



north carolina
Green Business Fund

**FISCAL YEAR 2011 REPORT ON THE COMMITMENT,
DISBURSEMENT, AND USE OF FUNDS**

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Receiving Entities:

The Joint Legislative Commission on Governmental Operations
The chairs of the House of Representatives and Senate Finance Committees
The chairs of the House of Representatives and Senate Appropriations Committees
The Fiscal Research Division of the General Assembly

Submitting Entity:

North Carolina Board of Science and Technology of the Department of Commerce

Introduction:

Established by the North Carolina General Assembly during the 2007-2008 legislative session and currently entering its fourth year of operation, the North Carolina Green Business Fund awards competitive grants to North Carolina small for-profit businesses, non-profit organizations, and State and local governments to encourage the development and commercialization of promising green technologies in the following three designated priority areas:

1. The development of the biofuels industry in North Carolina;
2. The development of the green building industry in North Carolina;
3. Attracting and leveraging private sector investment and entrepreneurial growth in environmentally conscious clean technologies and renewable energy products and businesses.

Consistent with the reporting requirements set forth in §143B-437.8 of the North Carolina General Statutes, this report details the commitment, disbursement and use of funds allocated from the NC Green Business Fund during the period July 1, 2010 – June 30 2011 (“Fiscal Year 2010-2011” or “FY2011”), and includes a report of disbursed funds committed to the awardees in previous years.

Eligibility requirements and review process:

The North Carolina Board of Science and Technology, a division of the North Carolina Department of Commerce, administers the Fund. An applicant must satisfy four conditions in order to be eligible to apply for the program:

1. The applicant must be eligible to apply during the Solicitation period and have its principal place of business in North Carolina.
2. An applicant cannot apply for a second award for activity for which the applicant has already received an award.
3. Any applicant that, in the judgment of the Board, has failed to correct a material breach of an award agreement or of any grant agreement under any program administered by the Board or the State of North Carolina is ineligible to submit an application.
4. Applicants are required to satisfy any other eligibility requirements established by the Board and published in a Solicitation.

To be eligible for funding, applicants must demonstrate that:

- The proposed project is technically sound and to be undertaken by an applicant with the necessary technical, financial and management capacity;
- The proposed project is undertaken in a collaborative and innovative manner as appropriate;
- Any new technologies and any related intellectual property developed during the performance period will be commercialized in a timely manner in relevant market sectors; and
- The funding is necessary to ensure that the project proceeds in a manner to ensure broad benefits to North Carolinians.

Solicitations are issued by the Board, inviting eligible applicants to submit an application and written proposal for an award. Under the Fund, awards can be made to eligible organizations for up to the maximum amount of \$100,000 (Maximum amount of \$500,000 under the ARRA-funded 2010-2011 solicitation). An Advisory Committee, composed of scientists, engineers, and qualified experts (including industry, academia, and other Government agencies) drawn from across the state from both inside and

outside of the Board, evaluates the merit of proposals. To avoid any potential conflicts of interest between the applicant and the prospective reviewer, reviewers are required to sign a Conflict of Interest and Nondisclosure Agreement with the Board, and to recuse themselves from review of any proposals that may pose a conflict of interest.

Program Impact

Although the NC Green Business Fund has only been in operation since 2008, initial data show that the program is having a significant impact in developing and sustaining a green economy in this state. Twenty five award winners have completed their projects and submitted their final reports to date. The total amount awarded to these 25 organizations is \$1.6 million. Data from their final reports indicate the following actual, not projected, impact measures. Collectively, these small businesses:

- Created **61 jobs**;
- Made an additional \$3.1M in internal capital investments;
- Leveraged \$2.8M in external capital investments;
- Generated over \$15M in follow-on funding (existing or in negotiation) from external investors;
- Projected to produce 18 patents and issue 7 licenses;
- Advanced innovative commercial technologies in numerous areas including solar, wind, biofuels, clean water management, and energy efficiency.

Most of these companies are small and still growing, albeit rapidly; therefore the impact of the Green Business Fund will multiply as more companies benefit, grow, and realize full commercial potential.

Sample Testimonials

“NC Green Business Fund Grant was a key decision in the future of North Carolina. Small businesses, like OrganoFuels Incorporated, will provide new employment and revenue generating platforms hardly imagined years ago.” – *OrganoFuels Inc., Candler, NC*

“The NC Green program is a fantastic program. It has enabled us to do early studies on applied technologies. The program provided the flexibility to implement alternate strategies to improve the overall chances of success within the program. To develop a green economy in NC, it is imperative that programs like this continue to support small businesses in NC.” – *Kyma Technologies, Raleigh, NC*

“The impact of this initial project is significant. Both job creation and training are a result of this project.” – *Alganomics, Southport, NC*

State appropriations

In FY 2007-2008, and FY2008-2009, respectively, the NC General Assembly appropriated \$1 million to the Green Business Fund for each of the following fiscal years, of which \$50,000 was allocated to a grant administrator position. In each year, the remaining \$950,000 was awarded to North Carolina small businesses as described in the table below.

For awards made using state appropriations, 50% of the grant total was disbursed upon the initial award announcement, 25% was disbursed upon receipt of an interim report (usually at the six-month mark), and the final disbursement of 25% was made upon receipt of a final report.

General Funds and American Recovery and Reinvestment Act (ARRA) funds

For FY 2009–2010 and FY 2010-2011, respectively, the General Assembly directed that \$5 million of American Recovery and Reinvestment Act (ARRA) dollars be allocated to the North Carolina Green Business Fund each year as part of the Department of Energy’s State Energy Plan (SEP).

During this period and inclusive of FY 2011-2012, a total of 47 awardees have been funded with ARRA funds, totaling \$ 9,431,482.91. The remaining \$568,517.09 (~5%) has been set aside for administrative costs (ARRA allows up to 10% administrative costs). Funds are disbursed to awardees on a reimbursement basis, as the awardees incur expenses. All ARRA-funded projects are projected to be complete by December 31, 2011.

Commitment and Disbursement of funds

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2010-2011
GREEN BUSINESS FUND PROJECTS AWARDED IN FY2008-2009					
<i>No disbursements were made in FY 2010-2011 to projects awarded in FY 2008-2009</i>					
GREEN BUSINESS FUND PROJECTS AWARDED IN FY2009-2010					
Aerofab Manufacturing Corporation	Factory Placement of Enhanced Medialess Indoor Air Quality Mist Eliminators in NC Metalworking Shops	Apex	Wake	\$45,435.00	\$11,358.75
CPS Biofuels, Inc.	High Performance Biofuel Product Derived from Biodiesel Waste	Raleigh	Wake	\$50,000.00	\$25,000.00
Innova Homes, LLC	ENGINEERING AND IMPACT ANALYSIS OF HYBRID MODULAR HOME MANUFACTURING	Asheville	Buncombe	\$51,160.00	\$12,790.00
InnovaTech, Inc.	Cost-Effective Harvesting of Algae in Phytobioreactor Bio-fuel Systems	Research Triangle Park	Durham	\$53,317.00	\$13,329.25
FLS Energy Finance, LLC	Large Scale Hot Water Implementation	Black Mountain	Buncombe	\$60,000.00	\$15,000.00
Vesture Corporation	BioPCM: Beyond Insulation	Asheboro	Randolph	\$75,000.00	\$18,750.00
Microcell Corporation	Microcell Fuel Cell Demonstration	Raleigh	Wake	\$80,000.00	\$20,000.00
Caldwell Community College and Technical Institute	CCCTI Institute for Sustainable Technology Mobile Demonstration Lab	Hudson	Caldwell	\$81,000.00	\$20,250.00

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2010-2011
Clean Marine Solutions, LLC	Affordable Environmental Compliance Systems for Boat Yards and Marinas	Wilmington	New Hanover	\$84,602.00	\$21,150.50
Semprius, Inc.	Development of Silicone-on-glass Lens Array for Concentrator Photovoltaic (CPV) Modules	Durham	Durham	\$99,486.00	\$24,871.50
Highland Craftsmen Inc.*	Job Training Course Creates Environmentally Preferable Building Product Supply Chain	Spruce Pine	Mitchell	\$89,967.50	\$68,075.00
American Carolina Lighting*	Energy-efficient Electronic Ballasts and Commercial/Industrial Lighting fixtures	Penrose	Transylvania	\$100,000.00	\$68,695.85
SunQest, Inc.*	Solar Thermal Enhancement and In-state Manufacturing	Newton	Catawba	\$99,659.00	\$16,410.18
Alganomics, LLC*	Algae-to-Bioproducts Commercialization (the ABC Project)	Southport	Brunswick	\$100,250.00	\$3,555.51
Holloman Investing LLC* dba Carolina Wind Power	Mag Lift Turbines	Wilmington	New Hanover	\$100,000.00	\$50,913.32
SBM Solar, Inc.*	SBM Production Line Expansion	Concord	Cabarrus	\$100,000.00	\$46,225.65
EcoMaintenance LLC*	EcoMaintenance-Cleans Green and Trains Green	Elizabeth City	Pasquotank	\$100,000.00	\$33,459.99
Builders of Hope**	State Street Village	Raleigh	Wake	\$100,000.00	\$23,829.48

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2010-2011
Cape Fear Green Building Alliance**	CFGBA Building Performance Workshop Series: A Hands-on Approach to Professional Training	Wilmington	New Hanover	\$99,805.46	\$59,121.37
GREEN BUSINESS FUND PROJECTS AWARDED IN FY 2010 – 2011					
AgPower**	Vestal's Renewable Energy Electrical Generating System	Kenansville	Duplin	\$369,050.00	-
Black Farms**	Black's Renewable Energy Electrical Generating System	Bunn Level	Harnett	\$295,130.00	-
Butler Farms**	Butler's Renewable Energy Electrical Generating System	Lillington	Harnett	\$373,780.00	-
Cape Fear Green Building Alliance**	Operation Green Reach	Wilmington	New Hanover	\$155,000.00	-
Carolina Solar Farms**	Solar Roof Top Installation at Elizabeth City State University	Raleigh	Wake	\$100,000.00	\$37,808.21
Community Development Specialists**	Small Wind & Solar For WNC Farms in Distressed Communities	Asheville	Buncombe	\$148,480.00	-
Energy Tight**	Marketing and Measuring the Benefits of Home Energy Retrofits to the Private Residential Market	Charlotte	Mecklenburg	\$222,466.00	-

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2010-2011
Essential Energy Efficiency Technologies & Services**	Energy Efficiency Acceleration Project	Charlotte	Mecklenburg	\$55,000.00	-
Go Green Lighting**	Energy Efficient Audits and Lighting Lab Expansion	Chapel Hill	Orange	\$300,000.00	-
Kyma Technology**	Green Manufacturing of Gallium Nitride Materials for High Electrical Efficiency Applications	Raleigh	Wake	\$427,760.00	-
Microcell Corporation**	Portable Combined Heat and Power (CHP) Systems for Emergency and Disaster Recovery Applications	Raleigh	Wake	\$484,120.00	-
North American Bio-Energies, LLC dba Foothills Bio-Energies, LLC	Implement Energy Efficiency Measures at Foothills Bio-Energies	Lenoir	Caldwell	\$98,687.00	\$49,878.02
NCSU Center for Marine Science & Technology**	Evaluation of Hybrid Wind-Photovoltaic Energy to Support the NC Marine Aquaculture Industry	Morehead City	Carteret	\$228,519.00	-
Onslow County Farmers Market**	Photo-voltaic panel installation	Jacksonville	Onslow	\$24,095.89	-
Piedmont Biofuels Industrial, L.L.C.	Reduction of Electrical Consumption and Optimization of Boiler Operation and Controls	Pittsboro	Chatham	\$100,000.00	\$84,731.96

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2010-2011
Praxis Technologies**	Plug In Hybrid Vehicle Charging Stations	Raleigh	Wake	\$247,304.00	-
Riding Partners**	BioWheels RTS (Responsible Transportation Systems)	Asheville	Buncombe	\$375,852.56	-
Southern Energy Management**	Comprehensive Whole-Building Energy Efficiency Retrofits	Raleigh	Wake	\$374,129.00	-
Storm Farms**	Storms' Renewable Energy Electrical Generating System	Bladenboro	Bladen	\$500,000.00	-
Triangle Biofuels Industries, Inc.	Biodiesel Process Pump Equipment and Hot Water Efficiency Improvement Project	Wilson	Wilson	\$99,783.00	\$4,226.82

Note: *indicates organizations awarded both general funds and ARRA funds. ** indicates projects fully funded by ARRA funds

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