

Final Scientific Report

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Executive Summary: The goal of the States Advancing Wind Project was to facilitate the adoption of effective state legislation, policy, finance programs, and siting best practices to accelerate public acceptance and development of wind energy. This was accomplished by Clean Energy States Alliance (CESA) through provision of informational tools – including reports and webinars – as well as the provision of technical assistance to state leaders on wind siting, policy, and finance best practices, identification of strategic federal-state partnership activities for both onshore and offshore wind, and participation in regional wind development collaboratives.

This project was part of the Market Acceptance portion of DOE's 20% Wind Initiative. While wind energy is a mature technology and there are abundant wind resources available, siting, permitting, and financing of wind projects continues to be a challenge. In this project, CESA provided information, peer-to-peer communication, and technical assistance to state agencies and officials across the nation through our existing state members' network and associated channels to regarding the merits, approaches, and policy tools available to address these challenges and accelerate wind project development. The specific objectives of States Advancing Wind project were to:

1. Provide information and technical assistance to state leaders and state energy programs in the development of effective wind siting policies and finance programs.
2. Identify, describe, and foster state practices and strategies to accelerate acceptance of wind.
3. Identify and promote strategic opportunities for states and federal to advance wind technology deployment through partnerships, collaboration, and targeted activities.
4. Advance state and federal cooperation to advance offshore wind development on the Outer Continental Shelf (OCS).

In order to meet our objectives, CESA created a number of informational tools, presentations, and peer-to-peer learning forums. These include:

Reports

- [*Supporting On-Site Distributed Wind Generation Projects*](#), by Charles Kubert and Mark Sinclair, Clean Energy States Alliance, May 2010.
- [*State-based Financing Tools to Support Distributed and Community Wind Projects*](#) by Charles Kubert and Mark Sinclair, Clean Energy States Alliance, May 2010.
- [*Executive Summary: State-Based Financing Tools to Support Distributed and Community Wind Projects and Supporting On-Site Distributed Wind Generation Projects*](#). CESA, June 2011.
- [*A Visual Impact Assessment Process for Wind Energy Projects*](#), Jean Vissering, Mark Sinclair, and Anne Margolis, May 2011.
- [*Executive Summary: A Visual Impact Assessment Process for Wind Energy Projects*](#). CESA, September 2011.
- [*State Clean Energy Fund Support for Renewable Energy Projects: Key Findings from the 2008 Annual and 1998-2008 Cumulative Results*](#), by Clean Energy States Alliance and Peregrine Energy Group, June 2010.
- [*State Clean Energy Fund Support for Renewable Energy Projects: Key Findings from the CESA 2009 National Database*](#), Clean Energy States Alliance and Peregrine Energy Group, Winter 2011.

Presentations

- “Opportunities to Expand Renewable Energy: Offshore Wind.” Presentation at the Northeast Funders Climate Meeting by Mark Sinclair, CESA, March 2011.
- “Developing State Markets.” Presentation at Wind Powering America All-States Summit by Anne Margolis, CESA, May 2011.
- “State Incentive Programs for Midsize Wind.” Presentation at Small Wind Conference by Anne Margolis, CESA, June 2011.
- “State Policies to Support Community Wind: A Sampling of Approaches.” Presentation for Wind Powering America Webinar by Mark Sinclair, CESA, June 2011.

Webinars

- 4/8/10 Webinar: “[State Policies and Programs to Advance Distributed Wind Projects.](#)”
- 6/1/10 Webinar: “[Public Financing Tools to Advance Distributed Wind Projects](#)”
- 10/14/10 Webinar: [Evaluating the Visual Impact of Wind Turbines: A Methodology for State Officials](#)
- 12/1/10 Webinar: “[Building the U.S. Offshore Wind Supply Chain #1](#)”
- 12/15/10 Webinar: “[Building the U.S. Offshore Wind Supply Chain #2](#)”
- 2/15/11 Webinar: “[Building the U.S. Offshore Wind Supply Chain #3](#)”
- 6/18/11 Webinar: “[Offshore Wind Ecological Studies - Findings from New Jersey Research Project](#)”
- 6/29/11 Webinar: [Best Practices for Sustainable Wind Energy Development in the Great Lakes Region.](#)”
- 7/13/11 Webinar: “[OSW Webinar: The Financing Challenges Facing the U.S. Offshore Wind Market](#)”
- 8/9/11 Webinar: “[OSW Webinar: The Role of States and Public Support Mechanisms in Supporting Offshore Wind Financing](#)”
- 9/14/11 Webinar: “[OSW Webinar: The Role and Needs of Private Investors in Offshore Wind Finance](#)”
- 9/23/11 Webinar: “[Making the Best Use of Incentive Dollars for Distributed Wind](#)”
- 11/18/11 Webinar: “[Interstate Turbine Advisory Council](#)”
- 12/6/11 Webinar: “[Innovative Approaches for Financing US Offshore Wind Energy](#)”

Details on these deliverables are contained in the body of this report. We reached out to our States Advancing Wind listserv of over 250 individuals – as well as to individuals and groups served by our partners’ listservs – to broadcast the availability of these learning tools, and we achieved robust participation. We also provided technical assistance to states across the U.S., through distribution of these tools, conference presentations, our listserv, and, especially, one-on-one project requests.

The most important outcome of this project is the ongoing legacy it has enabled, in terms of both CESA’s distributed wind work as well as our offshore wind work. For example, a new CESA project with several states and other clean energy incentive programs concerning small and distributed wind turbines has taken root, an idea that first germinated at the Small Wind Conference in Stevens Point in June 2011. A number of state wind incentive programs asked CESA to initiate and manage the Interstate Turbine Advisory Council (CESA-ITAC: see <http://www.cleanenergystates.org/projects/ITAC/>). This group of state wind incentive program managers will work with CESA to develop a unified list of wind turbines that will be acceptable for incentives in their various programs. By working together, the states hope to create better incentive programs that create clear signals for manufacturers and installers regarding what criteria – from performance standards to customer service and warranty support – are important to the incentive programs. We expect to launch a unified list in early 2012. States will be contributing funds to this effort, and we expect it to be self-sustaining. However, many state incentive programs are strapped and are therefore unable to fully participate in the cost-sharing.

Therefore, if there is additional Wind Powering America funding available to help support this very important effort, please let us know.

Additionally, CESA was able to create a robust, effective, and self-sustaining collaboration among leading state and federal officials, industry representatives, and non-governmental organizations to tackle the major barriers to building an offshore wind industry – through greater, focused cooperation and partnerships. Specifically, over the last year, CESA created and now manages the Offshore Wind Accelerator Project (OWAP), with involvement by the US Offshore Wind Collaborative (USOWC). The initiative is now implementing a portfolio of activities to address key challenges facing offshore wind deployment in five topic areas:

1. Ensuring ongoing cooperation and communication among stakeholders and government leaders on priority problem-solving;
2. Addressing siting and regulatory conflicts to assist existing state and federal agency efforts;
3. Advancing investment through power procurement cooperation by state and federal agencies and through new financing mechanisms;
4. Identifying supply chain needs and cooperative opportunities to build the industry infrastructure; and
5. Implementing a communication effort to ensure public and stakeholder access to objective, reliable information on offshore wind issues.

We have greatly enjoyed working on this project and are especially excited by the new projects our work has spawned. We would be happy to share additional details on these projects with DOE at your convenience. Meantime, this document is a final report on this grant agreement for the cooperative agreement between Clean Energy States Alliance (CESA) and the U.S. Department of Energy (DOE), signed by DOE on December 10, 2009 and covering the project and budget period of December 1, 2009 – November 30, 2011. The following narrative details our Tasks, as spelled out in our Scope of Work, and our deliverables created under each task to meet our overall project objectives.

Task 1: Survey Existing State Policies

Task 1 involved surveying and identifying state “best practice” wind policies, for the purposes of identifying best practices and also pinpointing states where particular programs and policies can be improved. CESA staff began by compiling and analyzing policy data sources and documents, including CESA member state program elements as well as non-member state programs and policies, which we examined with our CESA fund managers at a Distributed Wind Workshop we held during our February 2010 national members’ meeting. Managers of particularly advanced wind programs as well as distributed-scale wind developers discussed the challenges and opportunities presented by various program elements, from grants and incentives to tax subsidies and RPS laws – a discussion that has been key to informing this work.

CESA best practice analysis resulted in our creation of a policy briefing guide, [*Supporting On-Site Distributed Wind Generation Projects*](#), which is designed for state clean energy fund managers and policymakers to help them support the installation of on-site, behind-the-meter wind turbines at private businesses and municipal and other public facilities. We also held an associated webinar, entitled, “[*State Policies and Programs to Advance Distributed Wind Projects*](#),” which took place on Thursday, April 8, 2010.

CESA staff finished its survey of state wind policies and financing incentives in early 2011. We reviewed each policy and financing practice that we had previously identified as best practices in our finance and policy guides previously produced as deliverables under this grant by reviewing information publicly available in the Database of State Incentives for Renewable Energy (www.dsireusa.org). The resulting survey was attached as the spreadsheet “*State_wind_policy_finance_tools_033111.xls*” to the April 2011 quarterly report. It identifies which states are implementing which practices and also identifies opportunities for policy and finance tool implementation.

We originally said we would develop a best practices guide as a supplemental deliverable for this project. However, because the best practices guide is outside the scope of the project and is also redundant with the work of other Wind Powering America grantees, after a conversation with Ian Baring-Gould, it was agreed we would not create this extra deliverable and would instead stick with the survey as presented and would also do more to enhance and promote our existing, completed deliverables, including creating executive summaries of each (see below).

Task 2: Disseminate Wind Energy Policy Best Practices

CESA launched the project by developing a listserv and webpage for project stakeholders and announcing the overall project to a broad list of potential stakeholders, with a focus on state officials.

Subtask 2.1 - Hold Webinars

CESA held six webinars for state officials interested in creating or enhancing their existing state wind programs (offshore wind webinars are detailed separately, under Task 5).

1. The first, entitled, “[State Policies and Programs to Advance Distributed Wind Projects.](#)” took place on Thursday, April 8, 2010. It was designed to explore existing robust state wind programs to identify policies and programs that are supportive of wind projects, as well as to examine barriers and opportunities to wind power development from the industry’s perspective. Speakers included Bill Basa of Northern Power Systems, Carter Wall of the Massachusetts Clean Energy Center, and Charles Newcomb of NexGen Energy Partners, LLC. The webinar invitation generated 76 registrants and 39 actual attendees. Attendees were also sent the associated briefing guide, [Supporting On-Site Distributed Wind Generation Projects](#), which CESA created to enhance upon content discussed in the webinar.
2. The second webinar, entitled, “[Public Financing Tools to Advance Distributed Wind Projects.](#)” took place Tuesday, June 1, 2010. It built upon information from the first policy webinar, taking an in-depth look at the financial tools states can use to support wind projects. Speakers included Charles Kubert of CESA, Mark Bolinger of Lawrence Berkeley National Laboratory, and John Harper of Global Energy Investors. The webinar invitation generated 77 registrants and 54 attendees. Attendees later received the associated briefing guide, [State-based Financing Tools to Support Distributed and Community Wind Projects.](#)
3. The third of three scheduled webinars, “[Evaluating the Visual Impact of Wind Turbines: A Methodology for State Officials.](#)” took place on October 14, 2010 and drew a large audience of 84 state and local officials. On the webinar, Jean Vissering of Jean Vissering Landscape Architecture shared a draft of her visual impacts methodology report (discussed under Task 3). The report was circulated in draft form to the webinar registrants, and they were asked to contribute feedback. The purpose of the report and webinar is to help state officials objectively evaluate visual impacts, specifically, of wind turbine projects and to provide an understandable and workable aesthetic assessment review methodology that provides clear guidance for developers but also ensures the protection of important scenic resources.
4. CESA jointly hosted a webinar with the Great Lakes Wind Collaborative on June 29, 2011 entitled, “[Best Practices for Sustainable Wind Energy Development in the Great Lakes Region.](#)” This webinar attracted 105 attendees with a stake in wind energy from the Great Lakes region and beyond.
5. CESA jointly hosted a webinar with eFormative Options, LLC on September 23, 2011 entitled, “[Making the Best Use of Incentive Dollars for Distributed Wind.](#)” This webinar was tailored specifically for CESA members – state clean energy program managers – who run their states’ wind incentive programs. Program staff from OR, MA, PA, NH, CT, NJ, NY, CA, OH, AK, and MN attended the webinar.
6. The sixth and final webinar, “[Interstate Turbine Advisory Council.](#)” held November 18, 2011, introduced wind incentive programs across the U.S. to the Interstate Turbine Advisory Council, or ITAC. Founding members of ITAC, including New York State Energy Research and Development Authority (NYSERDA), Energy Trust of Oregon (ETO), and others, are in the process of creating a unified list of small and mid-sized wind turbines that fit the performance, durability, and customer experience expectations of their programs. This project was a direct result of our work under this grant and will reduce market confusion and

inefficiency by condensing the many state-level eligible wind turbine lists into a single resource. Instead of evaluating wind turbines individually on a state-by-state basis, participating programs are pooling knowledge, field data, and resources to develop the improved, central list.

The presentations from and recording of the webinars are available on the States Advancing Wind webpage, <http://www.cleanenergystates.org/projects/states-advancing-wind/>.

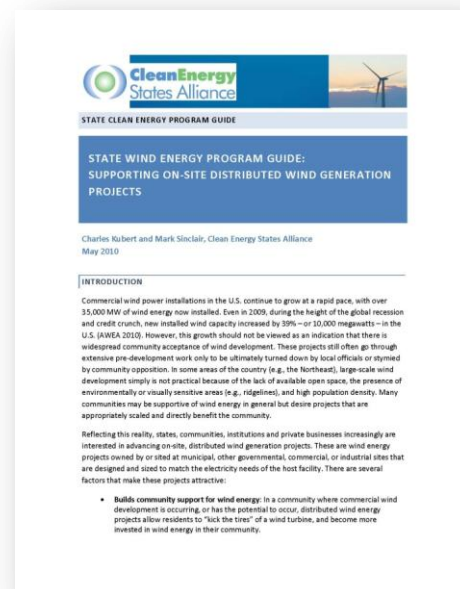
Subtask 2.2. Technical Assistance/Distributed Wind Workshop for State Officials

CESA organized its 3-day annual winter meeting in California for February 2010, with over 50 state officials in attendance. The CESA winter meeting presented an in-depth session relevant to how states can support on-site distributed wind projects. State renewable program managers from Massachusetts's Clean Energy Center and the Energy Trust of Oregon as well as a representative from Northern Power Systems, a mid-scale wind manufacturer, and NexGen Energy, a project developer, discussed challenges and opportunities presented by customer-sited, mid-scale wind projects. These included a look at the market, economics, and business case for on-site distributed wind, from both the states' and the developers' perspectives. The presentations were followed by an extensive question-and-answer session between the presenters and the other state clean energy fund representatives in attendance.

Subtask 2.3. Prepare Briefing Materials

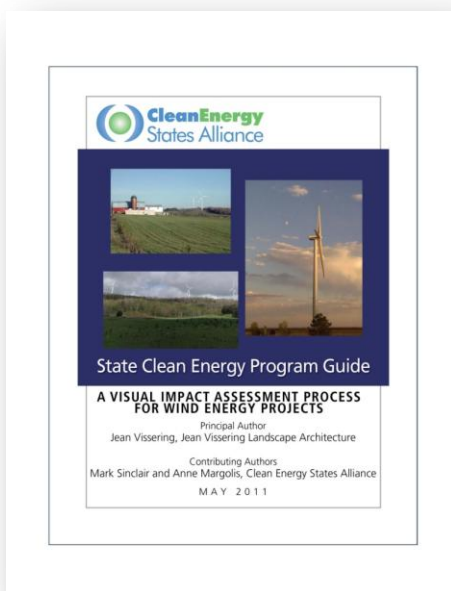
CESA staff drafted and distributed briefing guides, a major report, and three associated executive summaries for states on developing effective state wind policy and funding programs as well as a major visual assessment methodology process for wind energy projects:

[Supporting On-Site Distributed Wind Generation Projects](#) was prepared for state clean energy fund managers and policymakers whose programs support (or who would like to support) the installation of on-site, behind-the-meter wind turbines at private businesses and municipal and other public facilities. The guide reviews: financial incentives and financing assistance; site assessment and feasibility support; net metering and interconnection policies; regulations allowing third-party ownership; model on-site wind zoning ordinances; and green communities laws.





[State-based Financing Tools to Support Distributed and Community Wind Projects](#), the second briefing guide, was created to help state clean energy fund managers and policymakers examine financial support tools for distributed wind projects. The options explored range from rebates and loans to bridge financing, renewable portfolio standards, and third-party financing, all of which the guide suggests should be evaluated in light of the availability of tax and other incentives available at the federal level.



[A Visual Assessment Process for Wind Energy Projects](#) is a report created by CESA in collaboration with landscape architect Jean Vissering that creates a standard, effective methodology that can be used by state, federal, and local regulators to objectively evaluate wind project visual effects.

At the request of Ian Baring-Gould of the Wind Powering America program, we also created executive summaries of our two briefing guides and the visual assessment methodology report outlined above:

- [Executive Summary: State-Based Financing Tools to Support Distributed and Community Wind Projects and Supporting On-Site Distributed Wind Generation Projects](#)
[-Executive Summary: A Visual Assessment Process for Wind Energy Projects](#)

Subtask 2.4. Provide Technical Assistance to States

CESA provided community and distributed wind technical assistance to states in the following instances:

- Commonwealth Wind External Review: CESA Staff participated as external reviewers for the Massachusetts Clean Energy Center's Commonwealth Wind December 2009 grant round. CESA reviewed feasibility and implementation applications for this community-scale program and advised on the best projects based on our experience working with other CESA state wind programs and projects.
- CESA staff also provided direct technical assistance to Massachusetts Clean Energy Center by (a) gathering existing state and local noise and flicker regulatory language for them to use in improving their in-state regulations; and (b) helping to evaluate the novelty of their new initiative to install wind speed monitoring equipment upwind of their turbine installations in order to more accurately predict weather conditions and more optimally deploy their in-state turbines.
- Vermont Clean Energy Development Fund External Review: CESA Staff participated as external reviewers for the Vermont Clean Energy Development Fund's March 2009 grant round (grant review took place April 9). CESA reviewed feasibility and implementation applications for a number of distributed renewable energy generation projects (including distributed wind projects) and advised on the best projects based on our experience working with other CESA state wind programs and projects.
- CESA staff provided direct technical assistance to Iowa's office of Energy Independence by helping to review and recommend state-level model wind and solar ordinances.
- CESA staff helped the staff of the Southern Alliance for Clean Energy by providing model wind ordinances for them to use in developing a unique model ordinance tailored to South Carolina and Georgia.
- CESA staff helped the staff of Wisconsin's Focus on Energy program to look at production-based incentives for wind power.
- CESA staff also provided direct technical assistance on various wind policy and program issues to officials in Ohio, Virginia, Maryland, and Maine.
- At the request of the Wind Powering America program leadership, CESA attended and presented at the Wind Powering America Summit held in Anaheim, CA May 25-26, 2011. Our presentation, entitled *Developing State Markets*, discussed finance and policy tools available to states to help encourage distributed and community wind power development. A number of states were represented at this event and many of them engaged in conversations with us about the presentation at the event. The presentation was attached as part of the July 2011 quarterly report.

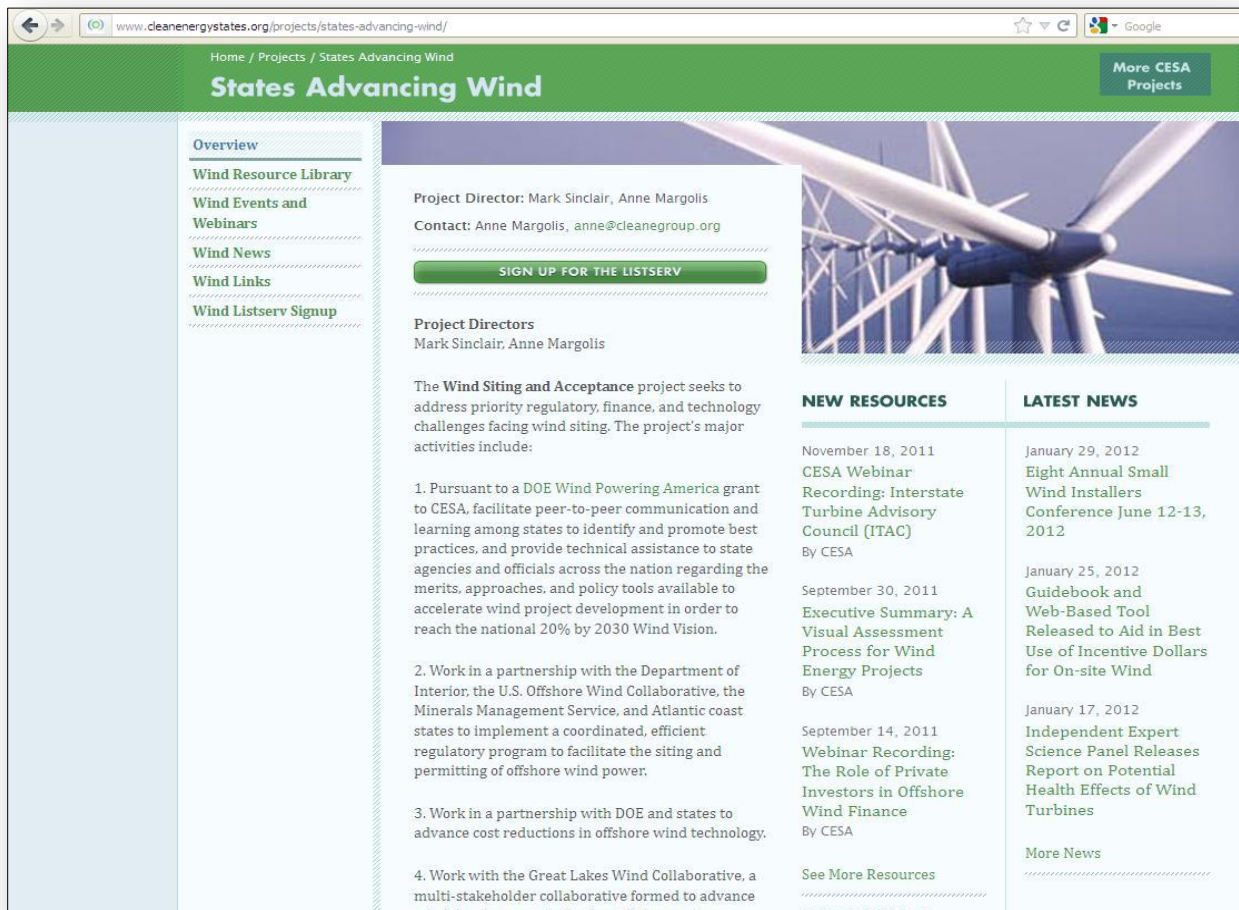
- CESA was asked to present at the June 15 WPA webinar on Community Wind Projects. The presentation, entitled *State Policies to Support Community Wind: A Sampling of Approaches*, and the recording of the webinar are available here:
http://www.windpoweringamerica.gov/filter_detail.asp?itemid=3077.
- CESA was asked by NREL to participate in the June 16 discussion held in Stevens Point, WI (in conjunction with the Small Wind conference) that focused on mid-size wind performance standards. CESA's presentation, entitled *State Incentive Programs for Midsize Wind*, was attached to the April 2011 quarterly report.
- CESA was asked to moderate a session on federal and state wind policy at the AWEA Small and Distributed Wind Conference held in Des Moines, IA on Sept. 14-16, 2011. We organized a panel with Lloyd Ritter of Green Capitol, Inc., Heather Rhoads-Weaver of eFormative Options, LLC, Rich Hasselman of GDS Associates, and Mark Mayhew of NYSERDA. The panel was well attended and well received.
- Also, CESA has started a new project called the Interstate Turbine Advisory Council (CESA-ITAC). This is a group of state wind incentive program managers working together to develop a unified list of wind turbines that will be acceptable for incentives in their various programs. By working together, the states hope to create better incentive programs that create clear signals for manufacturers and installers regarding what is important, in terms of equipment performance, warranty and customer support, etc., to the state programs. We expect to launch a unified list in early 2012.

Subtask 2.5. Develop and Maintain Listserv and Webpage

As part of the States Advancing Wind Project, CESA staff created and continually added to an extensive listserv (250+ voluntary members opted in) that reaches out to CESA members, other 20% wind initiative state outreach awardees, many other state officials, associations including AWEA, NWCC, Windustry, NCSL, and IREC, and industry. We used this peer-to-peer list to publicize our webinars and those of other Wind Powering America grantees, including New England Wind Energy Education Project (NEWEEP) and the Great Lakes Wind Collaborative (GLWC), as well as Department of Energy wind-related webinars, and to distribute our briefing guides as well as to allow members can discuss, share documents, and also post their related events. For instance, in 2011, CESA conducted outreach on behalf of DOE's August 18 wind technologies market report webinar, its September 16 offshore wind webinar, its October 7 release of its comprehensive report on offshore windpower in the U.S., NEWEEP's October 26 webinar on windpower, grid reliability, backup supply, and fossil fuel use in New England, and USOWC's webinars on building the U.S. offshore wind supply chain.

CESA staff also created a webpage, <http://www.cleanenergystates.org/projects/states-advancing-wind/>, where we post our upcoming webinars, other organizations' wind-related webinar announcements, audio and video of past CESA webinars, our related briefing reports, other DOE deliverables, best practice documents regarding distributed wind policy, technology, and finance, links to the Wind Powering America program and other useful sites, and information on behalf

of other 20% wind state outreach recipients. The new CESA website rolled out in 2011 and included an upgraded version of the States Advancing Wind project page:



Task 3: Develop Visual Impact Recommendations

CESA planned to develop a report and webinar on the visual impacts of wind with a leading landscape architect. CESA assessed the various methodologies being used to evaluate the visual effects of wind projects. Based on this assessment, CESA designed a project scope of work and tasks for development of a standard, effective methodology that can be used by state, federal, and local regulators to objectively evaluate wind project visual effects. CESA then contracted with a highly qualified, experienced landscape architect, Jean Vissering, who served on the National Academy of Sciences Task Force on Wind Development, to provide recommendations on the visual effects of wind development on the Atlantic Coast. Ms. Vissering surveyed and developed an effective process and methodology for use by state, federal, and local regulators to evaluate the visual effects of wind projects.

The methodology was reviewed by a number of Ms. Vissering's peers, as well as by the director of siting policy at AWEA, John Anderson. The final report was also sent to Bob Sullivan of Argonne National Labs for additional review, specifically for a look in the context of western landscapes and turbine installations, where we felt the methodology could use additional review. Mr. Sullivan sent us comments and photos for inclusion. We also sent the report to Ian Baring-Gould for NREL final review.

CESA and Ms. Vissering held a webinar on October 14, 2010, entitled [Evaluating the Visual Impact of Wind Turbines: A Methodology for State Officials](#), which was attended by 84 state and local decision makers. The visual assessment methodology was released to all the participants for comment.

CESA and Jean Vissering released the final version of the new report, *A Visual Assessment Process for Wind Energy Projects*, at the end of May 2011. The report is available here: <http://www.cleanenergystates.org/assets/2011-Files/States-Advancing-Wind-2/CESA-Visual-Impacts-Methodology-May2011.pdf>. We also helped engage Jean Vissering to present on the topic at the New England Wind Energy Education Project (NEWEEP) conference on June 7, 2011. CESA served on NEWEEP's steering committee, attended this event, and helped moderate a public acceptance panel.

At the request of Ian Baring-Gould of the Wind Powering America program, we also created an executive summary for *A Visual Impact Assessment Process for Wind Energy Projects*. The two-page summary is available here: <http://www.cleanenergystates.org/resource-library/resource/executive-summary-a-visual-assessment-process-for-wind-energy-projects>.

Task 4: Prepare and Distribute Finance Toolkit

CESA researched, wrote, and peer-reviewed the distributed wind finance toolkit, a briefing report for states – [State-based Financing Tools to Support Distributed and Community Wind Projects](#) – and held an accompanying webinar on financial incentives and other tools to support community and on-site distributed wind energy projects. The guide showcases current state financial incentive programs for this industry segment; outlines the financing needs of projects need during different stages of their development cycle and the role that states can play in meeting these financing gaps and challenges; and describes available federal financial incentives for community and distributed wind projects and how state programs can best complement these.

The report was released to the CESA membership and wind energy listserv, as well as through CESA's States Advancing Wind website, on June 1, in conjunction with the associated webinar, "[Public Financing Tools to Advance Distributed Wind Projects](#)," which also took place Tuesday, June 1.

Task 5: Facilitate Offshore Wind Collaboratives

CESA planned to assist and support the USOWC in advancing information sharing and cooperation among all sectors to advance offshore wind, and to help the Atlantic states develop and facilitate the work of a cooperative partnership with the Department of Interior/Minerals

Management Service and with DOE to advance the sustainable development of offshore wind resources. CESA and USOWC also held webinars on offshore wind issues for states, federal officials, and industry stakeholders. CESA and USOWC also worked on the establishment and facilitation of a new multi-state working group to advance cooperation on non-regulatory offshore wind obstacles.

CESA also assisted the GLWC by actively participating in working groups and on steering committee to develop best principles & practices for wind siting in the Great Lakes and championed the final execution and implementation of new MOU among the Great Lake states and federal agencies to improve regulatory coordination for review of lake-based wind projects.

Subtask 5.1: Assist U.S. Offshore Wind Collaborative (USOWC)

- CESA has been serving on the Board of Directors for the USOWC and assisted the organization to become an effective forum for advancing responsible offshore wind development, by, among other assistance, developing the organization's strategic and annual work plan, raising funding to support staffing, and partnering on joint efforts to address major OSW challenges. Specifically, CESA was instrumental in obtaining foundation funding for USOWC to support its initial outreach activities and workplan. CESA also contributed to USOWC's white paper on the status of offshore wind in the U.S., to the organization's prospectus, and website information portal.
- CESA worked closely with DOI Secretary Salazar's office and BOEM staff to propose and further the creation of a new Atlantic Offshore Wind Energy Consortium between the states and DOI to coordinate efficient review and development of offshore wind resources. CESA was the major proponent of this state/federal offshore wind partnership and worked with state leaders across the region to enlist their commitment to this partnership. CESA also provided DOI leadership with significant input on the scope and objectives for this Consortium effort. CESA also offered detailed recommendations to DOI that contributed to the design of the Smart from the Start effort.
- CESA worked closely with major environmental non-governmental organizations, including Environment America and National Wildlife Federation, to enlist their support and efforts to increase public education and public support for offshore wind projects. For example, CESA provided information and input into the NWF's new offshore wind report, *Offshore Wind in the Atlantic: Growing Momentum for Jobs, Energy Independence, Clean Air, and Wildlife Protection (2011)*.
- CESA and USOWC implemented a series of eight for states, federal agencies and other offshore wind developers to address major offshore wind development challenges and solutions. The webinars facilitated by CESA and USOWC included the following topics: building a domestic offshore wind supply chain, examining state efforts and studies to identify potential ecological effects of wind projects on the marine environment; advancing strategies and tools to fill the financing gaps facing OSW. The presentations

and recordings of these webinars are available on the Accelerating Offshore Wind webpage, <http://www.cleanenergystates.org/projects/accelerating-offshore-wind/>.

- “[Building the U.S. Offshore Wind Supply Chain #1](#),” took place on December 1, 2010 and focused on the components of the supply chain and lessons learned in the first two rounds of wind development in the UK.
- “[Building the U.S. Offshore Wind Supply Chain #2](#),” took place on December 15, 2010 and focused on case studies in supply chain implementation in the UK.
- “[Building the U.S. Offshore Wind Supply Chain #3](#),” took place February 15, 2011 and focused on offshore wind supply chains in three key regions of the U.S.
- “[Offshore Wind Ecological Studies - Findings from New Jersey Research Project](#),” took place June 8, 2011 and briefed participants on the comprehensive offshore wind ecological studies project, conducted by the New Jersey Department of the Environment.
- “[OSW Webinar: The Financing Challenges Facing the U.S. Offshore Wind Market](#),” was held on July 13, 2011 and examined the U.S. DOE national offshore wind strategy deployment objectives, its implications for the total investment required to develop this amount of generation, and the specific financing gaps and challenges. This first webinar set the stage for examination and discussion of potential financing solutions in later webinars.
- “[OSW Webinar: The Role of States and Public Support Mechanisms in Supporting Offshore Wind Financing](#),” was held on August 9, 2011 and examined the key strategies, efforts, and policy tools being used by states to support offshore wind financing and deployment. The webinar identified the characteristics of an effective approach by states to create demand, encourage power purchase agreements, employ public procurement, and use public funding to support offshore wind development and related supply chain investment.
- “[OSW Webinar: The Role and Needs of Private Investors in Offshore Wind Finance](#),” was held on September 14, 2011 and examined the financing issue from the perspective of private investors. The session involved a panel discussion of finance experts who discussed who is investing in offshore wind, what financing vehicles they are using, how to address financing and technology risks, and the role of state and government policy.
- “[Innovative Approaches for Financing US Offshore Wind Energy](#),” was held on 2/6/11 and examined some of the innovative approaches that could be used to advance financing early U.S. offshore wind projects. The webinar looked beyond the immediate challenges of extending the federal production and investment tax credits to explore additional approaches and tools to finance offshore wind projects of scale.

- CESA worked with DOE Wind Program Staff to support their efforts to obtain public outreach and input for the Strategic Work Plan for Creating an Offshore Wind Industry in the U.S. CESA was instrumental in assisting state leaders to become aware of, and gain support for, DOE's OSW Strategic Work Plan
- CESA worked with major environmental organizations and states to provide comments to BOEM on model lease conditions to ensure more predictability and regulatory certainty involving the Department of Interior's Smart from the Start offshore wind regulatory initiative.
- CESA provided substantial comments on behalf of its states members to the Request for Information issued by DOE in June, 2010 to provide input from the states on the highest priority activities that DOE should target to advance RD&D for OSW.
- CESA assisted USOWC in convening an offshore wind supply chain working group of states, federal agencies, industry, GLWN, and potential suppliers to work with DOE's funding awardee, Navigant, to inform a national offshore wind supply chain study and develop partnerships to implement the study's recommendations.
- CESA worked with states, industry, and stakeholders to develop recommendations for the Department of Interior on creation of an ombudsman position to address regulatory issues and conflicts facing offshore wind project siting.
- CESA led and supported a new coalition of offshore wind stakeholders, including states, federal agencies, and industry players, called the Offshore Wind Accelerator Project, to advance cooperation in addressing supply chain, regulatory, financing, and communications challenges facing the OSW industry.
- CESA developed analysis and drafted a report to inform the establishment of a collaborative buyers' network among states, utilities, federal agencies, and industry stakeholders to establish an offshore wind generation purchasing network to aggregate demand and facilitate the financing of early projects. The final report will be released in February, 2012.
- CESA worked with major environmental organizations and states to provide comments to BOEM on a Request for Information on the structure of an effective, efficient lease auction format that will facilitate offshore wind deployment by (a) providing auction "credits" for state finance/procurement commitments to a developer's project, and (b) establishing a lowest practicable bonus bid payment to address the difficulty of accessing upfront capital for OSW developers.
- CESA worked with environmental organizations (Conservation Law Foundation, National Wildlife Federation, and Southern Alliance for Clean Energy) and industry leaders to develop recommendations for how to ensure more effective public

participation in leasing decisions by the Department of Interior and on use of adaptive management.

- CESA developed and hired a new staff position to implement a communications effort to increase public education and public support for offshore wind projects.

Subtask 5.2. Assist Great Lakes Wind Collaborative (GLWC)

CESA assisted the Great Lakes Wind Collaborative (GLWC) in the following ways:

- CESA served on the Steering Committee of the Great Lakes Wind Collaborative. In this role, CESA assisted the Collaborative to implement its work plan to advance wind development in the region. CESA also assisted the Collaborative with revisions of its governing charter, identification of new Steering Committee members, and with fundraising efforts.
- CESA assisted the GLWC with outreach and discussions with the U.S. Army Corps of Engineers to advance COE consideration of development of programmatic environmental impact statement and/or other planning approach to facilitate smart siting of wind projects in the Great Lakes.
- CESA worked with the GLWC to create a develop a draft memorandum of understanding and pilot program that now has been tentatively supported by state officials from the Great Lake states, DOI, DOE, CEQ, US Corps of Engineers and other federal agencies to promote the effective and expedited regulatory review of Great Lake wind projects. The MOU is being reviewed for signature by the states and federal agencies. The MOU reflects CESA's direct recommendations on (a) creation of a regulatory roadmap, (b) improvement of interagency permitting coordination, and (c) implementation of administrative efficiencies for regulatory review of projects. CESA and USOWC will continue to support the finalization and implementation of the MOU and its commitments in cooperation with the state and federal signatories.
- CESA recommended, and assisted GLWC to develop, a Prospectus will provide the organization with more public visibility and assist with outreach to state officials and to potential funders. CESA also assisted the GLWC with planning for its annual meeting.
- CESA served on the national planning committee for the regional community wind conferences being organized by Windustry, another DOE market acceptance wind grantee.
- CESA served GLWC working group to develop best siting practices for siting of land-based and offshore wind projects in the Great Lakes.
- CESA assisted GLWC with development of a sustainable funding plan.

- CESA assisted the GLWC to plan and establish a fall workshop (October 25-26, 2011) that took place in Chicago to advance state/federal agency cooperation and planning to facilitate smart siting of lake-based wind projects in the Great Lakes. CESA drafted a proposal for consideration at the workshop on how to advance multi-state cooperation and coordination on review of offshore wind projects. CESA also actively participated in the GLWC's annual meeting, as a facilitator of sessions and discussion.
- CESA provided input to the GLWC for comments to DOE on how to further the establishment and focus of a proposed joint U.S./Canada initiative on Great Lakes Wind
- CESA helped to finalize GLWC's final work product, *Best Practices for Sustainable Wind Energy Development in the Great Lakes Region* as well as to publicize this work by co-hosting a webinar on June 29, 2011 (see Subtask 2.1).

Subtask 5.3. Assist New England Wind Energy Education Project (NEWEEP)

CESA participated on the New England Wind Energy Education Project (NEWEEP – another 20% Wind grant recipient) steering committee in order to help NEWEEP with their project planning and also to coordinate outreach efforts by both groups. This involved semi-monthly, 2-hour conference calls, attending their webinars, and offering guidance and feedback on their activities. Participating on the conference subcommittee represented a major investment of time by CESA, including obtaining sponsorships and organizing and ultimately moderating a panel – **Topics in Public Acceptance** – at NEWEEP's conference and workshop on June 7. The conference proceedings are available here:

<http://www.windpoweringamerica.gov/newengland/neweep/conference.asp>.

Task 6. Track Results

CESA first finalized and distributed [a summary report](#) based on the 2008 reporting data of the CESA National Renewable Energy Database. CESA staff analyzed the results of the reported data on wind projects supported and installed by CESA members.

We then collected and analyzed 2009 data from CESA members that includes installed wind projects and distributed [the report](#) on our website.

CESA will continue to maintain and disseminate an annual or biannual report to track and report on the effect of state clean energy programs in supporting wind energy projects, with the assessment of impact, trends, and financial report being provided by states.

Task 7. Project Management and Reporting

CESA hereby submits final report to DOE. Reports and other deliverables have been provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein.

Publications / Presentations/Travel: Please refer to previous quarterly reports.