



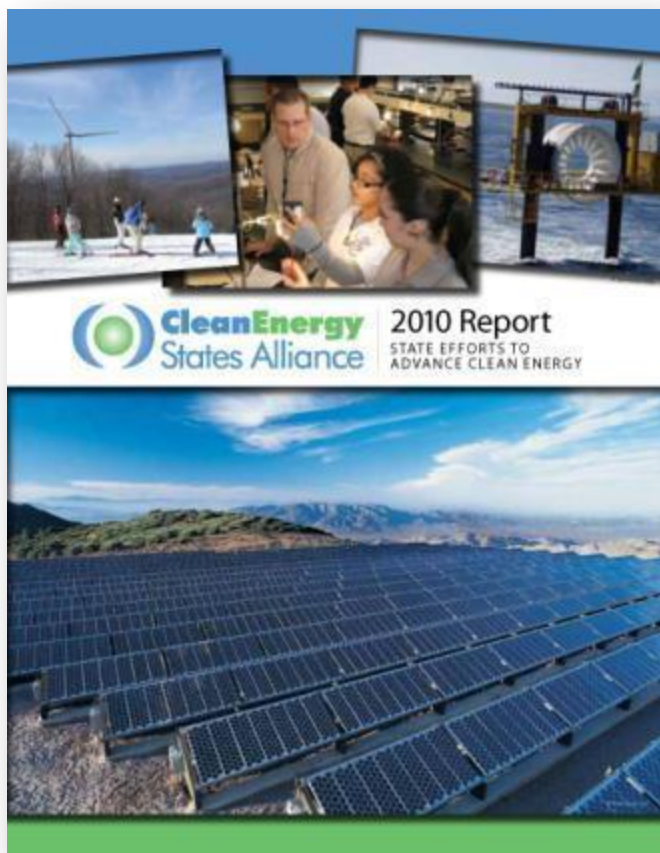
Linking State Clean Energy and Economic Development Activities

An Introduction

Lewis Milford
Clean Energy Group
Clean Energy States Alliance
June 27, 2011



CESA: Coalition of State Clean Energy Programs



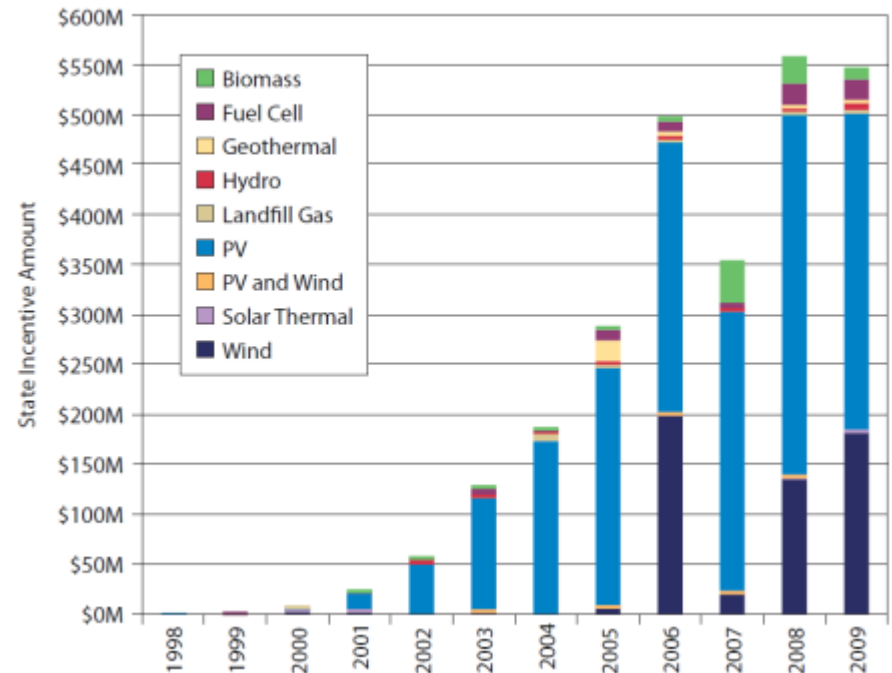
- Non-profit, membership organization working with more than 20 leading state clean energy programs
- Assistance to all states to advance renewable energy deployment
 - Joint Projects
 - Program & Policy Assistance
 - Information Exchange & Analysis
 - Partnership Development
- Managed by Clean Energy Group

Results that Matter: CESA Renewable Energy Project Database

States with dedicated funds to finance clean energy projects

- Invested \$2.7 billion in last 11 years
- Investment leverage: more than \$9.7 billion in other investment
- Nearly 75,000 RE projects
- 3 GW clean energy capacity installed
- Primary driver for grid-connected PV; in 2007, more than 75% of installed systems were installed in states with funds
- \$6 billion state funding for next 10 years plus new federal stimulus funding (\$3 billion for State Energy Programs)

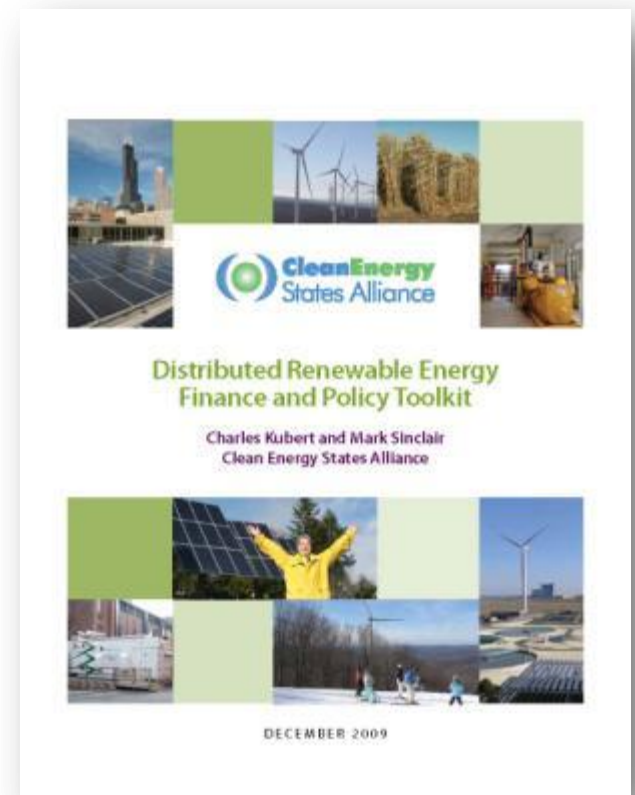
FIGURE 6 State Incentive Amounts Awarded



Source: CESA 2011

State Clean Energy Programs: Strategic Value

- States play key role in accelerating development of renewable energy and the green economy
- Clean energy is development – state programs can emphasize local energy resources and be tailored to state economy
- Rapid bottom-up learning – no one-size-fits all approach
- New financing models: REC financing, loans, equity investment, loan guarantees



States and Economic Development: Latest Trend in Clean Energy

States increasing are the leading actors to advance economic development programs in clean energy:

- Massachusetts Center Green Low Income Job Training
- NYSERDA Economic Development Unit
- Maryland Clean Energy Incubator
- Clean Energy Works Portland
- CEC/CE Workforce Training Program
- Scores of other excellent, emerging state programs

You will hear from two illustrative state strategies today.

New Learning Network on **EE/ED**

A Few Provocative Points to Think About Regarding EE/ED -
Should we consider doing some of the following to jump start this work?

- Research Program with Leading Academics and Think Tanks
- Create a Learning Network
- Advocate for New Programs, Policies and Funding

Take the excellent work – but go deeper and broader --ramp up to make real progress across the United States. Focus on real state strategies to create a durable clean energy economy.

Today's Panelists

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Clean Energy States Alliance

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Linking Economic Development and Clean Energy Programs

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jj2@nyserdera.org

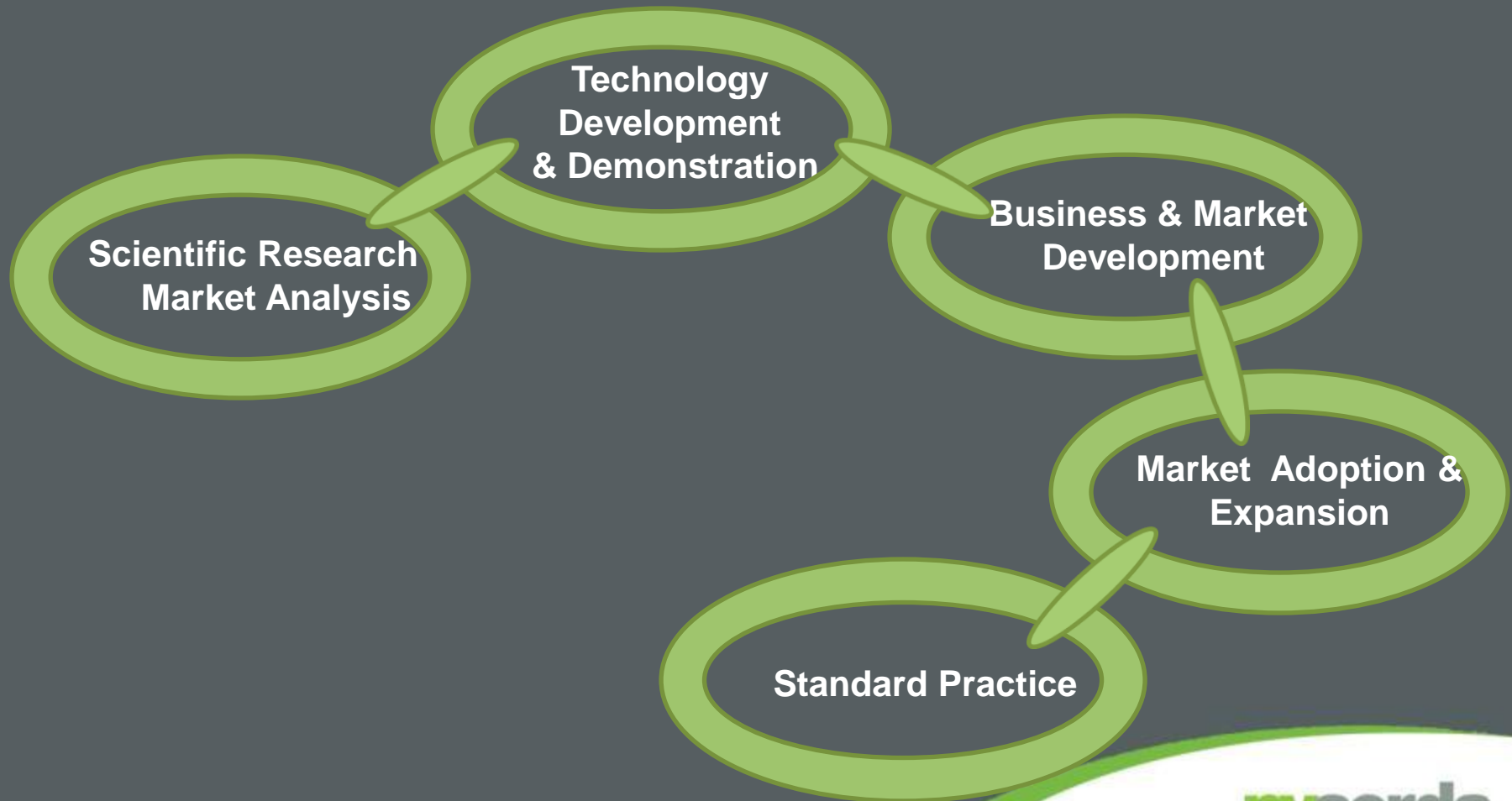
June 27, 2011

NYSERDA Mission

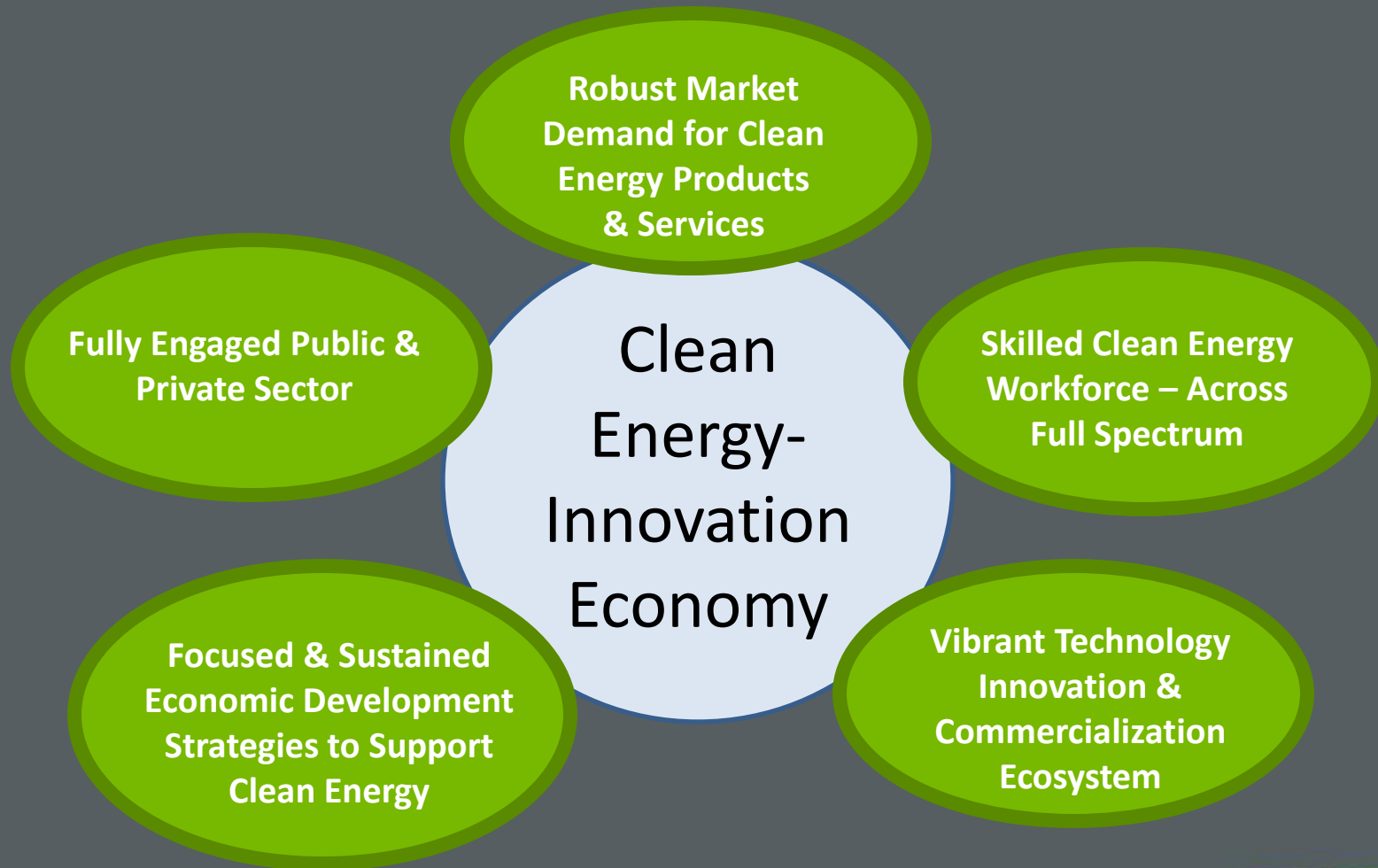
*Advance innovative energy solutions
in ways that improve New York's
economy and environment.*

NYSERDA's Portfolio

Spanning the Energy Innovation Chain



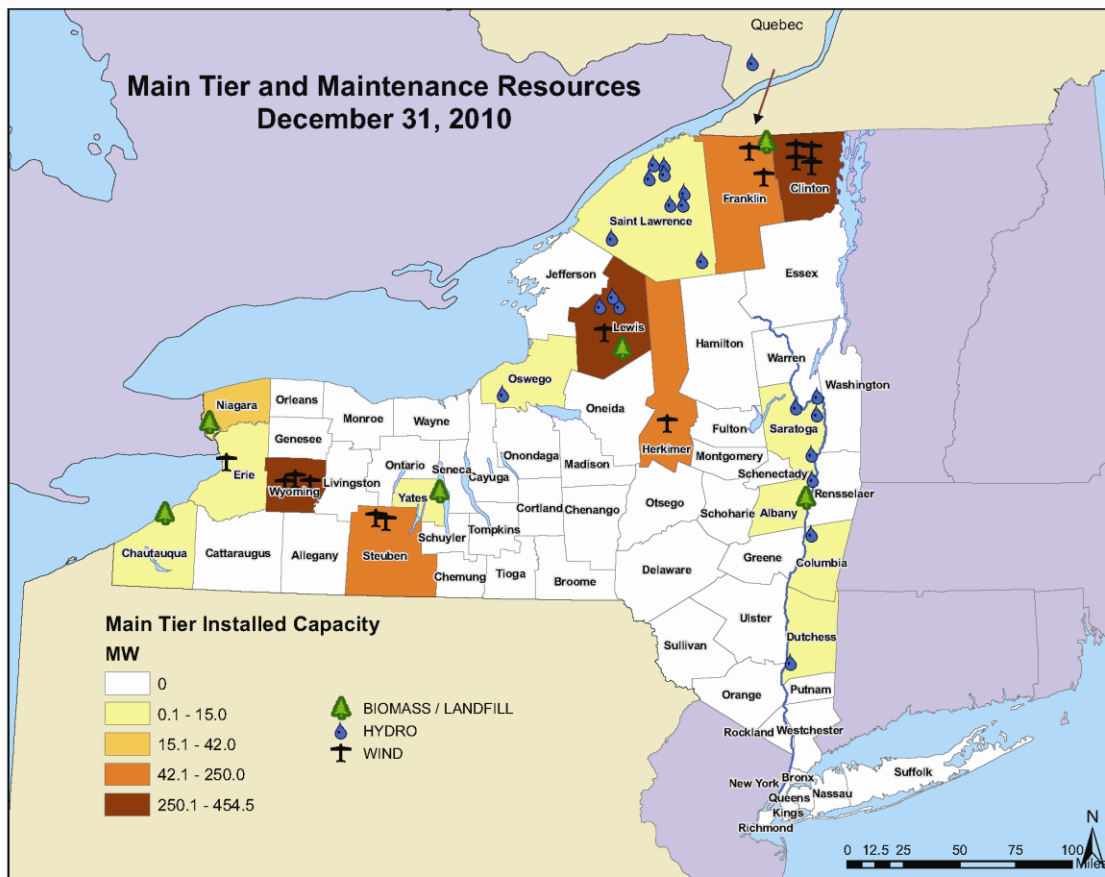
Framework for a Clean Energy Economy



\$\$ Access to Capital \$\$

Maximizing Economic Benefits:

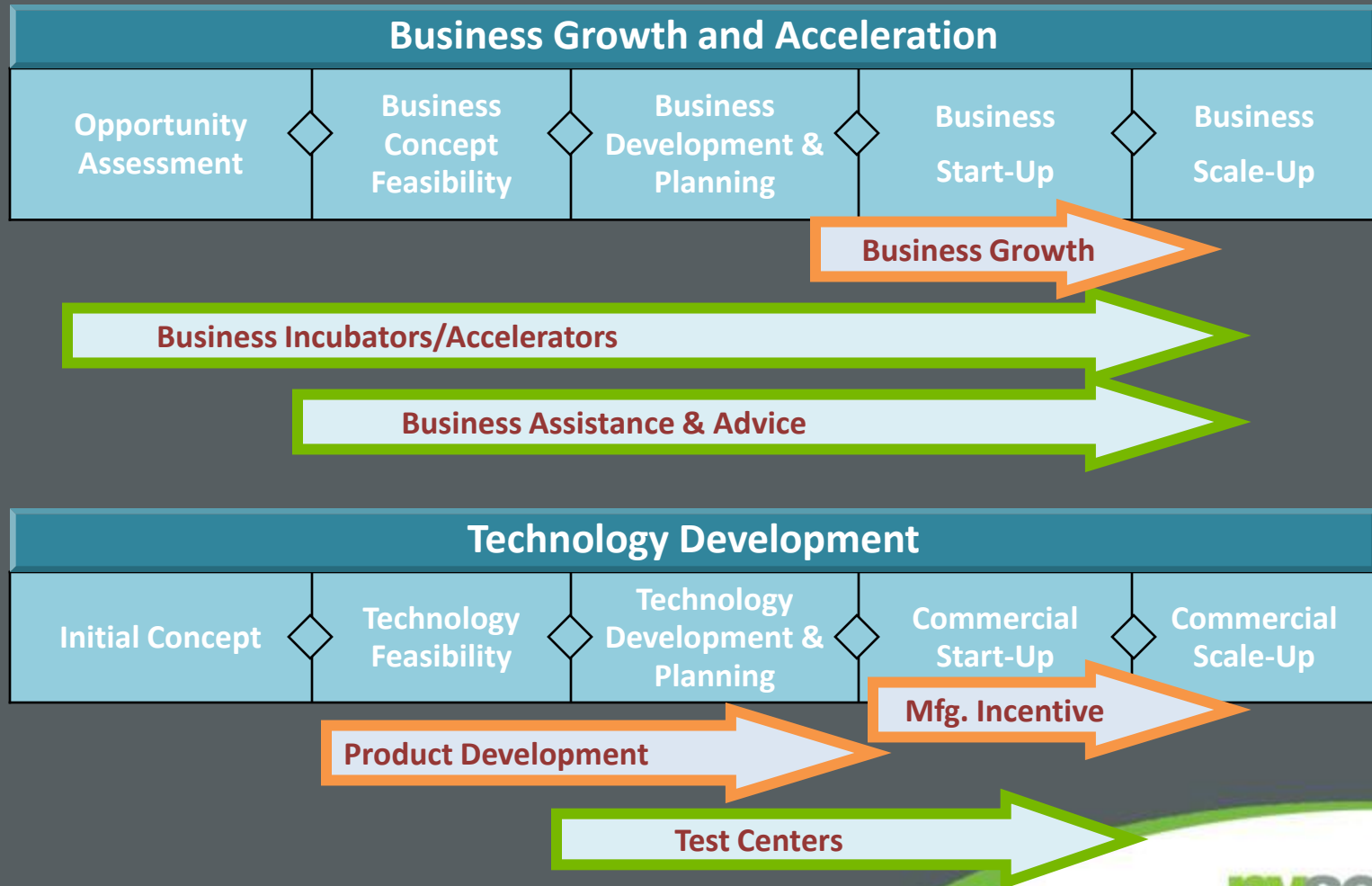
Opportunities in Resource Acquisition Programs



NYSERDA considers economic development benefits in evaluating RPS bids (30% weighting)

Crossing the “Valley of Death”

NYSERDA Programs Build the Capacity for Innovation



Technology Innovation & Product Development

- Risk-sharing/recoupment model
- Commercialized over 200 new and improved energy products
- Created over 1000 jobs in NYS
- For every \$1 that we invest in product development w/ a NYS business partner, we create \$5 in increased GSP



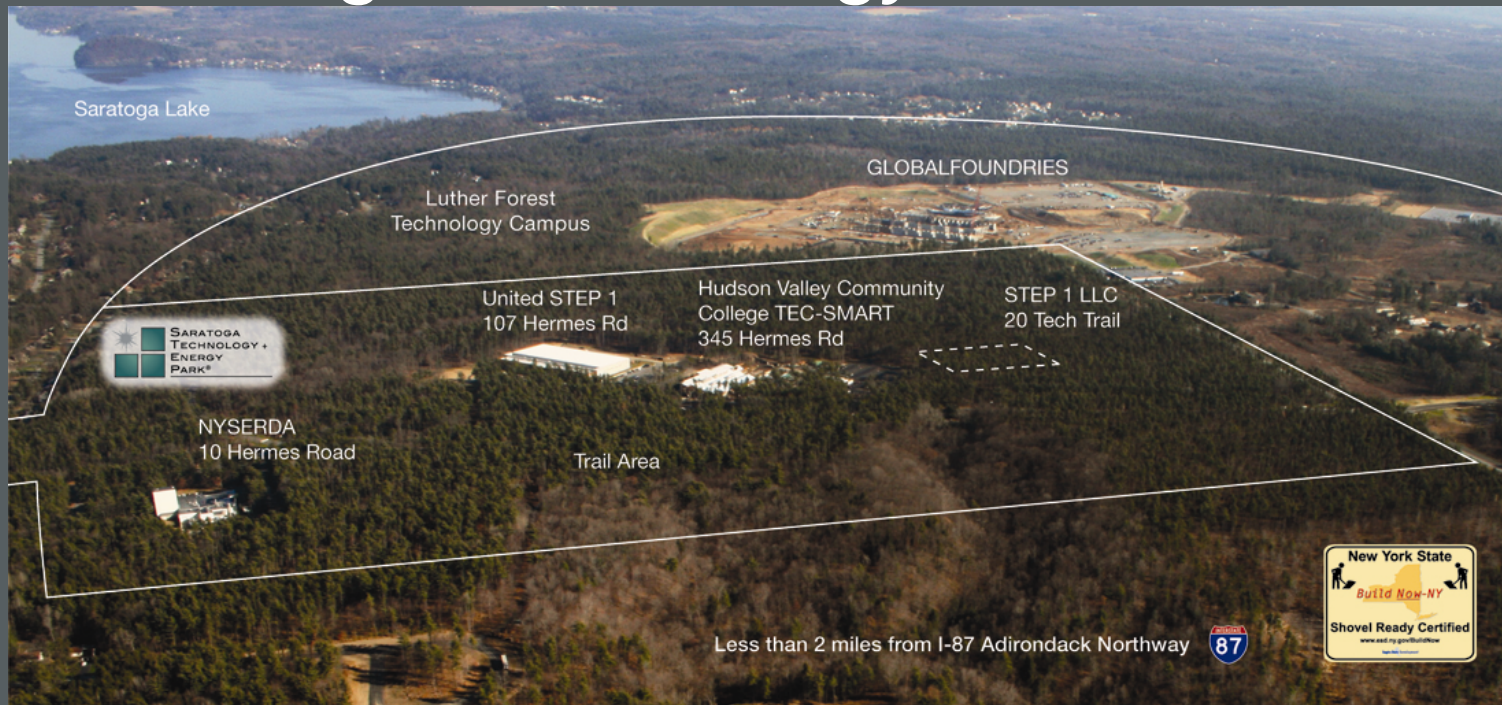
Cleantech Incubators in New York



- Invested \$2.7M of NYSERDA funds to date
- Supporting 72 Cleantech start-ups
- Already launched 20 products
- Raised \$26M in private investment and \$10M in federal funding
- Several graduates

Saratoga Technology & Energy Park (STEP)

Promoting Clean Energy Business and Jobs



- Converted brownfield
- Dozen cleantech firms
- 300 people employed at STEP
- Hudson Valley Community College Training & Education Center
- Adjacent to Global Foundries ChipFab

Clean Energy Workforce Development

Energy Efficiency and Renewable Energy Training Facility Locations

- Sites that were open before April 1, 2010
- Sites that were opened between April 1, 2010 and March 31, 2011



- Trained over 24,000 workers in clean energy
- Entrepreneurs in Residence
- CleanTech Execs

Future Directions

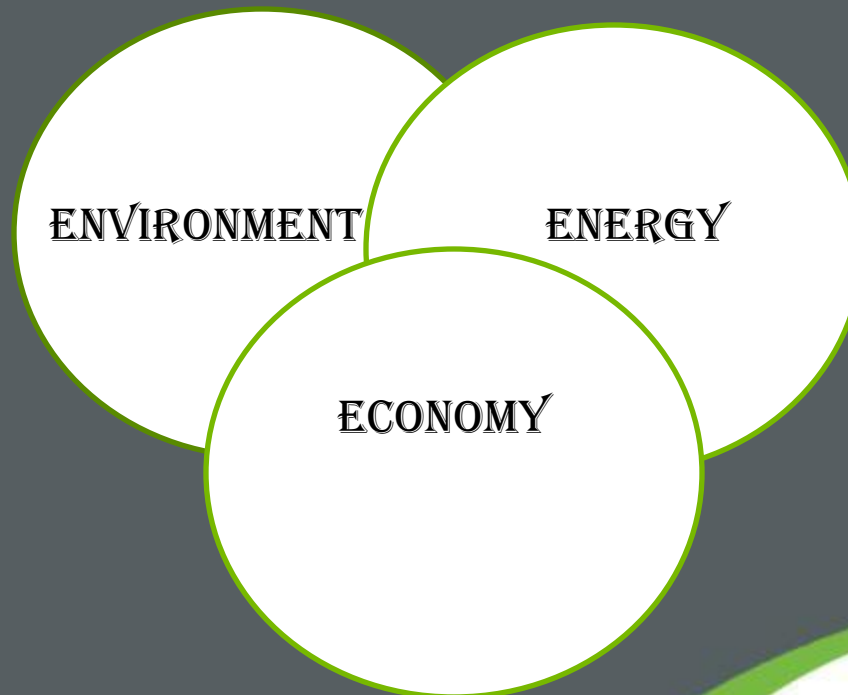
- Establishing Proof-of-Concept Centers
- Exploring other means of providing working capital (equity/debt)
- Regional Economic Development Councils
 - Accelerate networking/cluster development
 - Link incubators & other NYSERDA programs
- Increase access to capital
- Earlier stage/pilot manufacturing assistance

Challenges

- Lack of good benchmarking data
- Conventional sponsors of EERE programs don't always view themselves as supporting economic development
- Tremendous coordination needed within State government
- Larger state policy/economic issues (beyond a state's energy policy) will drive success

Closing Comment

Energy, the environment , and the economy are inextricably linked : our public policies need to try to optimize across all three “Es”



Massachusetts Clean Energy Center
Linking Clean Energy and Economic
Development
“Join the Innovation Revolution”

June 2011

Introduction

- Overview of MassCEC
 - Overview of MassCEC's Economic Development Model
 - Questions
-

History and Funding Source

- The Massachusetts Clean Energy Center (MassCEC) was created by the Green Jobs Act of 2008 to serve as the state's lead agency supporting the clean energy cluster
 - In November 2009, the Massachusetts Renewable Energy Trust was transferred to MassCEC
 - MassCEC is now the single agency responsible for fostering the development and installation of clean energy technologies in Massachusetts
 - MassCEC funding
 - Alternative and Clean Energy Investment Trust Fund, created by Legislature in 2008
 - Renewable Energy Trust Fund, which is funded by a small renewable energy charge on ratepayers' electric bill
-

MassCEC's Mission

- MassCEC enabling legislation demands the following:
 - Advancement of Technology
 - Job Creation
 - Workforce Development
- With the addition of MRET, MassCEC now also works to accelerate the adoption of renewable energy generating assets in the Commonwealth
- MassCEC's Investments in Clean Technology division is focused on *advancing technology* and *creating jobs* in the Commonwealth's clean technology sector

Massachusetts Clean Energy Assets

- Supportive policy and active government leaders creating a pro-growth environment for clean energy companies.
- Engaged private equity and venture capital community
- Companies that span the development curve
- Highly skilled workforce that is value driven and dedicated to clean energy



MASSACHUSETTS CLEAN ENERGY CENTER
Join the Innovation Revolution

About MassCEC
The Massachusetts Clean Energy Center is dedicated to accelerating the success of clean energy development and implementation, while creating high quality jobs and long-term economic growth for the people of Massachusetts.

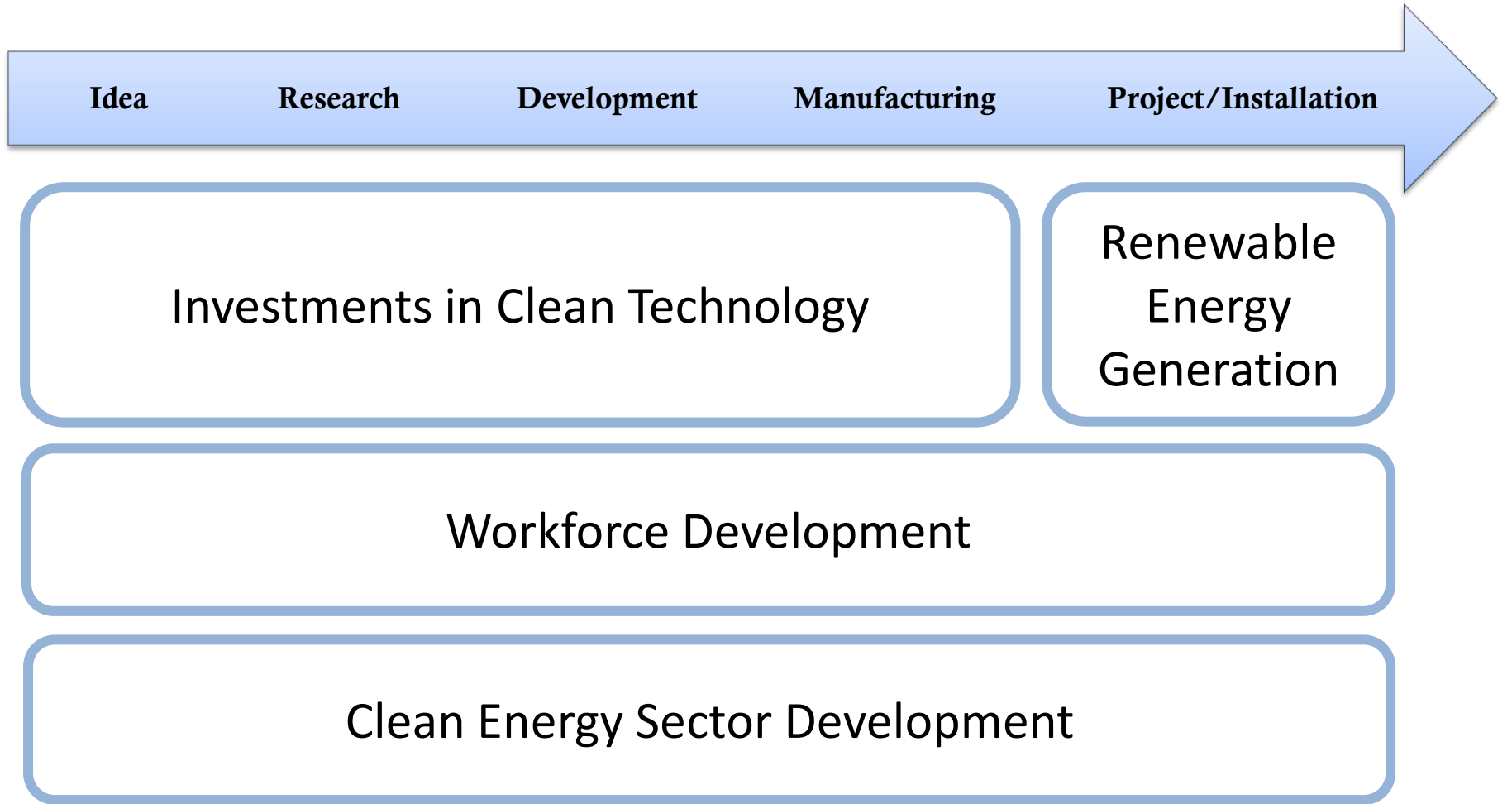
Areas of Focus

- **Renewable Energy Generation:** funding renewable energy projects throughout the Commonwealth.
- **Investments in Clean Technology:** investing in high potential clean energy companies.
- **Workforce Development:** funding and advising programs that train students and workers for careers in the clean energy economy.
- **Clean Energy Sector Development:** stimulating collaboration and partnership in the Massachusetts clean energy ecosystem, and promoting Massachusetts' clean energy assets.

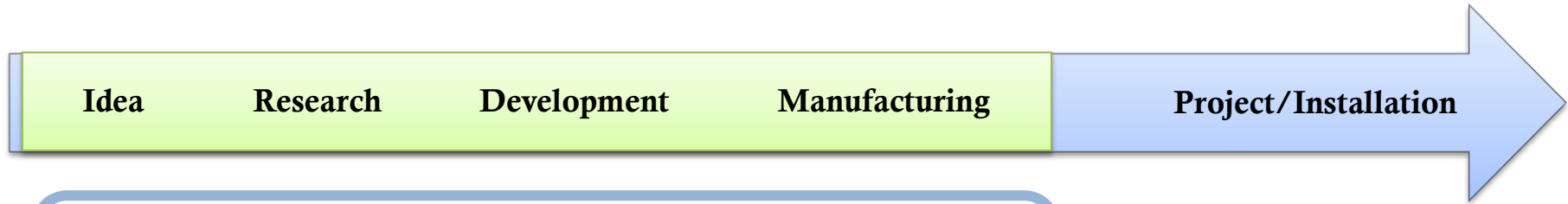
Visit our website www.masscec.com
Follow MassCEC on Twitter [www.twitter.com/MassCEC](https://twitter.com/MassCEC)
Contact info@masscec.com
P: (617) 214-8005 • F: (617) 214-8384
65 Summer Street, 16th Floor Boston, MA 02110

The image also contains several small photographs: a group of people working together at a table, a man in a suit holding a large gear, a woman presenting to a group, a man in a hard hat looking at a document, and a large wind turbine in a field.

MassCEC Areas of Focus



Investments in Clean Technology Division



Investments in Clean
Technology

Catalyst
Program

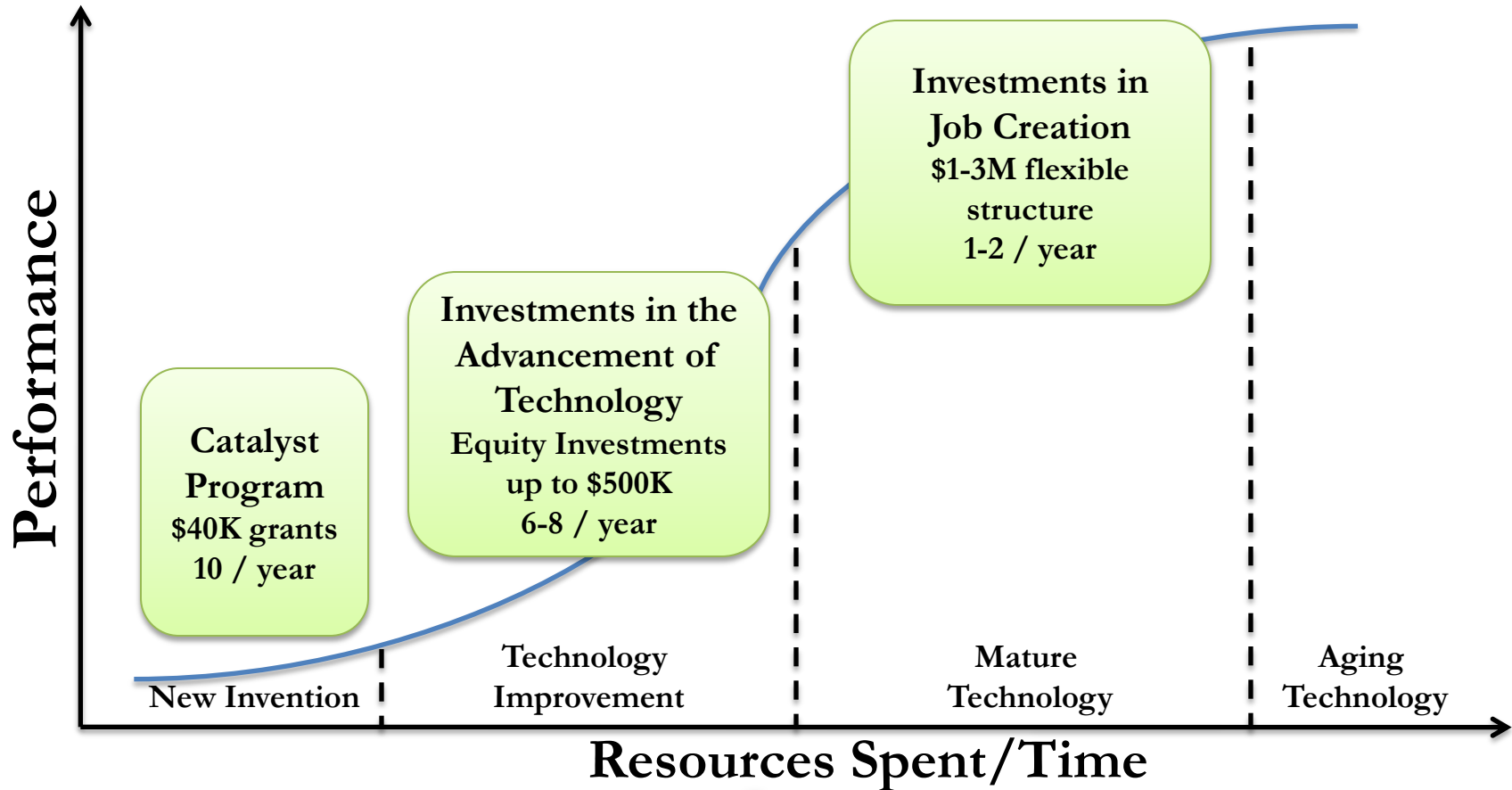
Investments in
the
Advancement
of Technology

Investments in
Job Creation

Investments in Clean Technology Division

Programs overview

- Each program is designed for different stages of the development curve:



MassCEC Investments To Date

- MassCEC has awarded over \$20M to companies since March 2009
- MassCEC has closed equity investments, loans and grants amounting to over \$17M & leveraged nearly \$75M in additional funds
- As a direct result of its Investments in Job Creation program, MassCEC anticipates nearly 700 jobs will be created or retained in Massachusetts

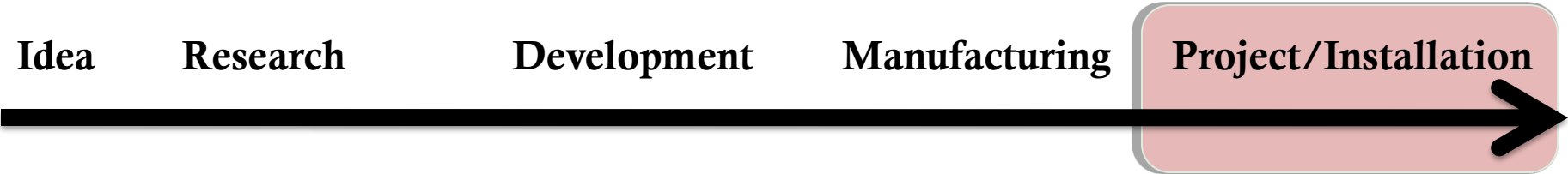
Case Study: FloDesign Wind Turbine

- MassCEC encouraged FloDesign (FDWT) to enter 2 local clean tech start-up competitions, which they won and attracted private capital investment
- MassCEC supported FDWT when they received an ARPA-E award w/ matching grant.
- MassCEC partnered with FDWT on Workforce grant at Western New England College.
- MassCEC provided FDWT a \$3 million financing package for in April 2010
 - \$1.7 million grant to defray a portion of the cost of installing the company's first prototypes at eligible sites in MA



Renewable Energy Generation

Idea Research Development Manufacturing Project/Installation



- Comm Solar II
- Solar Thermal
- SRECs
- Commo Hydro
- MicroWind
- Community Wind

- Commercial Wind
- State Facilitated Wind
- Offshore Wind
- Low Income Initiative
- Partnerships

MassCEC Wind/Solar Cos.



Workforce Development

Idea

Research

Development

Manufacturing

Project/Installation



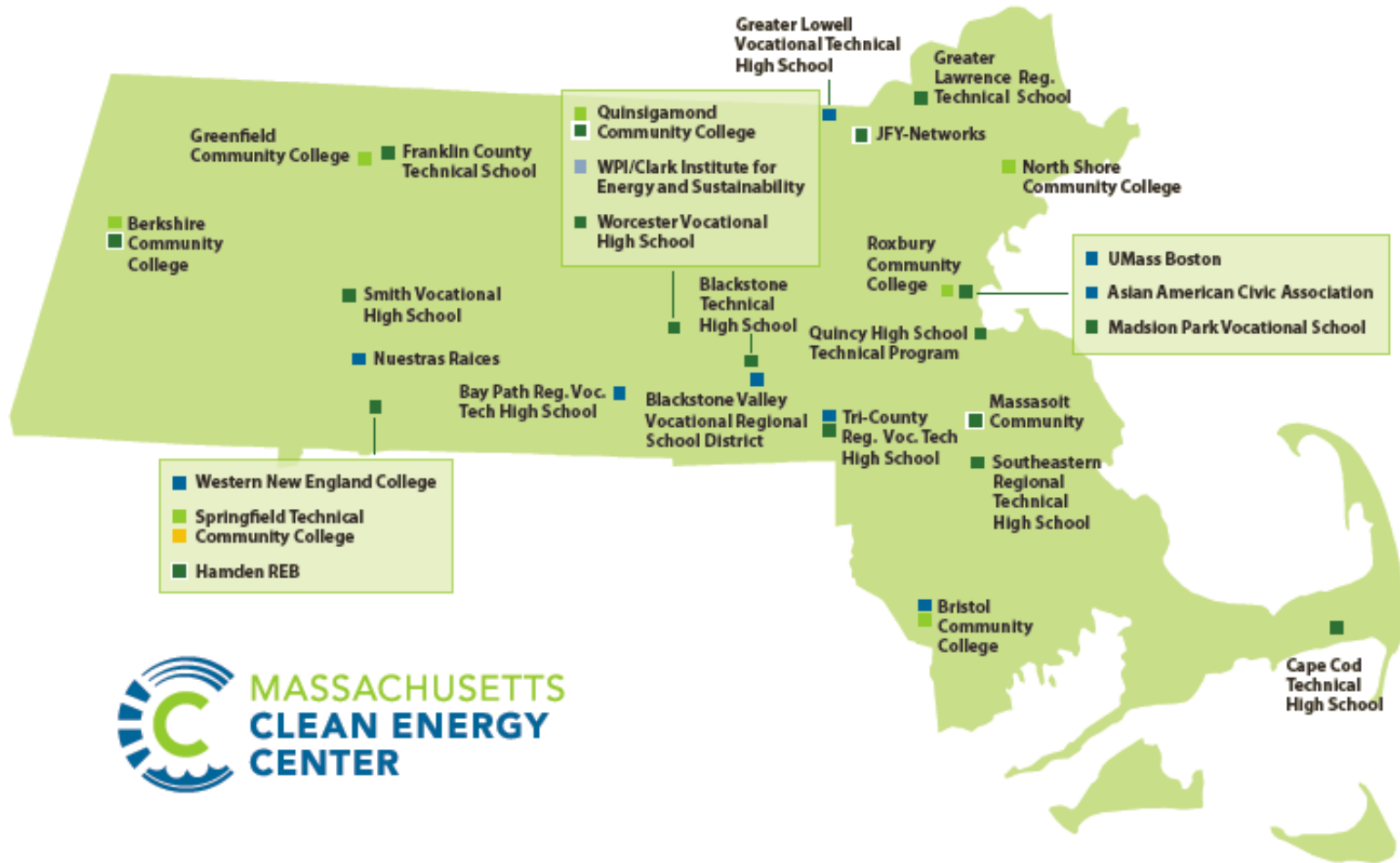
MassGREEN

**Pathways Out of
Poverty**

**On the Job
Training**

**Workforce
Capacity
Building**

Workforce Development



Clean Energy Sector Development

Idea Research Development Manufacturing Project/Installation



- Port Study
- Transmission Study
- New Bedford Marine Commerce Terminal
- Wind Technology Testing Center
- Fraunhofer
- Marketing & Branding

Wind Technology Testing Center

- Awarded \$25M from ARRA & \$2M from NREL
- Broke ground on December 1, 2009.
- WTTC will create the largest, most functional and most flexible blade testing center in North America - if not the world
- Integral to U.S wind industry as the key facility for next generation wind turbine technology development.
- Open for business: May/June 2011



Questions

Learn more at

www.MassCEC.com

Follow us on Twitter:

www.Twitter.com/MassCEC

CESA 2011

Linking State Clean Energy and Economic Development Activities

June 27, 2011

Toby Rittner
President & CEO



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About CDFA

- National non-profit association representing the development finance industry by providing education, advocacy, research, networking and leadership.
- Training Institute – Bond Finance (2), Tax Increment Finance (2), Tax Credit, Revolving Loan Fund Finance, Energy Finance, Innovation Finance and Fundamentals of ED Finance Course.
- Research – Produce annual State-By-State studies for Bond Volume Cap and Tax Increment Finance Statute changes.
- Resources – Over 2,800 resources in Online Resource Library.
- Federal Financing Clearinghouse – 175 federal financing programs catalogued and detailed by agency, type, etc.
- Advocacy – Active partner with Congress and Administration and had 3 items in the 2009 stimulus bill.



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What is Development Finance?

- Development finance is the efforts of local communities to support, encourage and catalyze economic growth through public/private investment in physical development, redevelopment, business and industry.
- It is the act of contributing to a project/deal that causes that project/deal to materialize in a manner that benefits the long term health of the community.
- Debt, equity, credits, liabilities, remediation, guarantees, collateral, credit enhancement, venture/seed capital, early stage, workforce, technical assistance, planning, short-term, long-term, incentives, gap, etc.
- Energy and economic development can be encouraged through partnership, cooperation and mutually advantageous programming centered on public finance.



Why is DF Important?

- Businesses need working capital and the ability to invest in themselves.
- Developers need assistance to achieve an acceptable ROI.
- Communities need infrastructure and amenities.
- Citizens need opportunities for advancement – jobs, small business, education, etc.
- Regions need economic prosperity.
- Consumers need reliable and diverse energy options

Industrial Financing Tools

- Over 200 programs exist to assist with local development finance challenges.
- A host of programs exist that provide public financing mechanisms for energy development projects
- For the purpose of this discussion, broken down by:
 - Bond Financing Tools
 - Targeted Financing Tools
 - Federal Financing Tools

Bond Financing Tools



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Bond Financing Tools

- Host of bond financing tools exist to assist with energy development including:
 - Industrial Development Bonds (IDBs)
 - 501(c)(3) Bonds
 - Exempt Facility Bonds
 - TIF Bonds
 - New Clean Renewable Energy Bonds (New CREBS)
 - Property Assessed Clean Energy Bonds (PACE)
 - Qualified Energy Conservation Bonds (QECBs)
 - Qualified School Construction Bonds (QSCBs)
 - Enterprise Zone Bonds
- Pros and cons to using all of these tools but the traditional bond finance industry is very well equipped to put these tools in place for energy projects.

Bond Financing Tools

- Industrial Development Bonds – IDBs are publicly issued bonds used for private activity aimed at small/medium sized manufacturers.
- IDBs are used for investment in bricks and mortar projects that help the manufacturer produce more goods.
- IDBs are the number one form of financing for manufacturers and have been around for over 40 years.
- Each state as a set aside volume cap available for IDBs and every local community can issue these bonds.
- IDBs require many participants – issuer (public entity), underwriter (bank), borrower (manufacturer) and bond counsel (for both borrower and issuer)



Bond Financing Tools

- A bond is effectively a loan. The borrower is the manufacturer and the lender is bank using tax-exempt bonds through a public entity. The bond holder invest in the bonds by purchasing them on the open market.
- Bond financing is an affordable alternative to traditional bank lending but has a higher level of public disclosure and paperwork.
- Energy Relationship – IDBs can be used for energy development projects if the project qualifies to help the manufacturer in production of goods.
- Needs – Expand IDBs even more to allow great energy financing options.

Targeted Financing Tools



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Special Assessment District Financing

- Mechanism by which business, industry, commercial districts and governments generate funds by applying special tax assessments on geographic areas.
- Two general structures:
 1. Business and Neighborhood Districts
 - Self assessment
 - BID, SID, NID, etc.
 2. Government Districts
 - Sometimes self-assessed, often govt. created
 - SSD, SAD, CFD, CDD, TID

Special Assessment District Financing

- Business and Neighborhood Districts help to support a variety of services:
 - security and safety patrols
 - snow removal
 - promotions, marketing and events
 - graffiti removal
 - beautification and cleanliness programs
 - economic development
 - energy efficiency upgrades
- Energy Relationship – BIDs & NIDs can use this tool to create alternative energy and energy efficiency programs in their districts.

Special Assessment District Financing

- Government Districts target very specific projects and services:
 - infrastructure such as roads, sewers, tolls
 - transit development
 - community amenities such as schools and public facilities
 - energy efficiency projects – residential & industrial
 - often used in conjunction with tax increment finance
- Energy Relationship – Government entities are looking more and more into the expansion special assessment districts to help pay the long term costs of alternative energy systems.

Federal Financing Tools



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Federal Financing

- Federal government plays a significant role in economic development financing and currently operates over 170 programs that support this effort.
- Programs exist across 17 federal agencies.
- 39 federal programs offer assistance for energy related projects, planning and initiatives.
- Programs exist at the DOE, Treasury, HUD, IRS, USDA, EPA and EDA.
- Understanding the depth and impact of these programs is critical to any good financing strategy and creates the energy linkage with economic development.



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Advancing Development Finance Knowledge, Networks & Innovation



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An online searchable clearinghouse of federal economic development finance programs.

CDFA's **Federal Financing Clearinghouse** is the only online resource cataloging the development finance programs offered by the federal government. The clearinghouse includes program overviews of over 100 federal financing programs available to both public and private sector users.

This is an exclusive CDFA member benefit. Users must log-in with their unique CDFA username and password to search the clearinghouse.

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Agencies

- Export Import Bank of the United States (Ex-Im Bank)
- Internal Revenue Service (IRS)
- National Aeronautics and Space Administration (NASA)
- National Science Foundation (NSF)
- U.S. Dept. of Agriculture (USDA)
- U.S. Dept. of Commerce (DOC)
- U.S. Dept. of Defense (DOD)
- U.S. Dept. of Energy (DOE)
- U.S. Dept. of Health & Human Services (HHS)
- U.S. Dept. of Housing & Urban Affairs (HUD)
- U.S. Dept. of Interior - National Park Services (NPS)
- U.S. Dept. of Justice (DOJ)
- U.S. Dept. of Treasury
- U.S. Dept. of Treasury CDFI Fund
- U.S. Economic Development Administration (EDA)
- U.S. Environmental Protection Agency (EPA)
- U.S. Small Business Administration (SBA)

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Advancing Development Finance Knowledge, Networks & Innovation

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- Search By Program
- Search By Financing Category
- Search By Keyword

Program: 1603 Program: Payments for Specified Energy Property in Lie

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Search By Agency

Search By Program

Search By Financing Category

Categories

- Access to Capital
- Bond Finance
- Brownfield Financing
- Community Development
- Energy Finance
- Foreign Investment
- Green Finance
- Infrastructure Finance
- Innovation Finance
- Revolving Loan Funds (RLFs)
- Rural Development
- Tax Credits
- Urban Development

Search

Sort results by

Financing Category

Search by Financing
Category

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Federal Financing Tools

ARPA-E Funding Opportunities

U.S. Dept. of Energy (DOE)

Created at the recommendation of a 2006 National Academies report, "Rising Above the Gathering Storm," the Department of Energy's (DoE) Advanced Research Projects Agency--Energy (ARPA-E) received...

Qualified Energy Conservation Bonds (QECBs)

U.S. Dept. of Treasury

U.S. Treasury's Qualified Energy Conservation Bonds (QECBs) finance qualified energy conservation projects. At minimum, 70 percent of a state's allocation must be used for governmental purposes, and...

Energy Efficient Mortgages

U.S. Dept. of Housing & Urban Affairs (HUD)

U.S. Dept. of Agriculture (USDA)

Homeowners can take advantage of energy efficient mortgages (EEM) to finance energy efficiency improvements to existing homes. The U.S. federal government supports these loans by insuring them...



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Federal Financing Tools

Clean Renewable Energy Bond (CREB) Program

U.S. Dept. of Treasury

Internal Revenue Service (IRS)

Prior to the U.S. Treasury's Clean Renewable Energy Bond (CREB) program--signed into law as part of the Energy Policy Act of 2005--only for-profit, investor-owned utilities were eligible to receive...

Modified Accelerated Cost-Recovery System (MACRS) + Bonus Depreciation (2008-2012)

Internal Revenue Service (IRS)

Under the federal Modified Accelerated Cost-Recovery System (MACRS), businesses may recover investments in certain property through depreciation deductions. The MACRS establishes a set of class...

Weatherization Assistance Program

U.S. Dept. of Energy (DOE)

The Department of Energy's Weatherization Assistance Program (WAP) enables low-income families to permanently reduce their energy bills by making their homes more energy efficient. Funds are used to...



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State Energy Program

U.S. Dept. of Energy (DOE)

The Department of Energy's (DOE) The State Energy Program (SEP) provides financial and technical assistance to states through formula and competitive grants. States use their formula grants to...

Biobased Products and Bioenergy Program (BIOMASS)

U.S. Dept. of Agriculture (USDA)

The goal of the Biobased Products and Bioenergy Program is to finance technologies needed to convert biomass into biobased products and bioenergy in a manner which is cost-competitive in large...

Industrial Technologies Program (ITP)

U.S. Dept. of Energy (DOE)

The Department of Energy's (DOE) Industrial Technologies Program (ITP) is the lead government program working to increase the energy efficiency of U.S. industry, which accounts for about one-third...



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Federal Financing Tools

Environmental Justice Grants and Cooperative Agreements

U.S. Environmental Protection Agency (EPA)

The U.S. Environmental Protection Agency's (EPA) Environmental Justice Grants and Cooperative Agreements provides financial assistance to build collaborative partnerships, to identify the local...

Office of Energy Efficiency and Renewable Energy (EERE) Grants

U.S. Dept. of Energy (DOE)

The Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) grants program is a funding vehicle for businesses, industries, universities, and others. EERE works with...

Office of Energy Efficiency and Renewable Energy (EERE) Continuation and Renewal Awards

U.S. Dept. of Energy (DOE)

The Office of Energy Efficiency and Renewable Energy's (EERE) programs conduct activities in partnership with the private sector, state and local government, DOE national laboratories, and...



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Federal Financing Tools

1703 Loan Guarantee Program

U.S. Dept. of Energy (DOE)

Section 1703 of Title XVII of the Energy Policy Act of 2005 authorizes the U.S. Department of Energy (DOE) to support innovative clean energy technologies that are typically unable to obtain...

1705 Loan Guarantee Program

U.S. Dept. of Energy (DOE)

The American Recovery and Reinvestment Act of 2009 amended authorizing legislation for the Department of Energy's (DOE) Loan Guarantee Program by adding Section 1705 to EPAAct. Section 1705 is a...

ATVM Loan Guarantee Program

U.S. Dept. of Energy (DOE)

The Department of Energy's (DOE) Advanced Technology Vehicles Manufacturing (ATVM) Loan Program, an incentive program established by Section 136 of the Energy Independence and Security Act of 2007,...



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Federal Financing Tools

Office of Energy Efficiency and Renewable Energy (EERE) Unsolicited Proposals

U.S. Dept. of Energy (DOE)

Financial assistance from the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) is awarded on a competitive basis, however, financial assistance can be awarded on...

Community Trade Adjustment Assistance Program

U.S. Economic Development Administration (EDA)

EDA's Community Trade Adjustment Assistance (Community TAA) Program, created by the American Recovery and Reinvestment Act of 2009, is aimed at helping to create and retain jobs by providing project...

Super Energy Savings Performance Contracts

U.S. Dept. of Energy (DOE)

Department of Energy (DOE)'s Federal Energy Management Program (FEMP) assists federal agencies to develop energy savings performance contract (ESPC) projects that help federal agencies meet energy...



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Federal Financing Tools

Tribal Energy Program

U.S. Dept. of Energy (DOE)

The Department of Energy's Tribal Energy Program promotes tribal energy sufficiency and fosters economic development and employment on tribal lands through the use of renewable energy and energy...

Utility Energy Services Contracts

U.S. Dept. of Energy (DOE)

Utility energy service contracts (UESCs) offer the Department of Energy (DOE) an effective means to implement energy efficiency, renewable energy, and water efficiency projects. In a UESC, a...

Section 9005 Bioenergy Program

U.S. Dept. of Agriculture (USDA)

The purpose of this section is to support and ensure an expanding production of advanced biofuels by providing payments to eligible advanced biofuel producers in rural areas. The Agency will...



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Federal Financing Tools

Rural Energy For America Program Grants/Renewable Energy Systems/Energy Efficiency Improvement Program (REAP/RES/EEI)

U.S. Dept. of Agriculture (USDA)

The REAP/RES/EEI Grants Program provides grants for energy audits and renewable energy development assistance. It also provides funds to agricultural producers and rural small businesses to purchase...

1603 Program: Payments for Specified Energy Property in Lieu of Tax Credits

U.S. Dept. of Treasury

Under Section 1603 of the American Recovery and Reinvestment Tax Act of 2009 (Section 1603), the United States Department of the Treasury appropriates funds for grant payments to persons who place...

Biorefinery Assistance Loan Guarantee Program

U.S. Dept. of Agriculture (USDA)

The purpose of USDA's Biorefinery Assistance Loan Guarantee Program is to assist in the development of new and emerging technologies for the development of advanced biofuels, so as to: Increase the...



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Federal Financing Tools

Biomass Crop Assistance Program (BCAP)

U.S. Dept. of Agriculture (USDA)

The Biomass Crop Assistance Program (BCAP), part of USDA's Farm Service Agency (FSA), provides financial assistance to owners and operators of agricultural and non-industrial private forest land for...

Rural Energy for America Program Guaranteed Loan Program (REAP Loan)

U.S. Dept. of Agriculture (USDA)

The REAP Guaranteed Loan Program encourages the commercial financing of renewable energy (bioenergy, geothermal, hydrogen, solar, wind, and hydro power) and energy efficiency projects. Under the...

Global Climate Change Mitigation Incentive Fund

U.S. Economic Development Administration (EDA)

The Global Climate Change Mitigation Incentive Fund (GCCMIF) was established to strengthen the linkages between economic development and environmental quality. The GCCMIF's purpose and mission is to...



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Federal Financing Tools

Business Energy Investment Tax Credit (ITC)

Internal Revenue Service (IRS)

The federal business energy investment tax credit available under 26 USC § 48 was expanded by the 2008 Energy Improvement and Extension Act. The expanded law: Extended the duration of the existing...

Advanced Energy Manufacturing Investment Tax Credit (MTC)

Internal Revenue Service (IRS)

The American Reinvestment and Recovery Act of 2009 (ARRA) authorized the Department of Treasury to award \$2.3 billion in tax credits for qualified investments in advanced energy projects, to support...

High Energy Cost Grant Program

U.S. Dept. of Agriculture (USDA)

The High Energy Cost Grant Program provides financial assistance for the improvement of energy generation, transmission, and distribution facilities serving eligible rural communities with home...



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Federal Financing Tools

Rural Energy For America Feasibility Grant Program

U.S. Dept. of Agriculture (USDA)

The REAP/Feasibility Grant Program provides grants for energy audits and renewable energy development assistance. It also provides funds to agricultural producers and rural small businesses to...

Rural Energy for America Program Grants/Energy Audit and Renewable Energy Development Assist (REAP/EA/REDA)

U.S. Dept. of Agriculture (USDA)

The Rural Energy for America Program Grants/Energy Audit and Renewable Energy Development Assist (REAP/EA/REDA) Grant Program will provide grants for energy audits and renewable energy development...

Energy-Efficient Appliance Manufacturing Tax Credit

Internal Revenue Service (IRS)

The federal Energy Policy Act of 2005 established tax credits for manufacturers of high-efficiency residential clothes washers, refrigerators, and dishwashers produced in calendar years 2006 and...



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Federal Financing Tools

Residential Energy Efficiency Tax Credit

Internal Revenue Service (IRS)

This credit applies to energy efficiency improvements in the building envelope of existing homes and for the purchase of high-efficiency heating, cooling, and water-heating equipment. Efficiency...

Residential Energy Conservation Subsidy Exclusion

Internal Revenue Service (IRS)

If a taxpayer has received any subsidies from a public utilities company for projects completed to improve the energy efficiency of a personal residence, the taxpayer can claim a personal exemption...

Energy Efficiency and Conservation Block Grant (EECBG) Program

U.S. Dept. of Energy (DOE)

The U.S. Department of Energy's (DOE's) Energy Efficiency and Conservation Block Grant (EECBG) Program, funded for the first time by the Recovery Act of 2009, represents a Presidential priority to...



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Federal Financing Tools

Energy-Efficient New Homes Tax Credit for Home Builders

Internal Revenue Service (IRS)

The federal Energy Policy Act of 2005 established tax credits for builders of all new energy-efficient homes, including manufactured homes. Energy saving requirements for this tax credit are as...

Energy-Efficient Commercial Buildings Tax Deduction

Internal Revenue Service (IRS)

The Federal Energy Policy Act of 2005 established a tax deduction for energy-efficient commercial buildings applicable to qualifying systems and buildings placed in service from January 1, 2006,...

Production Tax Credit (PTC)

U.S. Dept. of Energy (DOE)

The Recovery Act allows a tax credit for the generation of qualified energy from qualified facilities. The Production Tax Credit (PTC) specifies amounts, credit periods, and definitions of qualified...



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Finance & Energy – Next Steps

- Linkage between economic development and energy are abundant.
- Development finance is the glue that binds these causes and will be the driver of achieving real progress in state and local communities.
- Progress – Ohio (energy SIDS), New York City (energy districts), Philadelphia (Philadelphia Greenworks Loan Fund)
- Policy – Finance & Energy industries need to craft joint policy on improving public finance tools to address energy development.
 - Expand IDB definition to include energy for manufactures
 - Create tax-exempt bond category for renewable energy projects
 - Streamline federal funding programs to scale
 - Solve PACE bond challenges to get program rolling



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U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

Environmentally-Sustainable Economic Development

The Global Climate Change Mitigation Incentive Fund (GCCMIF)



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U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

- EDA provides **grant-based investments** to units of state and local government and non-profits in communities and regions suffering from economic distress
- EDA targets its investments to promote the attraction of **private capital investment** and the creation and retention of **long-term jobs**
- EDA investments are focused on fostering vibrant **economic ecosystems** to help regions thrive in the global economy
- EDA's economic development programs include **strategic planning, technical assistance, and infrastructure construction**



- Strong proponent of **environmentally-sustainable economic development** as a key driver of economic growth
 - *Green sectors are innovating and growing faster than the rest of the economy **
- EDA's role is operationalized through:
 - Investment Priority (“Environmentally-Sustainable Development”)
 - Global Climate Change Mitigation Incentive Fund (GCCMIF)

* “Innovating the Green Economy in California Regions” UC-Berkeley’s Institute for Urban & Regional Development (<http://communityinnovation.berkeley.edu>): The study found that the green economy accounts for just 1% of California jobs but is growing 50% faster than the economy overall.



- GCCMIF is like a ‘green’ version of EDA’s most flexible program (i.e., Economic Adjustment)
- The proposed GCCMIF project must advance EDA’s economic development mission and fulfill the objectives of the fund:
 - Project Type:
 - Renewable Energy
 - Energy Efficiency
 - Reuse/Recycling/Restoration
 - Green Building
 - Project Output:
 - Green end-product (‘what’)
 - Greening of an existing function/process (‘how’)
 - Creation of (or renovation to) a green building (‘where/in what’)



- Since FY 2008, EDA has invested approximately \$50 million in over 60 GCCMIF projects, that, according to recipient estimates, will result in the creation of over 12,000 jobs and foster over \$1.3 billion dollars in private investment.
 - FY 2008: GCCMIF total funding (\$9.4 million)
 - FY 2009: GCCMIF total funding (\$14.7 million)
 - FY 2010: GCCMIF total funding (\$25.0 million)
 - FY 2011: GCCMIF total funding (?)
- In FY 2011, EDA will invest \$6 million of the GCCMIF in **i6 Green**, a competitive challenge grant program designed to encourage the establishment and expansion of Proof of Concept Centers in support of innovation and entrepreneurship in a green economy.



- **Green Collar Workforce Training Center (Austin, TX):** In FY 2008 and FY2009, EDA invested approximately \$1.9M in American YouthWorks/American Charter Schools to support the renovation of an existing facility into a Leadership in Energy and Environmental Design (LEED) Gold certified Green Collar Workforce Training Center. The Center will offer green workforce training programs for at-risk youth and other members of the South Austin community, providing training in areas such as solar power installation, rainwater harvesting, and green facilities management. The recipient estimates that the project will create 164 jobs.
- **Renewable Energy Resource Center (Maui County, HI):** In FY 2009, EDA invested approximately \$1.06M to support the creation of the Renewable Energy Resource Center (RERC) to advance Hawaii's renewable energy cluster. The RERC will allow the recipient, the Maui Economic Development Board (MEDB), to disseminate information, connect prospects to resources and provide a model to spur business development to meet Maui County's and the State's goals for transition to alternative energy resources. The recipient estimates that the project will create 175 jobs.
- **Solid Waste Recycling Center (Palmer, AK):** In FY 2009, EDA invested \$3M to construct an approximately 23,000 square-foot solid waste recycling building, helping to establish Alaska's first Regional Resource Recovery and Training Park. The building will meet LEED Silver certification standards for New Construction and support the regional recovery of recyclable materials from the solid waste stream. Training in recycling technologies and innovative utilization of recyclable materials will be offered on site by the University of Alaska (Anchorage) and the local Job Corps Center. The recipient estimates that the project will create 177 jobs.
- **Clean Technology and Renewable Energy Revolving Loan Fund Initiative (Dover, DE):** In FY 2010, EDA invested \$500,000 to support the establishment of the Clean Technology and Renewable Energy Revolving Loan Fund (RLF) Initiative to make low interest, longer term loans to private sector companies involved in the development, design, and manufacturing of alternative energy equipment. The goal of the RLF is to attract private sector investment and entrepreneurial growth in environmentally conscious clean technology and renewable energy products and businesses. The recipient estimates that the project will create 200 jobs.
- **Wind Technician Training Turbine (Mitchell, SD):** In FY 2011, EDA invested \$1.2M to fund the acquisition of a wind turbine to train and certify wind technicians as part of Mitchell Technical Institute's wind technology training program. The project was driven by a public-private partnership which included participation by a private sector utility, a tribal education partner, and various federal, state and industry collaborators. The recipient estimates that the project will create 300 jobs.



- Limited funding, significant competition
- Applications for GCCMIF assistance are competitively evaluated based EDA's standard eligibility and distress criteria, investment policy guidelines, funding priority considerations, and the objectives of the GCCMIF.
- Quarterly funding cycle; grants made at EDA's regional offices
- Usually require 50% match
- Applicants should apply under the appropriate EDA federal funding opportunity (FFO) announcement (<http://www.eda.gov/PDF/FY%202011%20EDAP%20FFO-FINAL.pdf>) -- also can be found at Grants.gov
- Questions about application procedures, eligibility requirements, etc. should be referred to the appropriate EDA regional office that serves an applicant's State or region.

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U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

QUESTIONS

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