

**ESTIMATED FUNDS AVAILABLE:** \$150,000

**ESTIMATED NUMBER OF PROJECTS:** 3-5

**FUNDING CEILING:** Three to five projects for about \$30,000 to \$50,000 per project

**COST SHARE:** A 20% cost share is required. Higher project cost sharing will be considered favorably.

**BACKGROUND AND OBJECTIVES:** Energy efficient and renewable energy technologies can help States demonstrate a significant commitment to clean air and clean energy. The Environmental Protection Agency (EPA) estimates that states and localities invest \$19 billion annually in Clean Air Act compliance measures – an amount expected to grow to \$27 billion by the end of this decade. But despite the fact that energy efficient and renewable energy technologies significantly prevent multi-pollutant emissions, these emissions reductions are not generally credited in State Implementation Plans (SIP). In August 2004, EPA issued guidance, “State Implementation Plan Credits for Emissions Reductions from Electric-Sector Energy Efficiency and Renewable Energy Measures<sup>1</sup>,” that enables States to explicitly include energy efficiency and renewable energy measures in SIPs, where appropriate. Also in September 2004, EPA issued “Incorporating Emerging and Voluntary Measures in a State Implementation Plan.”<sup>2</sup> Background material about innovative programs is available on the Air Innovations Conference Website.<sup>3</sup>

Certain challenges need to be addressed for State Air Quality officials to include energy efficient and renewable energy technologies and programs as emissions reduction strategies. Challenges include defining methodologies for quantifying and verifying emissions benefits and providing technical assistance for regional, state and local officials to help determine which programs would be most effective given their local renewable energy resources, energy efficient opportunities, and air quality scenario. The Office of Energy Efficiency and Renewable Energy (EERE) is currently funding the National Renewable Energy Laboratory (NREL) to evaluate and recommend methods for quantifying and verifying energy efficient and renewable energy technology emissions benefits in collaboration with the EPA.

Current Special Projects offer an opportunity to greatly expand States’ experience in using energy efficient and renewable energy activities to help achieve their air quality goals. They are projects, currently funded with existing infrastructure, that have the ability to demonstrate emissions benefits of energy efficient and renewable energy technologies and practices by adding a new task to quantify benefits.

The purpose of this State Energy Program (SEP) Special Project sub-opportunity is to add to the store of information on the effectiveness of energy efficient and renewable energy technologies in reducing air emissions. This will include identifying the best means of

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<sup>1</sup> [http://www.epa.gov/ttn/oarpg/t1/memoranda/ereseerem\\_gd.pdf](http://www.epa.gov/ttn/oarpg/t1/memoranda/ereseerem_gd.pdf)

<sup>2</sup> <http://www.epa.gov/ttn/oarpg/t1/pgm.html>

<sup>3</sup> <http://www.cleanairinfo.com/airinnovations/>

quantifying and verifying air emissions reductions, energy benefits, and economic benefits from these existing projects. Specifically, this category provides funding for States to quantify, verify, or validate emissions reductions achieved from active projects previously funded through the SEP formula grant or past Special Project activities. Those emissions reductions could then be incorporated into a State's SIP, or appropriately applied in a quantitative manner to address air quality issues in an air-quality challenged area of the state.

**PROJECTS REQUESTED/TECHNICAL AREA OF INTEREST:** EERE is seeking to fund activities that clearly demonstrate quantifiable environmental benefits of energy efficient and renewable energy technologies resulting from existing projects. Collaborations with State and local energy and environmental agencies are needed to complement national clean air efforts. Methodologies are needed to quantify emissions reductions of various pollutants, including CO<sub>2</sub>, resulting from implementing EERE technologies in existing projects that meet the Special Requirements listed below. Additionally, methods to quantify and verify emissions reductions from their project are needed. All activities should be designed to be replicable in another area of the country and build capacity within State agencies.

Eligible projects will be limited to the following criteria:

- a) Active projects funded by the State Energy Program and/or SEP Special Projects; and
- b) Projects located in any of the following areas:
  - 1) An area designated by EPA as being non-attainment for a national ambient air quality standard;
  - 2) An area that must achieve emissions reductions to maintain a national ambient air quality standard; or
  - 3) A project location for which the emissions reductions of the project would be reasonably expected to assist an area to attain or maintain a national ambient air quality standard.

Technical assistance to awardees is available from the National Renewable Energy Laboratory to assist in identifying an appropriate quantification and verification methodology. Awardees must be willing to coordinate with DOE or other appropriate organizations identified by DOE to ensure consistency and replicability across multiple state and regional levels.

**EVALUATION CRITERIA:** Applications will be evaluated and ranked according to the following criteria:

1. **PROJECT DESIGN:** Overall merit, impact, and significance of the project. Ability of the project to clearly demonstrate, quantify, and verify emissions reductions resulting from existing energy efficient or renewable energy projects. This must be performed so information about the project itself, emissions impacts, and methodologies incorporated can be used by air quality officials in other States. This information may then be incorporated into similar projects within a SIP or to meet other air quality needs in the state. Projects should ensure clear quantifiable metrics and demonstrate that state air officials are willing to collaborate on the project. For efficiency projects, energy saved and emissions reductions should be clearly quantifiable. For renewable energy projects, energy produced and emissions reductions should be clearly quantifiable. In all technological applications, economic impacts should be addressed. All proposals should have clearly stated objectives, measures of success, deliverables, and schedules. **(Weight 30)**
2. **INTEGRATION:** Integration of project air quality and energy objectives with air quality and energy programs. **(30 points)**

3. COST SHARE: Overall benefit to cost. Anticipated project benefits, cost share level above the minimum required. **(20 points)**

4. REPLICABILITY: Projects must have significant potential to be widely replicable in other States across the country, within specific regions, or for specific pollutant categories. **(Weight 20)**