STATE OF NORTH CAROLINA
DEPARTMENT OF COMMERCE

NORTH CAROLINA BOARD OF SCIENCE AND TECHNOLOGY

August 25, 2008

FROM: John Hardin, Acting Executive Director, NC Board of Science and Technology

SUBJECT: NORTH CAROLINA GREEN BUSIENSS FUND REPORT TO THE JOINT LEGISLATIVE COMMISSION ON GOVERNMENTAL OPERATIONS AS REQUIRED BY §143B-437.8 OF THE NORTH CAROLINA GENERAL STATUTES PROGRAM STATUS AS OF AUGUST 25th, 2008.

BACKGROUND

Established by the North Carolina General Assembly during the 2007-2008 legislative session and currently entering its second year of operation; the North Carolina Green Business Fund is designed to award competitive grant funds to North Carolina small for-profit businesses, non-profit organizations, State and local governments to encourage the development and commercialization of promising green technologies.

NORTH CAROLINA GREEN BUSINESS FUND PROGRAM SUMMARY

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 submit an application. First, the applicant must be an eligible to apply during the Solicitation period and have their principal place of business in North Carolina. Second, an applicant cannot apply for a second award for activity for which the applicant has already received an award. Third, 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. Fourth, applicants are required to satisfy any other eligibility requirements established by the Board and published in a Solicitation.

To be eligible for funding, applicants were required to 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 companies 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 evaluate the merit of proposals. To avoid any potential conflicts of interest between the applicant and the prospective reviewer; reviewers were required to sign a Conflict of Interest and Nondisclosure agreement with the Board.

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PURPOSE

The purpose of the North Carolina Green Business Fund is to award funds to North Carolina small for-profit and non-profit businesses, and State and local governmental entities, to encourage the development and commercialization of promising and innovative green technologies in the following three designated priority areas:

1. The development of the biofuels industry in North Carolina. Grants made in this category may target projects that maximize the development, production, distribution, retail infrastructure, and consumer purchase of biofuels and workforce development in these areas.

2. The development of the green building industry in North Carolina. Grants made in this category may target the development of environmentally conscious and energy efficient green building processes, including but not limited to supporting the installation, certification, or distribution of green building materials; energy audits; marketing and sales of green building technology in North Carolina; and workforce development for green building processes.

3. Attracting and leveraging private sector investment and entrepreneurial growth in environmentally conscious clean technologies and renewable energy products and businesses. Grants in this category may target renewable energy deployment; biomass energy projects; waste reclamation for energy; liquefaction; implementation of innovative energy efficiency technologies; clean distributed generation infrastructure improvements; and other promising technologies.

HISTORICAL INFORMATION

- Fund created in the 2007-2008 Budget Act.
  - $1,000,000 appropriated - $950,000 for awards and $50,000 for Fund administration.
  - Annual Program Solicitation released in early Feburary 2008.
  - Eligible applicants were small for-profit businesses with fewer than one hundred (100) employees.
  - 2007-08 Solicitaiton closed April 30th, 2008.
  - 85 applications receieved with a total request of nearly $7 million dollars.
  - Of the 85, 63 were in compliance with the Solicitation and sent to the advisory committee.
  - Of the 63, 13 North Carolina Small Businesses from across the state received awards.

For more information about the North Caroliuna Green Business Fund and how to apply and qualify for the grants, please see the N.C. Board of Science and Technology's website at www.ncscitech.com.

ATTACHMENTS:
1. FY 2007-2008 PROGRAM ENCUMBRANCES AND AWARDEE PROFILES (as of August, 25th, 2008)

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FY 2007-2008 NORTH CAROLINA GREEN BUSINESS FUND PROGRAM SUMMARY

- $950,000 appropriated to fund in 2007-2008 Budget Act.
- Annual Program Solicitation released in ealy Feburary 2008.
- Grants totaling $950,000 made under the FY 2007-2008 program to a total of 13 North Carolina Small Businesses across the state.

FY 2007-2008	Grantee Organization	Emcumbered	Paid
	3F	$100,000.00	$0
	ALGANOMICS	$60,000.00	$0
	BLUE RIDGE BIOFUELS	$77,737.00	$0
	ECOCURRENT	$100,000.00	$50,000
	EVANS ENVIRONMENTAL ENERGIES,INC	$75,000.00	$37,500
	KYMA TECHNOLOGIES	$60,000.00	$30,000
	NANOTECHLABS	$70,000.00	$35,000
	NEXTREME THERMAL SOLUTIONS	$57,319.00	$28,660
	ORGANOFUELS	$81,944.00	$40,825
	PHASETEK CORPORATION	$75,000.00	$37,500
	PIEDMONT BIOFUELS	$75,000.00	$37,500
	RAIN WATER SOLUTIONS	$18,000.00	$9,000
	SENCERA INTERNATIONAL CORPORATION	$100,000.00	$0
		$950,000.00	$305,985

AWARDEE PROFILES:

Blue Ridge Biofuels of Asheville: $77,737.00 to develop and commercialize the conversion of low quality fatty acids into biofuel through an innovative purification method.

Organofuels of Asheville: $81,944.00 to manufacture a algae based fuel for gasoline engines. The project offers the promise of making algae oil products completive with gasoline.

Ecocurrent of Raleigh: $100,000.00 for a novel technological process that will divert hog manure from lagoons and convert it to electric power in an economically viable manner and valuable byproducts such as fertilizer and building materials.

Evans Environmental of Wilson: $75,000.00 to remove residual water in the final stage of biodiesel production. The innovative process will facilitate production of commercial grade biodiesel by 300%.

Alganomics of Southport: $60,000.00 to produce reliable, environmentally responsible, natural and renewable bioproducts from algal sources, and promote the use of renewable energy alternatives. The primary bioproduct is extracted oil/fatty acids for use as a biodiesel fuel feedstock.

Kyma Technologies of Raleigh: $60,000.00 will work with researchers at North Carolina State University to develop a normallyoff power switch using novel process enabled by high quality substrates developed by Kyma.

3F, LLC of Raleigh: $100,000.00 will develop a new natural fiber reinforced concrete formulation. The resulting lighter weight and yet stronger and tougher concrete will directly enhance the merits of precast concrete. Less weight for the same structural efficiency will reduce material use and dead load, and save transportation cost.

Piedmont Biofuels of Pittsboro: $75,000.00 to implement a cavitational reactor to produce biodiesel fuel. The process uses less energy, has a much smaller physical footprint, and causes a more complete reaction with higher fuel yields.

Nextreme Thermal of Durham: $57,319.00 to manufacture a novel thermoelectric power generator capable of converting waste heat into usable electrical power.

Rain Water Solutions of Raleigh: $18,000.00 to develop the foundation for a new rain barrel manufacturing process that allows mass production capabilities to 1) meet increasing demand in a timely manner and 2) provide an inexpensive, appealing option to consumers desiring to collect rainwater.

Nanotech Labs of Yadkinville: $70,000.00 to develop and commercialize an ultra-capacitor as an energy storage device that has extremely high volumetric capacitance but small overall dimensions.

Phasetek of Greensboro: $75,000.00 to develop a new class of thermal transfer and storage building material for wallboards in order to facilitate thermal efficiency in buildings.

Sencera of Charlotte: $100,000.00 to implement a Photovoltaic Solar Cell production facility in North Carolina based on a new thin-film manufacturing technology.