

State Leadership in **Clean Energy**

2010 AWARDS

Clean Energy States Alliance (CESA) established the *State Leadership in Clean Energy* (SLICE) Awards to recognize state programs and projects that are most effectively accelerating adoption of clean energy technologies and advancing clean energy markets.

State clean energy programs are the clean energy experts and serve as laboratories of change and innovation for clean energy technology deployment. Through the implementation of creative finance, policy, and market initiatives across the country, states have been leading the way in clean energy programs and have been essential drivers of the recent growth in clean energy installations. While many states have established special funds to promote renewable energy and clean energy technologies, others have positioned themselves to quickly take advantage of new federal resources by establishing clean energy programs.

The SLICE awards recognize exemplary programs and projects that demonstrate innovation and effectiveness and that take aggressive steps in advancing clean energy technologies. During the fall of 2010, state funds and agencies across the country nominated programs for *State Leadership in Clean Energy Awards*. A team of six expert judges selected the seven programs from among all the award nominations. The winning entries exemplify the groundbreaking work being done by the states. The awards were presented to the winning programs at the Monocle restaurant in Washington, DC, on October 28, 2010.

Clean Energy States Alliance is pleased to announce the following seven winners of the 2010 State Leadership in Clean Energy Awards.



California Energy Commission's (CEC's) Public Interest Energy Research Program Advanced Energy Recovery System (AERS)

The California Energy Commission's (CEC's) Public Interest Energy Research Program (CEC-PIER) has helped to fund a unique and innovative waste-to-energy system at the Gills Onions facility in Oxnard, California. The CEC-funded **Advanced Energy Recovery System (AERS)** project generates heat and power from onion waste that is converted to biogas. The environmental benefits to the community from the AERS project implemented at the Gills facility include the reduction in the amount of disposed biowaste from 150 tons per day to essentially zero and the elimination of up to 14,500 tons of carbon dioxide equivalent emissions per year. The biogas generated by Gills' onion waste is used in two 300-kilowatt fuel cells to produce heat and power for the facility. The system, which offers a payback period of 3-5 years, shall serve as a prototype and demonstration site for other agricultural business operations and food processors.



California Energy Commission's (CEC's) Renewable Energy Transmission Initiative (RETI)



The Massachusetts Clean Energy Center (MassCEC) Community Scale Wind Initiative

The CEC, in its efforts to pursue renewable energy development to achieve the Renewables Portfolio Standard, created a second SLICE-award-winning program: the **Renewable Energy Transmission Initiative (RETI)**. RETI serves as a stakeholder collaborative to address the problems associated with the transmission planning process and with permitting renewable-related infrastructure. The first-of-its-kind collaborative seeks to improve renewable energy-related planning and permitting processes by helping to ensure that there is broad stakeholder consensus and support for renewable energy transmission plans and for the competitive renewable energy zones (CREZ). The stakeholder collaborative includes the CEC, California Public Utilities Commission, California Independent System Operator, Northern California Power Agency, Southern California Public Power Authority, and Sacramento Municipal Utility District.

The Massachusetts Clean Energy Center (MassCEC) established the Commonwealth Wind Program in 2009 to complement the state's newly enacted net metering regulations and to assist responsibly sited wind energy projects with successful and timely installations. This year, Commonwealth Wind formed the **Community Scale Wind Initiative** as a competitive grant program to fund feasibility studies and design and construction activities for public and private applicants. Since April 2009, the program has awarded \$7.4 million to 32 Feasibility Studies and 15 Design and Construction projects, potentially leading to the development of 65 MW of wind energy and leveraging over \$82 million in total wind project investments in 39 municipalities. The first turbines to be constructed as a result of funding from this program are expected to go online in 2010.

New Jersey's Clean Energy Program promotes increased energy efficiency and the use of renewable sources of energy, offering financial incentives, programs, and services for residential, municipal, and commercial customers. To that end, the Clean Energy Program's **Local Government Energy Audit (LGEA)** encourages local government decision makers to undertake cost-effective energy-efficient upgrades in municipal buildings by providing them with a no-cost energy audit. New Jersey colleges and universities and nonprofit organizations may also participate in the free energy audit. The LGEA program subsidizes 100 percent of the audit costs as long as participants implement measures that amount to 25 percent of the cost. While the LGEA program does not result in direct energy savings, it does provide applicants with valuable information about the efficiency of their current equipment and structures and makes recommendations on cost-effective energy efficiency measures.



New Jersey's Clean Energy Program Local Government Energy Audit



Xcel Energy's Renewable Development Fund's Renewable Energy Kit for Remote Telecom Equipment

With financial assistance from the Xcel Energy's Renewable Development Fund, the West Central Telephone Association (WCTA), a rural Minnesota telephone provider servicing a 600-square-mile service area with phone, internet, and IPTV services, has developed a small wind/solar hybrid **Renewable Energy Kit for Remote Telecom Equipment**. The kits provide backup electricity in remote areas that need reliable services. WCTA developed a monitoring system, installed five test systems, and optimized equipment settings and configurations to find the "sweet spot" for power production. Data were analyzed to verify the kit's technical, financial, and market feasibility as an electrical power solution for challenging, remote applications. The kits are custom-designed to meet the needs of the telecom industry, and now other companies with similar needs can benefit from the groundwork laid by WCTA and Xcel Energy.

The Energy Trust of Oregon, in collaboration with the Southeast Uplift Neighborhood Coalition, created **Solarize Portland**, a community, group purchase initiative to help residents overcome the financial and logistical barriers to converting to solar energy. *Solarize* covered an average of 70 percent of the above-market cost of solar installation. *Solarize* not only provided the financial incentive but also provided workshops, solar experts, a contractor with set pricing tiers, and free assessments. The project resulted in the installation of solar energy in 120 homes in just six months. The installations added 347 kW of new photovoltaic capacity in Portland; they are estimated to produce 344,500 kWh of electricity per year. The City of Portland is now providing planning, coordination, and implementation support for four additional *Solarize* efforts in Portland neighborhoods.



The Energy Trust of Oregon's Solarize Portland



Sacramento Municipal Utility District's Feed-in Tariff Program

In January 2010, Sacramento Municipal Utility District (SMUD) began implementation of one of the first utility **Feed-In-Tariffs** (FITs) in the country, which is based on the value of the electricity to the utility, rather than the underlying costs of the generating technologies. The FIT amount is based upon SMUD's avoided cost of energy, including adders for avoiding GHG emission costs and for avoidance of gas price volatility that would come from purchasing conventional power. For an average, around-the-clock, generating profile, SMUD's FIT amounts to about 11 cents/kWh, while for projects with increased generation in more valuable peak hours, SMUD's FIT will average about 14–15 cents per kWh. By offering standard rates and terms for the purchase of renewable power, as well as from combined heat and power facilities up to 5 MW in size, SMUD has created a market for power purchases from renewable facilities.

Judges

The judges for the *State Leadership in Clean Energy Awards* represent federal agencies, national associations, and other organizations important to the implementation of clean energy. CESA would like to express its sincere thanks to these judges for their time and careful consideration of all the nominated CESA-member programs.

Glen Andersen is an energy policy specialist at the National Conference of State Legislatures' Energy Project. He conducts legislative outreach on issues such as climate change, energy efficiency, and renewable energy. He has worked for over nine years assisting state legislators in their efforts to address energy and environmental concerns, providing them with policy information and analysis and facilitating communication between legislators, regulators, industry, and advocates.

Michael Northrop has played a leading role in encouraging the philanthropic community to address global warming. He directs the sustainable development grantmaking program at the Rockefeller Brothers Fund in New York City, where he focuses on climate change. He is also a lecturer at Yale University's Forestry and Environmental Studies School and at Princeton's Woodrow Wilson School, where he teaches graduate courses on environmental campaigns.

Gilbert Sperling is Program Manager for the Weatherization and Intergovernmental Program of the Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy. He previously served as Executive Vice President of Verdant Power, which develops projects that generate electricity from water currents of rivers, tides, and manmade waterways, and as Vice President and General Counsel of the Pipeline Research Council International. Earlier, he practiced energy-related law.

Susan Sloan is the Director of State Relations at the American Wind Energy Association (AWEA). She works to promote state policies by engaging members and allied organizations in state and regional efforts. Susan also serves as staff liaison to AWEA's Community Wind Working Group. Prior to joining AWEA, Susan worked for wind and solar interests, promoting renewable energy policies locally in Austin, and then to the Texas legislature when it expanded the Renewable Portfolio Standard and established the transmission Competitive Renewable Energy Zones (CREZ). Susan's public affairs background includes working for public officials in Texas, cable and broadcast media interests at the local, state, and federal levels, and companies in Texas and Hong Kong.

Robert Thresher is a research fellow at the National Renewable Energy Laboratory, where he has been a principal researcher developing early wind technology and an architect of the wind program at NREL. He has more than 40 years of research, development, engineering, and management experience in wind technology, plant engineering, and aerospace systems. His career accomplishments include: developing NREL's wind program from \$5 million to \$30 million, receiving the H.M. Hubbard Award in recognition of outstanding leadership and initiative in science and technology management in 1990 by the Solar Energy Research Institute and the Midwest Research Institute, receiving the 2004 Pioneer Award from the World Renewable Energy Network at the World Renewable Energy Congress VIII, and more.

Scott Sklar is the president of the Stella Group, LTD. a Washington, D.C.-base strategic marketing and policy firm leveraging projects using advanced batteries and controls, energy efficiency, fuel cells, heat engines, micro-generation, micro hydropower, modular biomass, PV, small wind, and solar thermal. Prior to Stella Group, Scott served for 15 years heading the national trade associations of the solar and biomass electric industries. For nine years, he served as an aide to Senator Jacob Javits (NY).