



Energy Funding Opportunities

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Major Sources of Funding

- Federal
 - American Recovery and Reinvestment (ARRA)
 - Traditional Department Programs
- State
 - American Recovery and Reinvestment (ARRA)
 - Traditional Department Programs
- EECBG: Counties over 200,000
- EECBG: Cities over 35,000
- EECBG: Tribal Governments
- Foundations/Other

Types of Projects Funded

- Deep Research
- Targeted Research in Specific Areas to Attain Performance Goals
- Applied Research for Promising Emerging Technologies
- Performance Demonstrations of Emerging Technologies
- Market Transformation for Newly Commercialized Technologies
- Studies, Outreach and Education
- **Shovel-Ready with Off-the-Shelf Technologies**

Project Metrics & Outcomes

- Energy Saved per Dollar of Funding
- Renewable Energy Installed
- Jobs Created
- GHG Emissions Reduced
- ARRA funds: “shovel ready” project
- Cost-share leveraged
- Cost/Benefit
- Innovation
- Replicability

Federal Funding for Energy

Primary Agencies (ARRA and non-ARRA)

- U.S. Dept of Energy (DOE)
- U.S. Environmental Protection Agency (EPA)
 - Collaborations (e.g. Blue Skyways for Clean Diesel)
- U.S. Dept of Agriculture
- U.S. Dept of Commerce
- National Science Foundation
- Treasury & Internal Revenue Service

Federal Level Energy Funding American Recovery and Reinvestment Act

	<u>\$ Billions</u>
Dept. of Defense	\$ 0.3
Dept of Agriculture	\$28
Dept of Energy (DOE)	\$36.0
General Services Admin	\$ 4.8
Dept of the Interior	no specifics
Environmental Protection Agency	\$ 0.3
Dept of Labor	\$ 0.5
Dept of Transportation	\$ 0.1
Dept of Housing and Urban Development	no specifics
Dept of Education	no specifics
Total Energy in Selected Departments	\$42.0

Federal Renewable Energy Tax Incentives



	<u>\$ Billions</u>
Renewable Energy Electricity Production Tax Credit	\$13.1
Investment Tax Credit (ITC) in Place of the PTC	\$ 0.3
Grants in Place of Tax Credits	not specified
Business ITC, Repeal Limit with Subsidized Financing	not specified
Business ITC, Repeal of Credit Caps	\$ 0.6
Clean Renewable Energy Bonds (CREBs)	\$ 0.6
New: Advanced Grant in Lieu of Tax Credit	

Federal Tax Incentives for Efficiency



	<u>in \$ Billions</u>
Energy Conservation Bonds (ECBs)	\$0.8
Labor Standards for Energy Bonds	not specified
Energy Efficiency Tax Credits	not specified
Efficiency Improvements to Existing Homes	\$2.0
Efficiency and Renewables Equipment, Credit Limit	\$0.3
Advanced Energy Manufacturing Facility	\$1.6
Parity for Transportation Fringe Benefits	\$0.2
Alternative Fuel Refueling Infrastructure Tax Credit	not specified
Plug-In Vehicle Tax Credit	\$2.0

Resource for Energy Incentives



WWW.DSIREUSA.ORG

DSIRE is a comprehensive source of information on state, local, utility, and federal incentives and policies that promote renewable energy and energy efficiency.

U.S. DOE Fossil Fuel R & D



- Total Appropriation \$3.4 billion
- \$1.52 billion for competitive solicitations
 - Industrial carbon capture
 - Industrial energy efficiency
 - Innovative concepts for reusing CO²
- \$70 million for characterization geologic formations & training
- \$1 billion fossil fuel R&D programs

U.S. DOE: Office of Energy Efficiency & Renewable Energy (EERE)

	<u>\$ Billions</u>
R&D (includes Biomass [\$800 million], Geothermal [\$400 million])	\$2.5
Energy Efficiency and Conservation Block Grants	\$3.2
Weatherization Assistance Grant Program	\$5.0
State Energy Grant Program	\$3.1
Grants Advanced Battery/Component Mfg Facilities	\$2.0
Grants for Alternative-Fuel Vehicles	\$0.3
Transportation Electrification	\$0.4
Energy Efficient Appliance Rebate Program	\$0.3
Total for EERE (including programs not shown above)	\$16.8

U.S. DOE & Minnesota's State Energy Grant Program

Federal funds require spending plans that:

- Identify and describe programs
- Specify program outcomes (energy saved, jobs, CO² reduced, etc)

Federal Departments have approval authority over the plans

State Agencies must have authorization from the Minnesota Legislature to receive and spend any funds.

The MN Legislature provided authorization for ARRA funds and developed spending guidelines for state agencies that were eligible to receive funds

State of MN ARRA Funds for Energy and Environmental Programs (\$ Thousands)

WWW.MMB.STATE.MN.US/RECOVERY

MPCA: Water Quality Mngt	\$ 727.6
MPCA: Clean Diesel Campaign	\$ 1,730.0
MPCA: Leak Underground Storage	\$ 4,091.2
MPCA: Source Water No. Shore	\$ 1,000.0
DEED: Clean Water Revolving Fund*	\$ 82,564.0
DEED: Drinking Water Revolving*	\$ 24,577.0
DEED: Brownfield's	\$ 5,400.0
MN DOC State Energy Program	\$ 56,172.0
MN DOC Weatherization	\$132,000.0
MN DOC EECBG	\$ 10,644.0
MN DNR: Wildfire Mngt	\$ 5,000.0

* Public Facilities Authority

What's Taking So Long?



The National Environmental Policy Act (NEPA)

A process to integrate environmental values into decisions

- Categorically excluded from a detailed environmental analysis
- Written environmental assessment (if no significant impact is determined, project can proceed)
- Environmental Impact Statement (EIS)

Minnesota's Guidelines for Weatherization ARRA Funds

Minnesota Session Laws CHAPTER 138--S.F.No. 657

Weatherization Program

- Consistent with federal weatherization program guidelines and adopts federal program priorities
- Requires office to request waiver to weatherize abandoned and foreclosed residential properties acquired and rehabilitated through Neighborhood Stabilization Program
- Eligible Households that have Solar Heat funded by Renewable Energy Equipment Program will be eligible for weatherization

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

RESIDENTIAL ENERGY EFFICIENCY PROGRAMS: Minnesota Housing Finance Agency: Provide loans, grants, and rebates, and additional programs to finance energy efficiency improvements in dwellings, including the purchase and installation of energy efficient windows.

INNOVATIVE ENERGY RESIDENTIAL EFFICIENCY PROGRAM: Grant to a city of the first class located in the service area of Minnesota Power for basic and more comprehensive conservation program. Program must include revolving loans and financing options allowing residents to finance energy efficiency improvements, at least in part, with energy savings.

SMALL CITY ENERGY EFFICIENCY GRANT: Grant to a small rural city with a population under 4,000 located in the service area of Minnesota Power for basic and comprehensive residential energy conservation program. Program must include revolving loans and financing options that allows residents to finance energy efficiency improvements, at least in part, with energy savings

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

OUTREACH ACTIVITIES TO INCREASE RESIDENTIAL PARTICIPATION IN ENERGY EFFICIENCY ACTIVITIES

RFP is open now. Proposals due November 6, 2009.

Grant to community based organization for outreach activities to maximize the number of new households participating in programs.

The methods used to contact households may include, but are not limited to, direct contact with households, advertising in traditional and nontraditional media, distribution of literature, presence at community events, partnering with community organizations, and other innovative measures.

WWW.ENERGY.MN.GOV

Click on: **project funding**



Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

LOCAL GOVERNMENT AND SCHOOL DISTRICT RENOVATIONS

Grant program for local governments and school districts energy efficiency improvements in existing facilities.

Prioritize: Lighting, windows, recommissioning, other cost-effective measures ready for implementation

May require facility to commit to implement future activities, designed to create additional energy or operating savings such as training.

Statewide geographic distribution of projects, optimized energy savings, and an improved learning environment for schoolchildren.

B3: Building, Benchmarking and Beyond – Benchmark energy use of MN's public buildings to identify facilities that could benefit most from energy retrofits

WWW.MNBENCHMARKING.COM

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

STATE GOVERNMENT BUILDING RENOVATIONS

Prioritize: Lighting, windows, recommissioning, other cost-effective measures ready for implementation

May develop a system to set energy-reduction goals for state buildings, to automate utility bill data and analysis, to develop a system for reporting monthly energy use relative to these state building energy-reduction goals, and to install individual metering devices for separate buildings.

May require facility to commit to implement future activities, designed to create additional energy or operating savings such as training.

B3: Building, Benchmarking and Beyond – Benchmark energy use of MN's public buildings to identify facilities that could benefit most from energy retrofits WWW.MNBENCHMARKING.COM

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

ENERGY TECHNOLOGY TRANSFER CENTER

Grant to a nonprofit organization with extensive experience in the delivery of energy-efficient programs and technical analysis to develop an energy technology transfer center in this state.

DEVELOP PLAN FOR NATIONAL ENERGY EFFICIENCY CENTER

To test energy efficiency equipment and systems to measure actual energy savings performance

To provide an ongoing assessment of energy efficiency best practices to disseminate information and provide training on technology developments and best practices

Apply for grant to develop center if a federal grant becomes available.

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

RENEWABLE ELECTRIC GENERATION AND GEOTHERMAL FACILITY REBATES

Eligibility: a homeowner's primary residence; or
a business with 20 or fewer full-time employees

Rebate Amounts: the lesser of \$10,000 for homeowners or
\$25,000 for businesses or 35% of the cost, including
installation costs.

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

SOLAR REBATE PROGRAM (residential and small businesses)

Solar Electric (Waiting List)

NABCEP certified PV installer \$2.00/watt, other installer \$1.75/watt Residential = 5 kW max; Small Business =10kW max

Solar Thermal

Licensed plumber or general contractor

Residential single family: \$25/sq ft net aperture; \$2,000 max.

Businesses & multi-family:\$15/sq ft net aperture; \$20,000 max

Licensed plus NABCEP

Residential single family: \$25/ sq ft net aperture; \$2,000 max.

Businesses & multi-family: \$15/sq ft net aperture; \$20,000 max

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

SOLAR CITIES PROGRAM

Grants to local units of government for the installation of large and small-scale solar electric or thermal projects.

Grant for innovative energy storage technology, in a geographically-concentrated area.

Program must leverage funds from the federal Department of Energy to demonstrate the impacts of these projects on the electric grid, and the costs and benefits to ratepayers.

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

SCHOOL DISTRICT AND LOCAL GOVERNMENT RENEWABLE ENERGY GRANT PROGRAM

- School Districts required to integrate into education
- Solar PV \geq 100 kW, the lesser of 40% total cost or \$200,000
- Solar PV $<$ 100 kW, the lesser of 40 % or \$100,000
- Wind \geq 40 kW, 35% project cost, up to \$150,000
- Wind $<$ 40 kW, 35% project cost, up to \$25,000
- Geo-source Heat 35% project cost, up to \$100,000
- Solar thermal 50% project cost, up to \$75,000
- CHP & District Energy 35% project cost, up to \$200,000

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

EMERGING RENEWABLE ENERGY INDUSTRIES GRANT

Grants to eligible businesses to assist in the development of renewable energy systems, energy storage systems, geothermal energy systems for heating and cooling, and businesses that manufacture components for these types of energy systems.

- Establish MN as mfg center
- Leverages other funds
- Creates jobs
- Increases mfg that advanced green economy

Minnesota's Guidelines for State Energy Office ARRA Funds: CHAPTER 138--S.F.No. 657

ENERGY IN COMMERCIAL AND INDUSTRIAL BUILDINGS

- Installing energy efficiency improvements
- Installing devices that use renewable energy
(excludes combustion using mixed MSW & RDW)
- Installing geothermal system for heating and cooling
- Maximum grant \$500,000
 - Job creation/retention
 - Energy saved or Renewables increased
 - Dollars leveraged
 - Long term sustainability
 - Cost effectiveness

Minnesota's Guidelines for State Energy Office ARRA Funds

Appliance Rebate Program- ARRA

- \$5,009,000
- Plan due to US DOE Oct 15th
- Program launch in spring 2010
- MN residential consumers who purchase a white major appliance
- Recycle (fully take off the grid) currently used refrigerators
- Range of \$100 - \$200 per appliance
- Program rules, criteria & rebates choices are in planning stage.

Important ARRA Programs

Energy Efficiency and Conservation Block Grants (EECBG):

Competitive grant process to enhance energy efficiency and reduce energy use.

- Local Governments
- Cities
- Counties

The Facility Cost-share Program: Competitive grant process for local governments and school districts to make energy efficiency improvements to *existing* facilities.

- School Districts
- Cities
- Counties

EECBG: What is it?

WWW.EECBG.ENERGY.GOV

\$6,386,460 available to eligible entities (ARRA)

Cities and counties with an incorporated government that were **NOT** eligible to receive formula grants are considered eligible

- Awards will be made available through a competitive grant process
- Fair Competition:
 - 5% reserved for smaller entities (<2,000)
 - 10% reserved for medium entities (2,000 – 10,000)
 - Remainder available to most competitive proposals

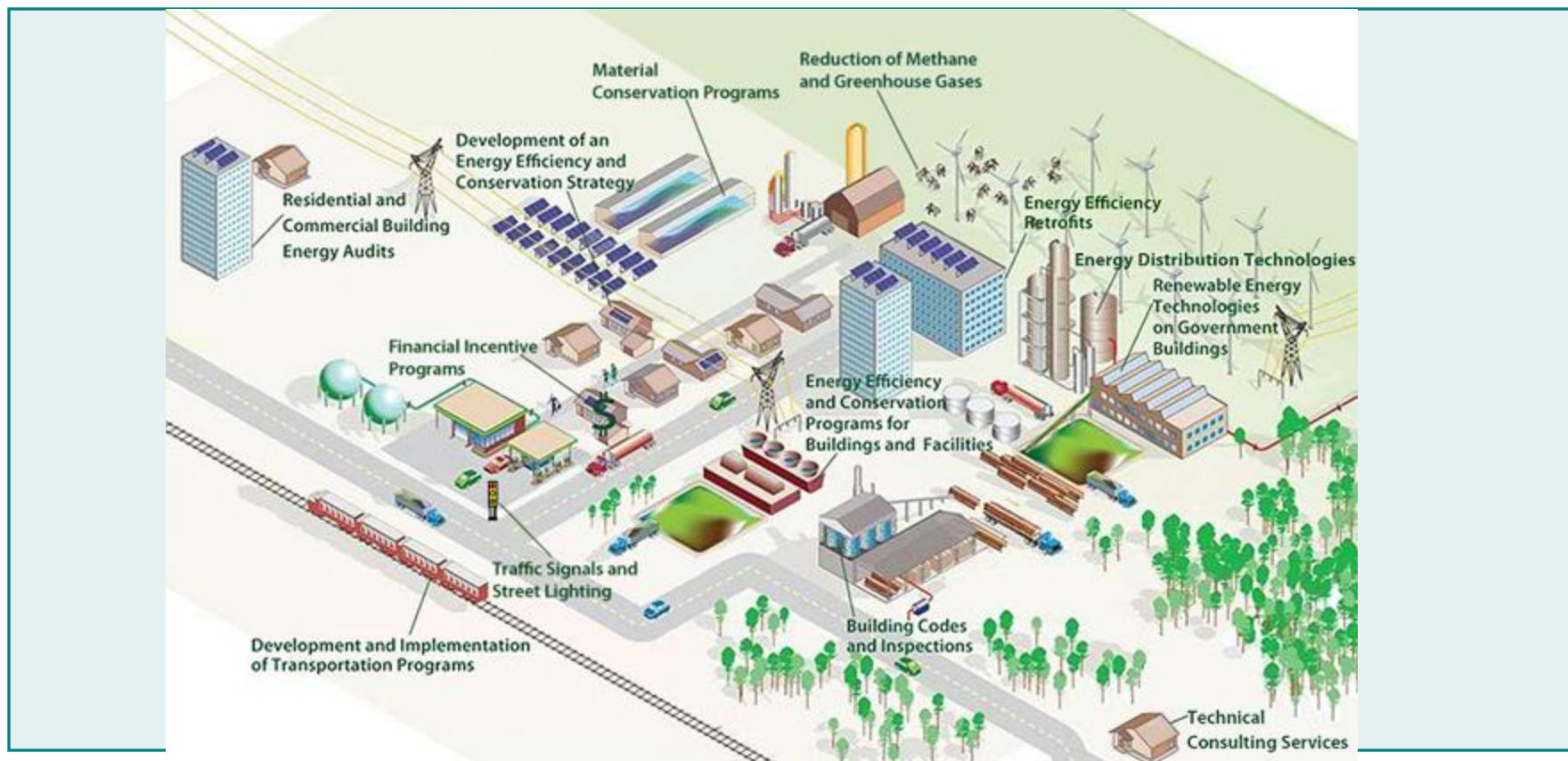
EECBG: Purpose

The purpose of the EECBG Program is to assist eligible entities in creating and implementing strategies to:

- Reduce total energy use;
- Stimulate the economy and job market;
- Reduce greenhouse gas emissions;
- Maximize benefits for local and regional communities; and
- Improve energy efficiency in the building, transportation, and other appropriate sectors

EECBG Eligible Activities

But remember NEPA



EECBG: What to Prepare

More information will be available upon release of the RFP, however there are several steps that can be taken now in preparation:

- Consider projects that will have substantial energy savings
- Gather energy information for buildings or facilities intended to be included in proposal
- Calculate estimated energy savings for project
- Estimate labor hours and jobs created or retained for possible projects
- Calculate estimated greenhouse gas emissions reduction
- Consider projects that have little or no potential NEPA conflicts

EECBG: Evaluation

Proposals will be evaluated based on the following criteria:

- Energy saving per grant dollar
- Jobs created per grant dollar
- Project readiness
- Greenhouse gas emissions reduction

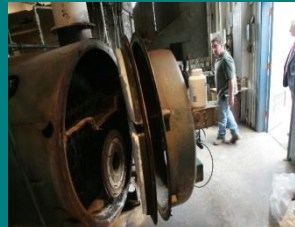
Other Considerations:

- Amount leveraged
- Innovation



Facility Cost-Share Program: What is it?

- Awarded through a competitive process to local governments and school districts to make energy efficiency improvements to *existing* facilities.
- Priority improvement projects include lighting upgrades, energy-efficient windows, energy recommissioning, and other cost-effective projects
- Ready for immediate implementation
- Provides funds for up to 25% the cost of a facility improvement project; we expect to give out up to \$100,000 for each award.



Facility Cost-share: Eligibility



Eligible entities include school districts, cities, counties, and townships. Portions of the funds will be dedicated to assure there is funding for each type of facility,

Group	Reserved Funds
School Districts	25%
Cities	10%
Counties	10%
Townships	5%

As mandated by the legislature, this program is largely focused on school districts.



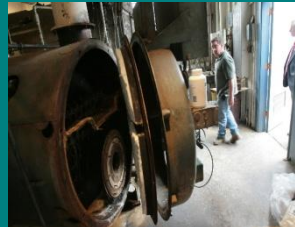
Facility Cost-share: What to Prepare

We suggest that eligible entities begin to gather:

- Energy saving estimates
- Number of labor hours expected
- Minnesota B3 benchmarking

➤ www.mnbenchmarking.com

The RFP for the cost-share program will be posted on our website when it becomes available in late October or early November.



Some Open State of MN RFPs



MPCA Environmental Assistance Grant Program – waste prevention, reduction, source separation, storm water sources.

www.pca.state.mn.us/grants/eagrants

MPCA Environmental Assistance Loan Program -- small to medium-sized businesses and political subdivisions of Minnesota, projects related to pollution prevention, source reduction, recycling, and source-separated composting. www.pca.state.mn.us/grants/ealoans.html

MN DNR Solar Energy Legacy Grants – solar for parks and trails

www.dnr.state.mn.us/grants/recreation/se_legacy.html

Minnesota Office of Energy Security--Develop Modeling Tool for GHG Emissions from Solid Waste

www.state.mn.us/portal/mn/jsp/content.do?subchannel=null&programid=536917261&sc3=null&sc2=null&id=-536893811&agency=Energy



Public Building Enhanced Energy Efficiency Program (PBEEEP)

WWW.PBEEEP.ORG



- Targets cost effective efficiency improvements
- Access to financing at attractive rates

Foundations & Other Funding

Fee Based Organizations providing searchable grant makers databases and tools to help write grants:

Minnesota Council of Foundations www.mcf.org

Minnesota Grantmakers On-line gives you instant access to the largest, most up-to-date database of Minnesota grantmakers and grants.

Grant Station www.grantstation.com

Provides access to a comprehensive online database of grantmakers



Other Funding Lists



Office of Energy Security's "New Funding Opportunities in the Fields of Energy and Environment" Linda.Limback@state.mn.us

Next Step Minnesota Sustainable Communities Network
www.nextstep.state.mn.us

Minnesota Clean Energy Resource Teams (CERTs)
www.cleanenergyresouceteams.org

MN State Register – published every Monday
http://www.comm.media.state.mn.us/bookstore/state_register.asp

UMN Institute for Environment – updated monthly with a focus on deep research <http://environment.umn.edu/research/>

Questions?



www.commerce.state.mn.us/ARRA/StimulusPackage.html

