

PORTOLIO OF CCMR-RTDC OFFERINGS

Other Programs “beyond CCMR” Overview of Grants and Funding

Obtaining Grants & Funding

Small and medium industrial companies frequently seek alternate sources of funding to support their technology development and commercialization efforts. One such funding source is grant money. Grant opportunities are frequently made available through federal, state, and local government agencies.

Small businesses seeking grants should first contact their local RTDC representative or a member of the CCMR Industrial Partnerships team. Either organization can assist with identifying grant and funding sources and explain the process of securing the grants or funds. In some cases, they may be able to assist with the applications or administration of the grants. Once the grant or funding is obtained, the benefits received through partially funded participation in CCMR SBOP programs will produce high returns on investment for the industry partner.

This assistance includes:

- Identifying solicitations from US, state, and local agencies
- Understanding the steps to writing and submitting an application
- Finding Cornell faculty partners
- Identifying facilities resources
- Providing letters of support
- Reviewing your proposal

This section describes the sources of grant opportunities and includes a partial list of grant sources for reference.

Grant Strategy

Depending upon the research or equipment needs of industry partners, various grant strategies may apply. For example, a combination of grants may be necessary to fund the CCMR SBOP programs required to meet the partner’s needs. Each partnership requires the creation of a grant strategy to maximize the potential for sources of funding. CCMR and the RTDC representing the industry partner can assist in developing a grant strategy.

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Other Programs “beyond CCMR” SBIR/STTR Programs

Overview

There are two special programs that are available through U.S. Federal Agencies – Small Business Innovation Research (SBIR) and Small business Technology Transfer (STTR). These funds are intended for small businesses interested in conducting targeted research for the U.S. Government. Small companies retain the intellectual property rights to technologies they develop under these programs. Funding is awarded competitively.

SBIR - The SBIR Program provides over \$1,000,000 in early-stage R&D funding directly to small technology companies.

STTR - The STTR Program provides over \$1,000,000 in early-stage R&D funding directly to small companies working cooperatively with researchers at universities and other research institutions.

Additional information about SBIR/STTR funds can be found at www.sbirworld.com.

The Cornell Center for Life Science Enterprise, a NYSTAR Center for Advanced Technology, is another resource which assists NYS small and medium businesses in obtaining SBIR and STTR grants.

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Other Programs “beyond CCMR” Federal, State and Regional Offerings

FEDERAL OFFERINGS

The federal government provides grants through several agencies to facilitate technology development and aid industry. A partial list of sources of assistance and their websites is given below.

Government Industry related grants
www.fedgrants.gov

Catalog of Federal Domestic Assistance grants
www.cfda.gov

Federal Funding Sources
www.federalfundingsources.com

National Science Foundation funding opportunities
www.nsf.gov

U.S. Small Business Administration
www.sba.gov

The Space Alliance Technology Outreach Program (SATOP)
<http://www.spacetechsolutions.com/>

SATOP is a no-cost service designed to provide technical assistance and speed the transfer of space technology to the private sector, utilizing technical expertise derived from the US space program. Made up of an Alliance of more than 45 space companies, universities, colleges, and NASA centers (Johnson Space Center – Texas, Kennedy Space Center – Florida, and White Sands Test Facility – New Mexico), SATOP finds professionals within these companies who volunteer their time and expertise in solving the challenges brought forth by the inquiring businesses. Small businesses can receive up to 40 hours of free technical assistance through SATOP, in areas such as machine design, process engineering, material selection, and many other technical issues.

National Institute of Standards and Technology (NIST)
<http://www.nist.gov/>

Now celebrating 100 years of service to the nation, the National Institute of Standards and Technology (NIST) is a non-regulatory federal agency within the Commerce Department's Technology Administration. NIST's mission is to promote economic growth by working with industry to develop and apply technology, measurements, and standards. NIST carries out its mission through four interwoven programs: NIST Laboratories, Baldrige National Quality Program, Manufacturing Extension Partnership, and Advanced Technology Program.

Manufacturing Extension Partnership (MEP)

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<http://www.mep.nist.gov/>

Most RTDCs are members of the national MEP network of manufacturing advisors sponsored, in part, by the National Institute of Standards and Technology, and locally by New York State. Each Center has the ability to assess where your company stands today, to provide technical and business solutions, to help you create successful partnerships, and to help you keep learning through seminars and training programs. This non-profit network is dedicated to providing expert consulting assistance to small and medium-sized manufacturers who:

- have been unable to locate the proper resources or technologies they need
- want expert, impartial advice to help evaluate alternate solutions
- need help solving a specific problem, such as determining the cause of product defects, modifying plant layout to improve work flow, or establishing employee training
- want assistance in reversing negative business situations such as sales decreases, loss of market share, or cost increases
- want to implement new technologies or processes that will help establish them as market leaders
- seek to improve their ongoing business operations for peak performance

STATE OFFERINGS

New York State (NYS) has specific grants targeted at scientific and technology development. In addition, NYS has low cost loan programs available to assist industry fund projects and capital equipment. A partial list of sources of assistance and their websites is given below.

NYS Department of Labor funding opportunities

www.labor.state.ny.us

Workforce New York funding opportunities

www.workforcenewyork.com

Local Workforce Investment Boards (WIB) can provide funding for small companies seeking training and development of employees. Basic information about WIBs can be found at www.workforcenewyork.com. CCMR SBOP programs may qualify for this funding through an application submittal by the industry partner. The RTDC partner can assist small companies in their regions with applying for WIB funding.

New York State Energy Research and Development (NYSERDA)

<http://www.nyserda.org/Funding/default.asp>

Businesses can get technical and financial assistance to reduce their energy costs, through a variety of programs offered by NYSERDA (New York State Energy Research and Development Authority). These programs help companies pay for the expenses of energy feasibility studies, energy control systems/instrumentation or purchasing and installing energy efficient equipment (HVAC, production equipment, office equipment, etc.)

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New York State Foundation for Science, Technology and Innovation (NYSTAR)

<http://www.nystar.state.ny.us/>

NYSTAR supports technology development, innovation and commercialization leading to economic growth in New York State. To achieve its vision and make New York a national leader in high-technology academic research and economic growth, NYSTAR's mission is comprised of key goals — benchmarks that reflect the overall charge given to NYSTAR.

Small Business Technology Investment Fund (SBTIF)

<http://www.nystar.state.ny.us/sbtif.htm>

The Small Business Technology Investment Fund (SBTIF) provides early stage high-tech companies throughout New York State with a potential source of venture capital to promote new job creation and economic growth. The Fund makes venture capital investments in NYS based companies that have developed innovative technology products (and related services) which display significant competitive advantage(s) and market acceptance. The Fund may also offer professional, technical and managerial services and referrals to help grow technology-based business ventures.

NYSTAR Matching grants program

<http://www.nystar.state.ny.us/matching/>

The Innovation Economy Matching Grants program will provide a 10 percent match for every stimulus dollar the federal government awards through competitive grants to research facilities in New York State. New York will allocate \$100 million over several years for this program which is expected to leverage one billion dollars in federal research funding. This program will help ensure that new research centers are built in New York which will position the state for future federal grants and private investment. In order to leverage these ARRA funds, and to enhance the competitive position of New York applicants, the State of New York is committing up to a 10% match in State funds for each ARRA awardee in strategic areas. Priorities are for applications from the most promising sectors of New York's innovation economy: renewable energy, clean tech, and smart grid; nanotechnology; stem cell, biomedical, and life sciences; advanced manufacturing; broadband, information technology, and cyber security.

The goal of the New York State Innovation Economy Matching Grants Program is to provide assistance through the commitment of matching funds to New York State research institutions, businesses and municipalities in attracting new federal, private foundation or industry dollars to New York. New York State will consider a request for funds from this program once: 1) it has been determined that the specific funding program will benefit New York's innovation economy; and 2) all of the required information as described below has been submitted.

NYSTAR's Technology Transfer Incentive Program (TTIP)

<http://www.nystar.state.ny.us/ttip.htm>

TTIP is specifically designed to help business make the rapid transfer of new ideas and new technology from the research lab to the marketplace.

This program helps New York companies commercialize high-tech innovations in partnership with colleges and universities by providing awards to institutions of higher education to move leading-edge technologies from the research lab to the marketplace.

The Technology Transfer Incentive Program supports a wide array of activities associated with bringing new technologies to the marketplace including improvement of product prototypes and

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existing commercial products, new product development, development of manufacturing processes to commercialize prototypes, and filing patent applications. NYSTAR partners with high-technology companies and relevant high-technology academic research centers and scientists on projects to help further development of the company's products.

NYSTAR James D. Watson Investigator Program

www.nystar.state.ny.us/jdwrfp.htm

The James D. Watson (JDW) Investigator Program is twofold. First, the Program is designed to recognize, retain, and support the professional development of outstanding early career Life Sciences and Enabling Sciences researchers who work in New York's academic, public, and not-for-profit private research centers and who demonstrate a willingness and ability to develop research into economic opportunities in the State...<http://www.nystar.state.ny.us/jdwrfp.htm>

EMPIRE-STATE DEVELOPMENT SUPPORTED PROGRAMS:

NYS Industrial Effectiveness Program - IEP

http://www.empire.state.ny.us/Manufacturing_&_Environment/industrial_effectiveness.asp

The purpose of the IEP is to help restore the competitiveness of qualified small and medium sized manufacturing companies and industry groups by sharing the cost of technical assistance. IEP provides up to two thirds of the cost of consultant effort to implement various types of projects.

IEP provides grants of up to \$50,000 to manufacturing firms. They will identify, develop and implement improved management and production processes for businesses to expand market share and promote job growth or retention within New York State.

Funds may be used for:

- Product design and development
- Manufacturing process and quality improvement
- Market expansion and product commercialization
- Information systems upgrades
- Supplier development projects
- Project management
- Technical awareness seminars
- Assistance with environmental and other regulatory requirements

Environmental Services Unit (ESU)

http://www.empire.state.ny.us/Manufacturing_&_Environment/Environment/default.asp

ESD Environmental Assistance - Compliance – Recycling - Pollution Prevention and Waste Reduction

Empire State Development (ESD) offers a range of resources to help businesses identify and transform environmental concerns into market opportunities and competitive advantages.

Through its Environmental Services Unit, ESD provides business with...

- [Financial Assistance](#) - For capital projects; research, development and demonstration (RD&D) projects and technical assistance projects that improve business productivity and competitiveness through pollution prevention, waste reduction and recycling.

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- [Permitting and Compliance Assistance](#) - Simple explanations of air quality permitting and compliance issues, and ombudsman for businesses with less than 500 employees.
- [Market Information](#) - Information on purchasing and selling secondary materials and recycled products.
- [Technology Transfer](#) - Information on new technologies to effectively recycle, reduce waste and prevent pollution.

More at 518/292-5340, e-mail at environment@empire.state.ny.us

NYS Environmental Investment Program – EIP

http://www.nylovesbiz.com/Productivity_Energy_and_Environment/Environmental_Assistance/pollution_prevention.asp

Under the EIP program, New York State invests in projects that:

- lead to the reuse or recycling of materials that would otherwise be disposed of
- prevent pollution and lead to the reduction in the toxicity or volume of waste before it is generated.

Grants are available for capital projects; research, development and demonstration of new products and technologies; and technical assistance to help businesses achieve pollution prevention and recycling results.

RTDCs assist companies in assessing project eligibility, helping to prepare the appropriate documentation, and guiding them through the application process.

Manufacturing Assistance Program (MAP)

http://www.empire.state.ny.us/Manufacturing_&_Environment/manufacturing_assistance_program.asp

MAP encourages manufacturers to invest in projects that will significantly increase the productivity and competitiveness of their operations by providing capital grants of up to \$1 million.

Linked Deposit Program

http://www.nylovesbiz.com/Small_and_Growing_Businesses/loan_discounts.asp

Helps eligible businesses obtain loans from commercial banks, savings banks, savings and loans, farm credit institutions and the New York Business Development Corporation at a two to three percentage point savings on the prevailing interest rate for "Linked Loans," to make borrowing less expensive.

REGIONAL OFFERINGS

A variety of regional agencies and organizations provide support across the state. We show two programs for the Central New York and Finger Lakes regions below as examples.

1) [Metropolitan Development Association](#)

<http://www.mda-cny.com/>

2) Creative Core

<http://www.creativecoreny.com/pages/home.aspx>

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3) The Essential New York Initiative

<http://www.essentialconnections.org/>

4) The Grants for Growth (GfG) program

<http://www.essentialconnections.org/index.php?action=gfg>

GfG offers up to \$75,000 in matching funds for innovative applied research projects. By seeding applied research relationships between university and industry, the program seeks to give companies in Central Upstate New York greater access to the unique knowledge, expertise and educational resources available at regional research institutions and thereby increase innovation and technology commercialization within the regional economy.

The program is part of the Metropolitan Development Association's (MDA) Essential New York Initiative -- a plan to accelerate the transition of the regional economy to one based on knowledge, technology and creativity.

Grants are awarded twice a year, approximately in January and July of each year, on a rolling application timeline.

The general objectives of the program are:

- link regional industries and universities to foster collaborative research;
- ensure effective and efficient technology and knowledge transfer to industry;
- strengthen university research capacity in eight target industrial clusters;
- create jobs and deliver economic impact to Central Upstate;
- enhance scientific career and skills development opportunities to students at Central Upstate academic institutions,
- increase the retention of the best and brightest graduate students in the region; and
- increase innovation and technology commercialization within the Central Upstate regional economy.

5) Workforce Innovation in Regional Economic Development (WIRED)

WIRED is a new initiative that focuses on the role of talent development in driving regional economic competitiveness, increased job growth and new opportunities for American workers. Finger Lakes Wired (<http://www.fingerlakeswired.com/>) was created to link the communities of education, workforce development and economic development, creating an entrepreneurial, industry-driven, integrated system.

The nine-county Finger Lakes region is undergoing an historic restructuring. Changes in manufacturing companies and in the global economy have left the region in a state of decline. Finger Lakes Wired shares a vision to renew the economy of the Finger Lakes region by means of four project goals:

- 1) Energize the region's entrepreneurial economy
- 2) Catalyze regional innovation
- 3) Empower workers to succeed in the global economy
- 4) Build 21st century innovation infrastructures

The Phase-Zero Grant provides funding to small businesses for retaining professional services dedicated to developing and improving the firm's SBIR or STTR grant proposal, including:

- Retaining the services of grant writers
- Proposal review and enhancement by consultants
- Expenses related to the development of the grant's budget

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- Expenses related to market research in connection with the commercialization plan and/or other sections of the grant proposal
The Phase Zero Program awards \$2,500 maximum per grant, typically 1-2 awards per month. "Fast Track" and other proposals deemed by HTR to have significant value to the development of the region may be eligible for an additional \$2,500 for a total of \$5,000 maximum per Phase-Zero grant. The Program Application Deadline is 5pm on the last day of each calendar month. To learn more about the Program, please contact Rami Katz, Technology Commercialization Manager, at Rami.katz@htr.org.

6) Syracuse Center of Excellence

<http://syracusecoe.org>

Commercialization Assistance Program (CAP) The goal of the program is to encourage innovation, product development and entrepreneurship in NY State. The intent of this request for proposals (RFP 01-2007) is to solicit promising commercialization projects from area businesses and industries in the three focus areas of the Syracuse Center of Excellence: Indoor Environmental Quality, Water Resources, and Clean and Renewable Energy. It is anticipated that four (4) awards will be made, for a combined total of up to \$200,000. Most awards are typically in the \$50,000 range. To qualify for CAP IV, the proposing company must provide matching funds of at least 1 to 1 for every dollar funded through this program. The matching funds can include cash or in-kind services.

Technology Application and Demonstration (TAD) TAD projects promote technology application and demonstration efforts rather than technology development. As such, TAD projects are those designed to accelerate the introduction of new environmental quality products and services into the market place. Projects that will be considered for award will demonstrate the "first proof of principle" or "reduction to practice" phase of a new product or service associated with air and water quality in built and urban environments. These are competitively awarded funds.

7) The Tech Garden, Syracuse

<http://www.thetechgarden.com/>

The Center for CleanTech Entrepreneurship is a NYSERDA-funded initiative located at the Tech Garden in Syracuse, NY, aimed at incubating and accelerating the growth of clean technology companies in Upstate New York. This sector has the potential to become the cornerstone of a new economy built on entrepreneurship and innovation, and the CleanTech Center will support the growth of companies in the clean and renewable energy sector under the umbrella of a state-wide “NY Loves CleanTech” brand.

The CleanTech Center will help entrepreneurs understand the industry, how it is growing, and ways to adopt best practices from other world class regions and companies in this sector. Working with a network of partners, the CleanTech Center will offer intensive hands-on support for entrepreneurs on starting and financing a clean technology business, and for small established companies on staged growth. The goal is to connect companies across lifecycles with appropriate funding opportunities – from seed to angel, VC, traditional and public finance. Additionally, the CleanTech Center can help tech entrepreneurs with challenges associated with proof of concept,

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development of prototypes, testing, validation, licensing and IP protection through a network of technical advisors.

8) Business plan competitions

- Cornell Big Idea Competition:
entrepreneurship.cornell.edu/BigIdea (for undergraduate students)

- MDA NY Creative Core Emerging Business Competition
www.essentialconnections.org/index.php?action=competition

April 2008: Mezmeriz, Ithaca

April 2007: e2e Materials, Ithaca

- HTR 2008 Rochester Regional Business Plan Contest
www.htr.org/2008rochesterregionalbusinessplancontest.asp

- Golden Horseshoe Business Challenge
www.rochesterbiz.com/GoldenHorseshoe

The Golden Horseshoe Business Challenge is targeted toward entrepreneurs in four cities in Western New York and Ontario, Canada — Rochester, Buffalo and Ithaca in Western New York, as well as the city of Waterloo, Ontario. The first-place winner will receive \$100,000 in cash to help implement the winning business plan. Judges will include a select group of venture capitalists.

- MRS Entrepreneurship Challenge
www.mrs.org

7) Venture forums

- SmartStart/UNYTECH Upstate New York
www.smartstartvf.com

8) Environmental Investment Program – Sustainable Business Practices

NYS Resources

Environmental Investment Program – www.empire.state.ny.us/environment

NYSERDA – www.nyserda.org

Environmental Improvement Resources for Business In NYS –

www.empire.state.ny.us/environment and scroll to end of page

Secondary markets Web Portal – www.empire.state.ny.us/recycle

Product Design

Design for Environment – www.epa.gov/Sustainability/materials_policies.htm

REACH, WEE/RoHS – www.buyusa.gov/europeanunion

Life Cycle Assessment – www.epa.gov/nrmrl/lcaccess

Operations

Product Stewardship – www.epa.gov/Sustainability/materials_policies.htm

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Product Certifications

Ecologo – www.ecologo.org

Green Seal – www.greenseal.org

Food Alliance – www.foodalliance.org

Green Restaurant Association – www.dinegreen.com

Forest Stewardship Council – www.fscus.org

Waste Audits

Regional Technology Development centers – www.nystar.state.ny.us/rtdcs.htm

Environmentally Preferable Purchasing

NYS Executive Order #4 – www.ogs.state.ny.us

Center for a New American Dream – www.newdream.org

The Responsible Purchasing Network – www.responsiblepurchasing.org

Federal Government Environmentally Preferable Purchasing –
www.epa.gov/opptintr/epp



RESOURCE CATEGORY	PROGRAM NAME	CONTACT	PROGRAM NAME	CONTACT	PROGRAM NAME	CONTACT
Financing or Funding	Quasi-Equity Loan Fund Seed Capital Fund Venture Capital SBIR, STTR Kaufman Grants Grants for Growth	GSBDC or RPDB Tech Garden Tech Garden/UVANY/NYSTAR CNYTDO SU Whitman School MDA	SBA 504, 7A, 8A loans ESD Capital program ESD IEP Grant ESD MAP Grant Environmental grant & reasearch assistance Energy funding assistance Energy & environmental grant & loan assistance Minority & Women Business Enterprise Purchasing Consortium/Solutions Linked Deposit ESD GEMS grant Revolving Loan Fund Employee Productivity Program Bank Financing	GSBDC or SBA ESD ESD/ CNYTDO ESD ESD/ESU NYSERDA National Grid ESD MACNY ESD ESD GSBDC or RPDB OCIDA Commercial Banks	IDA Pilot Agreements IDA Industrial Revenue Bonds IDA Sales Leaseback Trade Adjustment Assistance USDA Grants and/or loans Brownfield Opportunity Area	City/County IDAs City/County IDAs City/County IDAs TAAC USDA SIDA
Workforce Development & Training/Management Assistance	Business Start up consulting/coaching Business Plan Development Start up consulting/Boot Camp	TDOs, SSIC, TECH Garden, SCORE SBDC, SU Falcone Center SU Falcone Center	Leadership, Productivity, & OSHA Training On The Job Training Department of Labor Grants Networking Councils Interns Interns, Project ION Employee Productivity Program Work Place Literacy	TDOs/MACNY County One Stops County One Stops MACNY SU CASE MDA/Chamber/MACNY OCIDA Chamber	Family Business Center Trade Adjustment Assistance	Chamber TAAC
Process and Productivity Improvement	Lean Training and Consulting Lean Training and Consulting	TDO's MACNY	Customized Training Program ESD IEP Grant Quality/ISO	BOCES, OCC, ESF ESD/CNYTDO MACNY	Trade Adjustment Assistance	TAAC
Marketing and Sales	Market Research Market Consulting Export NY Demographic/Economic Data	Small Business Development Center Central New York Development Organization CNYTDO/CASE RPDB/Chamber	ESD IEP Grant ESD GEMS grant	Empire State Development Empire State Development	Trade Adjustment Assistance	TAAC
Green and Physical Plant	Start up Space Start up Space Start up Space	SSIC Tech Garden SU CASE	Energy Smart Loan Program Energy & environmental grant & loan assistance Energy Survey Environmental compliance training, ISO 14001 Flex Tech Empowerment Zone Empire Zone ESD Capital program ESD MAP Grant Environmental grant & reasearch assistance Electricity Aggregation	NYSERDA (RPDB) National Grid Industrial Assessment Center MACNY NYSERDA (RPDB) City of Syracuse Onodaga County/City of Syracuse ESD ESD ESD/ESU MACNY	Brownfield Opportunity Area Environmental Survey Funding assistance IDA Pilot Agreements IDA Industrial Revenue Bonds IDA Sales Leaseback	SIDA CIMS COE City/County IDAs City/County IDAs City/County IDAs
Research and Development	Research and Development Assistance Grants for Growth Materials research and testing Materials research and testing Research and Development Tax Credit Technical Assistance Technical Assistance, Wood Products	CoE MDA CCMR CAMP IRS & TDOs TDOs, Tech Garden SUNY ESF				