



**FISCAL YEAR 2010 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 third year of operation, the North Carolina Green Business Fund awards competitive grants to North Carolina small for-profit businesses, non-profit organizations, 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, 2009 – June 30 2010 (“Fiscal Year 2009-2010” or “FY2010”), and includes a report of funds disbursed 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 an 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. 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 shows that the program is having a significant impact in developing and sustaining a green economy in this state. Fifteen award winners have completed their projects and submitted their final reports to date. The total amount awarded to these fifteen organizations is \$960,000.00. Data from these reports indicates the following impact measures:

- Return on the state dollar (ratio of internal and external investments and follow-on funding, per dollar of state funds awarded): **\$3.92**
- Jobs created: **38**
- Patents issued: **10**
- Licenses issues: **5**

Most of these companies are small and still growing; 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. Those payments made in FY 2008-2009 and FY 2009-2010 are shown in the table below.

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

For FY 2009 – 2010 and FY2010-2011, the General Assembly directed that \$5 million of American Recovery and Reinvestment Act (ARRA) dollars be allocated to the North Carolina Green Business Fund as part of the Department of Energy's State Energy Plan (SEP). Sixteen projects were selected and are under consideration for ARRA funding; the portion of those projects that cannot be covered with federal funds were funded with state general fund dollars.

Commitment and Disbursement of funds

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2009-2010	Amount disbursed in FY2008-2009
GREEN BUSINESS FUND PROJECTS AWARDED IN FY2008-2009						
Rain Water Solutions	Roll out the Rain Barrels	Raleigh	WAKE	\$18,000.00	\$9,000.00	\$9,000.00
Nextreme Thermal Solutions, Inc.	Increased Efficiency Devices for Energy Harvesting Applications	Durham	DURHAM	\$57,319.00	-	\$57,319.00
Alganomics, LLC	Commercializing Algae Biomass Production for Biofuel	Southport	BRUNSWICK	\$60,000.00	-	\$60,000.00
Kyma Technologies, Inc.	Normally-off GaN MOSFETs for High Electrical Efficiency Power Electronics	Raleigh	WAKE	\$60,000.00	-	\$60,000.00
NanoTechLabs Inc.	Nanoporous Electrodes for Ultracapacitors	Yadkinville	YADKIN	\$70,000.00	-	\$35,000.00
Evans Environmental Energies, Inc	Biodiesel Production Innovation	Wilson	WILSON	\$75,000.00	-	\$56,250.00
Piedmont Biofuels	Continuous Flow Cavitation Biodiesel Pilot Plant	Pittsboro	CHATHAM	\$75,000.00	\$19,000.00	\$56,000.00
PhazeTek Corporation	Green Energy Saving Wallboards and other Building Products	Greensboro	GUILFORD	\$75,000.00	\$18,750.00	\$56,250.00

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2009-2010	Amount disbursed in FY2008-2009
Blue Ridge Biofuels, LLC	Biodiesel from High Free Fatty Acid Oils	Asheville	BUNCOMBE	\$77,737.00	-	\$58,302.75
OrganoFuels Incorporated	Novel Algae Based Fuel: Biogasoline	Candler	BUNCOMBE	\$81,944.00	-	\$81,944.00
Sencera International Corporation	Thin Film Photovoltaic Solar Cell Production Line	Charlotte	MECKLENBURG	\$100,000.00	\$50,000.00	\$50,000.00
EcoCurrent, Inc.	PROPOSAL TO FINALIZE DESIGN PARAMETERS FOR A NOVEL TECHNOLOGICAL PROCESS TO CONVERT HOG WASTE TO ELECTRICITY	Raleigh	WAKE	\$100,000.00	-	\$75,000.00
3F, LLC	Light-Weight Bio-Based Fiber-Reinforced Concrete	Raleigh	WAKE	\$100,000.00	-	\$75,000.00
Total				\$950,000.00	\$96,750.00	\$730,065.75
GREEN BUSINESS FUND PROJECTS AWARDED IN FY2009-2010						
VisibleEnergy, Inc.	Home Energy Dashboard	Durham	DURHAM	\$40,000.00	\$30,000.00	-
Aerofab Manufacturing Corporation	Factory Placement of Enhanced Medialess Indoor Air Quality Mist Eliminators in NC Metalworking Shops	Apex	WAKE	\$45,435.00	\$34,076.25	-

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2009-2010	Amount disbursed in FY2008-2009
EnSolve Biosystems, Inc.	Green Bilge Water Treatment System for Worldwide Applications	Raleigh	WAKE	\$50,000.00	\$50,000.00	-
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	\$25,580.00	-
InnovaTech, Inc.	Cost-Effective Harvesting of Algae in Phytobioreactor Bio-fuel Systems	Research Triangle Park	DURHAM	\$53,317.00	\$39987.75	-
FLS Energy Finance, LLC	Large Scale Hot Water Implementation	Black Mountain	BUNCOMBE	\$60,000.00	\$30,000.00	-
Vesture Corporation	BioPCM: Beyond Insulation	Asheboro	RANDOLPH	\$75,000.00	\$56,250.00	-
Microcell Corporation	Microcell Fuel Cell Demonstration	Raleigh	WAKE	\$80,000.00	\$60,000.00	-
Caldwell Community	CCCTI Institute for Sustainable Technology Mobile	Hudson	CALDWELL	\$81,000.00	\$60,750.00	-

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2009-2010	Amount disbursed in FY2008-2009
College and Technical Institute	Demonstration Lab					
Clean Marine Solutions, LLC	Affordable Environmental Compliance Systems for Boat Yards and Marinas	Wilmington	NEW HANOVER	\$84,602.00	\$63,451.50	-
Centralina Council of Governments	Greater Charlotte Region Biofuel Facility	Charlotte	MECKLENBURG	\$85,000.00	\$42,500.00	-
Solar Center	ATTRACTING INVESTMENT THROUGH REMOVAL OF A KEY OBSTACLE IN THE SOLAR INDUSTRY	Raleigh	WAKE	\$95,000.00	\$47,500.00	-
Semprius, Inc.	Development of Silicone-on-glass Lens Array for Concentrator Photovoltaic (CPV) Modules	Durham	DURHAM	\$99,486.00	\$74615.50	-
Highland Craftsmen Inc.*	Job Training Course Creates Environmentally Preferable Building Product Supply Chain	Spruce Pine	MITCHELL	\$15,992.50	\$15,992.50	-
American Carolina Lighting*	Energy-efficient Electronic Ballasts and Commercial/Industrial Lighting	Penrose	TRANSYLVANIA	\$25,000.00	\$25,000.00	-

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2009-2010	Amount disbursed in FY2008-2009
	fixtures					
SunQest, Inc.*	Solar Thermal Enhancement and In-state Manufacturing	Newton	CATAWBA	\$25,359.00	\$25,359.00	-
Algaen Corporation*	Concurrent Production of Biodiesel and treatment of Animal Wastewater Using Oil-Rich Microalgae	Clemmons	FORSYTH	\$26,404.00	\$26,404.00	-
Alganomics, LLC*	Algae-to-Bioproducs Commercialization (the ABC Project)	Southport	BRUNSWICK	\$29,750.00	\$29,750.00	-
Holloman Investing LLC*	Mag Lift Turbines	Wilmington	NEW HANOVER	\$30,000.00	\$30,000.00	-
WindLift, LLC*	Alpha 3 Field System Building and Testing	Durham	DURHAM	\$41,050.00	\$41,050	-
FLS Energy, Inc.	Easy Solar Kit	Asheville	BUNCOMBE	\$47,500.00	\$47,500.00	-
High Country Green Box, LLC.*	High Country Green Box, A Green Solution For the Affordable Housing Crisis in North Carolina	Boone	WATAUGA	\$48,994.50	\$48,994.50	-

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2009-2010	Amount disbursed in FY2008-2009
PureLux Inc.	PureLux Lighting Fixture Validation and Commercialization	Winston Salem	FORSYTH	\$50,000.00	\$50,000.00	-
Biomass Marketing Associates, LLC*	Development of Additional Renewable Energy Component for Gasification Units	Hobgood	HALIFAX	\$50,000.00	\$50,000.00	-
SBM Solar, Inc.*	SBM Production Line Expansion	Concord	CABARRUS	\$50,000.00	\$50,000.00	-
EcoMaintenance LLC*	EcoMaintenance-Cleans Green and Trains Green	Elizabeth City	PASQUOTANK	\$100,000.00	-	-
Builders of Hope**	State Street Village	Raleigh	WAKE	\$100,000.00	-	-
Cape Fear Green Building Alliance**	CFGBA Building Performance Workshop Series: A Hands-on Approach to Professional Training	Wilmington	NEW HANOVER	\$100,000.00	-	-
North Carolina's Northeast Economic Development Foundation,	Green Building Technology at a Pilot-Scale Botanical Extraction Facility for the Development of Biotech Crops and Biofuels	Edenton	CHOWAN	\$100,000.00	-	-

Organization Legal Name	Project Title	Organization City	County	Total Grant Amount	Amount disbursed in FY2009-2010	Amount disbursed in FY2008-2009
Inc.**						
Total				\$1,690,050.00	\$1,079,761.00	-

*Note: *indicates projects funded with general funds which are being considered for further ARRA funding. ** indicates projects approved to be fully funded by ARRA funds*

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