorologists, modelers, and environmental specialists have worked on the design and assessment of over 50 GW of wind projects, both on land and offshore.

Leading Offshore Development

As the leading consultancy for offshore wind development in North America, AWS Truepower designs and implements offshore wind resource assessments and met ocean studies, including met tower design and review. We employ innovative measurement techniques using floating platforms, jack-up barges, and remote-sensing technologies for wind measurement and atmospheric characterization such as LIDAR and SODAR. Our clients include private developers, institutional and government

agencies, and utilities. We are also an active participant in leading offshore industry studies, including the evaluation of new technologies.

Offshore wind farm development presents its own set of unique challenges. From innovative resource assessment methods, to oceanographic studies, to wind farm layout and design, your project's success is our priority. Our offshore team specializes in the management and integration of the multi-disciplinary aspects of offshore wind development.

Image Courtesy Cape Wind



AWS Truepower designs and implements offshore wind and wave resource assessments and employs innovative measurement techniques.

Offshore Consulting Services

In the offshore and coastal development arenas, AWS Truepower leads the field in experience and expertise with high profile offshore wind projects, working both on behalf of the developers and owners, or lenders and investors. Our services include:

- Site identification
- Feasibility studies
- Wind resource modeling
- Met-ocean site characterization
- Resource assessment campaign design and implementation
- Turbine layout design and cost of energy optimization
- Project design and analysis
- Technology and market assessments & cost-benefit studies
- Bankable energy production estimates
- Independent engineering and due diligence reviews
- Grid integration assessment
- Port, infrastructure and supply chain review
- Photo simulation

Demonstrated Leadership

As an active member of the offshore wind community, in 2003 we prompted the American Wind Energy Association (AWEA) to form the Offshore Wind Working Group, which was led for several years by AWS Truepower President and CEO, Bruce Bailey. Our offshore wind collaboration activities are also reflected by involvement in over two dozen U.S. and international offshore wind conferences. Other offshore leadership roles include:

- Facilitator and author of “A Framework for Offshore Wind Energy Development in the United States,” on behalf of the Massachusetts Technology Collaborative, U.S. Department of Energy, and General Electric.
- Primary author of the “New Jersey Offshore Wind Energy Feasibility Study” for the New Jersey Board of Public Utilities.
- Development of high-resolution, validated wind maps and data to facilitate wind energy siting and planning at the national, state, and project levels.
- Offshore wind mapping available for most continents including Asia, Europe, North and South America. The Great Lakes wind resource atlas was completed in 2008, and updated wind maps for the eastern U.S. extending 50 nautical miles from shore were completed in 2009.
- Part of 2011 U.S. DOE team of experts to identify sites for high offshore wind potential and grid inter-connection for all U.S. coastal regions.