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## **American Recovery and Reinvestment Act (ARRA) State Energy Program (SEP) Formula Grants**

### **Overview of North Carolina Planned Activities**

Through American Recovery and Reinvestment Act funding to its State Energy Program, North Carolina will significantly increase its investments in energy efficiency and renewable energy in the public and private sectors, build its sustainable energy economy and workforce, and promote innovation and development of new energy technologies and resources.

To assist in meeting these goals, North Carolina has identified six focus areas for ARRA State Energy Program funds:

1. Support small businesses and industry through energy savings,
2. Grow North Carolina's green workforce,
3. Develop an Energy Investment Revolving Loan Fund,
4. Improve government energy efficiency,
5. Promote residential energy efficiency and renewable energy, and
6. Foster renewable energy technology and resource innovation.

In each area, North Carolina will work with strategic partners in the public and private sectors and coordinate with other available sources of funding, including those provided through the ARRA. This will enable the state to maximize available funding, drive job creation, and extend as far as possible the scope and positive impacts of these initiatives.

North Carolina will demonstrate its performance in each of these six focus areas by tracking appropriate metrics, including jobs created, energy costs saved, units of energy saved, increased capacity for renewable energy generation, and greenhouse gas and other emissions reduced.

Core initiatives in each of these six areas are described in more detail below. The total funding allocation for each area includes anticipated staffing and administrative expenses not to exceed 5% of the allocation.

### **1. Supporting Small Businesses and Industry through Energy Savings** **TOTAL: \$12 million**

**Energy savings for small business and industry** – North Carolina will provide technical expertise and financial incentives to qualified businesses and industries to identify and implement energy saving measures. Qualified specialists and Department of Energy tools will be used to conduct assessments and provide training to personnel at each business or industry. Incentives for implementing recommendations would be capped at 25% of the project cost up to a maximum of \$100,000. Businesses who

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participate in this plan may also be eligible to finance additional needs through the N.C. Energy Investment Revolving Loan Fund.

**“Main Street” communities** – North Carolina will pair energy efficiency and renewable energy initiatives for small businesses and industries with its “Main Street” programs through the N.C. Department of Commerce. These programs seek to boost economic development in small towns, including those in rural areas. Energy initiatives will complement existing economic development tools and support regional job creation strategies in small towns and “micropolitan” communities.

**Commercial renewable energy system grants** – North Carolina will award grants to industrial and commercial facilities to implement renewable energy projects using solar, wind, hydropower, and biomass technologies. Projects would be sought through a competitive RFP process. Grants will fund up to 25% of project costs, with a maximum of \$100,000 per project.

**Nonprofit energy management program** – This program will work with nonprofit agencies to implement energy efficiency initiatives that will reduce the operating expenses for each agency. Eligible organizations would include daycare centers, shelters, health clinics, places of worship, recreational and community centers, museums, schools, and many others.

## **2. Growing North Carolina’s Green Workforce**

### **TOTAL: \$8.5 million**

**Workforce development initiative** – Through its community college and university systems as well as other workforce development agencies, North Carolina will develop a multi-level program to meet the training and workforce needs of the emerging green economy. The curricula will address current and projected workforce needs in sectors related to energy efficiency, renewable energy, and alternative fuels. The program will include regional training hubs as well as other on-site, distance and immersive learning components. Participating campuses will also create opportunities for students to participate in on-campus energy improvement projects as part of the curriculum. All workforce development efforts will be designed to reflect recognized certification standards and to provide participants with maximum job mobility and flexibility.

**Continuing education for residential and commercial building code inspectors** – North Carolina is actively working to improve its energy codes for residential and commercial buildings. As these improvements are implemented, there will be a significant need for continuing education for building inspectors in all 100 counties to improve code implementation and enforcement. The existing program will be expanded with new partners identified through a competitive RFP process.

**Education and training for effective ARRA implementation** – Energy education and training programs will be expanded in the governmental, residential, commercial, industrial, nonprofit and transportation sectors. All of these sectors are key

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stakeholders in achieving North Carolina's energy agenda and effectively utilizing federal recovery funds. These education and training programs will focus on energy efficiency and clean energy technology. Participants will gain skills to solve energy problems, reduce energy usage, save energy dollars and access state and federal funding opportunities. Education and training providers will be identified through an RFP process.

### **3. Creating an Energy Investment Revolving Loan Fund**

**TOTAL: \$20 million**

**Energy Loan Fund** – A revolving loan fund will be created to provide no- and low-interest loans to businesses, nonprofits, local governments, public schools, community colleges and state agencies/universities. The Revolving Loan Fund will extend the scope of federal recovery funds and ensure that these funds continue to support the state's commitment to renewable energy and energy efficiency well into the future. This fund will provide zero- or low-interest financing up to \$1 million for terms of up to ten years. Eligible projects will include:

- Renewable energy and energy efficiency projects for businesses, industries and nonprofit organizations.
- Energy saving measures at public schools.
- Energy saving initiatives for state and local government, including universities and community colleges.
- Performance Contract Term Buy-downs – There are 12 performance contracts in process in state institutions and an unknown number of performance contracts with local institutions that may benefit from financing to reduce the amount provided by third parties lenders.

### **4. Improving Government Energy Efficiency**

**TOTAL: \$9 million**

**Developing energy assessments and strategic energy plans** – North Carolina will work with local agencies, including community colleges, public schools and local governments, to conduct energy assessments and develop strategic energy plans. These plans will help participating agencies implement long-term energy saving strategies and identify potential projects for federal and state Recovery funding.

**Energy efficiency upgrade grants** – Grants for energy efficiency upgrades will address repair and renovation projects at state agencies, universities and community colleges that have been identified but not funded. Proposals for additional projects will be sought from public schools and local governments. The funding would cover items that generate significant energy savings, including: retro-commission HVAC controls; steam trap replacement, lighting fixture upgrades; boiler and water heater improvements; lab fume hood retrofits; chiller plant retro-commissioning; summer boiler installation; condensate recovery; heat pump and plumbing upgrades; incandescent exit light and bulb replacement; water saving toilets and shower heads; IT room HVAC

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renovations; building automation system upgrades; programmable thermostats; thermostatic radiator valves; sink aerators; occupancy sensors; photo/optical sensors; and exterior lighting upgrades to LED.

## **5. Promoting Residential Energy Efficiency and Renewable Energy**

**TOTAL: \$12 million**

**Promoting energy efficiency in new affordable housing units** –North Carolina will work in two targeted sectors to improve energy efficiency in new affordable housing. First, we will expand existing efforts through the N.C. Housing Finance Agency to promote energy efficiency in qualified new homes. Second, we will focus on increasing energy efficiency in manufactured housing, where energy efficiency upgrades can result in up to 30% decreases in energy use. Efforts in the manufactured housing sector will build on partnerships to increase the number of “Energy Star” manufactured homes.

**Energy efficiency audits and implementation for existing homes** – North Carolina will provide partial funding toward the cost of comprehensive home energy audits for owners of existing homes and grants to assist homeowners with implementing audit recommendations. North Carolina will also work with private-sector lenders and other key parties to develop innovative financing programs to help homeowners finance more expensive residential energy improvements. Such financing is currently unavailable to most homeowners through traditional lending programs, and this prevents homeowners from pursuing more costly energy improvements or renewable energy systems. The State Energy Office will issue an RFP to select partners for these programs.

## **6. Fostering Renewable Energy Technology and Resource Innovation**

**TOTAL: \$14 million**

**North Carolina Green Business Fund (NCGBF)** – Established by the N.C. General Assembly in 2007, the N.C. Green Business Fund awards competitive grants to North Carolina businesses and organizations with innovative projects focused on three priority areas. In 2008, the priority areas included: (1) Development and commercialization of the biofuels industry; (2) Development and commercialization of the green building industry; and (3) Attraction and leverage of private sector investments and entrepreneurial growth in environmentally conscious clean technology and renewable energy products and businesses. The State Energy Office will contract with the Department of Commerce to fund appropriate projects.

**Statewide alternative and renewable energy innovations program** – This statewide competitive grant program will promote innovation in developing and using alternative and renewable energy. Examples of eligible projects include expanding local infrastructure for plug-in and other alternative fuel vehicles, supporting biofuels development, and funding large-scale renewable energy projects.