This is an open competitive process to distribute Qualified Energy Conservation Bond (QECB) allocations to Michigan Communities receiving the highest scores from the checklist of DELEG priorities as listed below. Eligible applicants will agree to accept a minimum allocation of \$100,000 and/or maximum of \$5 million in QECB tax credit bonds, and to implement qualified energy conservation projects within their jurisdictions. These bond allocations will be issued for a 180 day period. Extensions may be granted for up to 30 days based upon DELEG evaluation and approval.

The timeline for communities to apply for a QECB allocation is between June 7, 2010 and close of business on July 30, 2010.

- Applications can be downloaded from this <u>website</u>, must be sent by U.S. Mail, and received by DELEG-Bureau of Energy Systems up until the closing date of July 30, 2010.
- Applicants receiving a score of 85 or above will be given priority selection.
- Applications will be reviewed and scored as they are received.
- Bond allocations will be made until all available QECBs have been awarded.

The Michigan QECB application should include a cover page with narrative addressing:

- (1) The scope of the proposed project, indentifying which of the Qualified Projects from those listed in Appendix A would be addressed through use of these bonds.
- (2) The estimated energy usage reduction and cost savings to be derived and methods used to determine the reductions and savings.
- (3) The time frame of the project, including bond issuance and project start dates, and completion date.
- (4) The summary of the project management and monitoring to be used.

Once all required information is received, the Michigan QECB application will be considered by the Bureau of Energy Systems Review Committee based on feasibility, estimated energy usage reduction and savings, eligible uses of funds, availability of funds, job creation and retention, environmental benefits and an

emphasis on participation in the Michigan's new Green Communities' Challenge (see Appendix B). Total maximum points are 100.

SCORING of APPLICATIONS WILL BE BASED UPON THE FOLLOWING CATEGORIES:

- 1. Proposal Quality and Completeness of Work Plan, Timeline and Budget (15 points) (Proposals will be evaluated based on the degree of completeness, level of detail, and overall quality of information contained within the narrative.)
- 2. Project Feasibility and Timeline (15 points) (Projects will be evaluated on their feasibility to achieve the anticipated impacts and outcomes within the established timeline.)
- 3. Energy and Cost Savings (20 points)
 (Project will be evaluated on the overall magnitude of anticipated energy generation and/or reduced energy purchases and associated cost savings.)
- 4. Project Costs and Return on Investment (15 points)
- 5. Greenhouse Gas Reduction and Other Environmental Benefits (15 points)
- 6. Participation in the MI Green Community Challenge (20 points) (Resolution Passed and filed with BES see Appendix B)
- 7. Not involved in the Green Communities Challenge but having an energy conservation plan/strategy in place. (10 pts) (If the community has not accepted the Green Communities Challenge, but has an energy conservation strategy/plan in place, has existing or planned partnerships with energy efficiency and renewable energy stakeholders (ex: non-for-profit energy and environmental organizations, business organizations, renewable energy or energy efficiency businesses, colleges or universities with renewable energy or energy efficiency programs).

Appendix A—Qualified Purposes as defined by IRS Notice 2009-29 54D(f)

Qualified Purposes:

Qualified Energy Conservation Bonds can be used for the following purposes:

- Capital expenditures incurred for the purposes of:
 - o Reducing energy consumption in publicly-owned buildings by at least 20 percent
 - o Implementing green community programs
 - o Rural development involving renewable energy
- Expenditures with respect to research facilities and research grants, to support research in:
 - o Development of cellulosic ethanol or other non-fossil fuels
 - o Technologies for the capture and sequestration of carbon dioxide produced through the use of fossil fuels
 - o Increasing the efficiency of existing technologies for producing non-fossil fuels
 - o Automotive battery technologies and other technologies to reduce fossil fuel consumption in transportation
 - o Technologies to reduce energy use in buildings
- Mass commuting facilities and related facilities that reduce the consumption of energy
 - o Reduce pollution from vehicles used for mass commuting
- Demonstration projects designed to promote the commercialization of:
 - Green building technology
 - o Conversion of agricultural waste for use in production of fuel or otherwise
 - o Advanced battery manufacturing technologies
 - o Technologies to reduce peak use of electricity
 - Technologies for the capture and sequestration of carbon dioxide emitted from combusting fossil fuels in order to produce electricity
- Public education campaigns to promote energy efficiency.



QECB Communities Challenge Project Evaluation Process

Appendix B-- Green Communities Challenge

Michigan Green Communities Challenge - An Energy Efficiency and Conservation Strategy

The Basic Challenge - Government Policy Adoption

All Michigan communities are eligible to complete the Basic Challenge, a program designed to reflect the governing body's commitment to adopt policies and programs of energy efficiency and conservation. If a community decides to accept the Basic Challenge, its governing board must pass a resolution indicating its desire to participate, and <u>complete Steps 1–6</u> as outlined in the attached materials.

How your community can get started...

- **1. Sign Up** by passing the sample resolution (or a similar resolution) indicating that your governing board wants to participate in the Michigan Green Communities Challenge. (Attachment A) In passing the resolution, you will have completed Step 1 of the Basic Challenge. Fax the resolution to the Michigan Green Communities Challenge c/o Michigan Municipal League at 734-662-8083.
- 2. Complete the <u>Intention and Progress Survey</u> (Attachment B) online OR <u>fax the survey</u> to the Michigan Green Communities Challenge c/o Michigan Municipal League at 734-662-8083.
- **3.** Begin work on <u>Steps 2–6 of the Basic Challenge</u>. Steps 2-6 will provide a step-by-step plan for your community to develop, implement and measure your goals and objectives meeting the Basic Challenge. <u>Attachment C</u> is intended to provide suggested goals and activities for Step 5.

Challenge Progress Report

For more information, please contact:

<u>Sue Jeffers</u>, Green Initiatives Coordinator, Michigan Municipal League <u>mailto:sjeffers@mml.org</u> <u>Jeff Spencer</u>, Green Communities Coordinator, Bureau of Energy Systems <u>Jan Patrick</u>, EECBG Small Cities Coordinator, Bureau of Energy Systems

The Michigan QECB Communities Challenge Project Evaluation Process Appendix C—Green Communities Challenge For Step 5.

Michigan Green Communities Challenge

A community should consider the following suggested goals and activities for inclusion in Step 5 of the Challenge:

1. Develop and implement an energy improvement plan for Governmental operations.

All local governments engage in planning—which can include land use, transportation, open/public spaces, historic preservation, etc. Increasingly, local governments are recognizing the value in developing plans regarding energy usage. An energy efficient plan outlines the measures a jurisdiction has and will implement to become more energy efficient and reduce its energy consumption. To determine what types of energy-efficient measures will be implemented, the jurisdiction must first assess the current energy consumption of government-owned and leased facilities. It generally applies to retrofitting existing buildings and sets standards for new governmental facilities to incorporate energy-efficient and sustainable building techniques in their construction.

Implementing energy-efficient and conservation measures into daily operations are essential for reducing energy consumption. An energy improvement plan provides examples of energy-efficient measures that can be applied in areas such as lighting, temperature control, infrastructure, purchasing/procurement, renewable energy, and alternative fuels. Employee awareness should be a fundamental part of the plan. By educating employees about the need for resource conservation and what they can do to make a difference, municipal facilities will become more energy efficient. Continue tracking energy usage through Energy Star's Portfolio Manager or ICLEI's CACP 2009 software greenhouse gas emissions through a period of three years.

Resources / Links:

Guidelines for Energy Management Energy Star's Cash Flow Opportunity Calculator DTE Your Energy Savings

2. Adopt a community sustainability plan, climate protection resolution, or similar commitment by the governing body.

By adopting a sustainability plan, or a similar document to organize green initiatives, local governments can coordinate efforts that often cross departmental boundaries, gain input and buy-in from governmental staff and additional stakeholders, and track progress to ensure that goals are met. While each jurisdiction should create a plan that suits its

particular situation, the development and adoption of the plan is an important exercise that can benefit communities of any size and lead to demonstrable results. Credit is also given for adoption of resolutions that are circulating nationally—or their equivalent—to promote responsible actions on climate protection through emissions reductions. While these resolutions are best coupled with plans for specific actions and policies, they represent a public commitment on behalf of the community and can be a positive first step.

Resources / Links:

City of Grand Rapids
Grand Valley State University
Michigan Climate Challenge
Mayors Climate Protection Center
Intergovernmental Panel on Climate Change
Michigan Climate Action Council
The Michigan Climate Action Plan
ICLEI Five milestones for sustainability

Develop recycling and household hazardous waste programs for residents and businesses.

Everyone produces waste. Although most waste can be safely disposed in landfills, much of the solid waste stream contains materials that could be processed into usable commodities. Some common recyclables include metals and corrugated cardboard containers. By providing curbside and drop-off programs, a community is supporting jobs (for every one job created in the waste industry, five jobs are created in the recycling industry) and providing residents and businesses an opportunity to do something positive for their community. Recycling reduces energy use and greenhouse gas emissions in addition to extending landfill life and protecting natural resources from the damage of harvesting, mining, and depletion of non-renewable resources such as oil and metals.

Resources / Links:

City of Grand Rapids
U.S. EPA
Tools for Local Government Recycling Programs
Michigan Dept. of Natural Resources and Environment
WARM - calculator for measuring greenhouse gas (GHG) reductions
Northeast Recycling Council environmental benefits calculator

4. Consider performance contracts.

An energy audit gives a snapshot look at government facility energy use trends, consumption, and potential opportunities to help better manage facilities. Such an audit evaluates energy consumption practices and provides an analysis that can be the foundation for continued business planning, especially in identifying areas for energy and cost savings within existing facilities. The use of energy-saving performance contracting is becoming increasingly attractive to local governments. This is when a government or organization contracts with a private firm to assess and correct energy deficiencies—often with little or no actual cost to the locality as the long-term energy savings offset the costs.

Resources / Links:

Rebuild Michigan

EPA Webinar: Maximize Stimulus Funding with Performance Contracting and ENERGY STAR

Retired Engineers Technical Assistance Program (RETAP)

Energy Services Coalition

International Performance Measurement and Verification Protocol

U.S. Environmental Protection Agency

Portfolio Manager Factsheet

5. Consider the purchase of electric power from renewable sources or install renewable energy technology (solar, wind, or geothermal) for use in government facilities.

The total of purchased renewable energy and on-site produced renewable energy must equal at least 1% of the energy used of all governmental facilities.

Resources / Links:

Clean, Renewable and Efficient Energy Act (2008 PA 295)

- 6. Develop a policy to utilize energy-efficient and dark sky-compliant outdoor light fixtures.
- 7. Establish a policy of adherence to LEED certification criteria for all new government facilities.
- 8. Approve or build a LEED-certified government building or renovate an existing building to LEED-certified level.

- 9. Implement an internal government program that reduces, reuses and recycles paper, plastic and other materials.
- 10. Establish a procurement policy of a minimum of 30 percent postconsumer recycled content for everyday office paper use (consistent with the current federal government policy).
- 11. Adopt a "green fleet" policy that incorporates, at a minimum, the purchase of lowemitting, fuel-efficient vehicles for vehicle fleet replacement and the use of alternative fuels (biodiesel, natural gas, and ethanol) in fleet operations.
- 12. Promote light rail systems, increased busing, and other modes of transportation.
- 13. Develop and implement a plan for tree preservation and planting.
- 14. Adopt an anti-idling policy for government fleet vehicles.
- 15. Develop diesel engine retrofits partnership (NOx filters and particulate traps) with the heavy construction industry to reduce air pollutants.
- 16. Provide employee benefits for ride sharing, walking, biking or taking public transit to work.
- 17. Adopt a policy that a minimum of 20 percent of the eligible workforce should participate in alternative work schedules or telework by 2010.
- 18. Develop an employee education program on policies/practices relating to the environment and energy conservation.

19. Establish an advisory commission (or "Green Team") composed of local residents and business representatives to advise and assist the local governing board on policies and practices dealing with the environment, energy efficiency and conservation.

Resources/Links:

ICLEI--Outreach and Communications Guide- A tool to help local governments effectively communicate climate information to their constituencies

20. Develop and implement an energy efficiency and conservation education program for the local community dealing with the environment and energy.

21. Create a water protection education program.

Water is essential for communities and cannot be taken for granted. Education establishes a foundation for working together to secure and protect this vital natural resource. Understanding water's flow through our daily lives informs the debate about the cost and value of public investments in municipal water supplies.

Resources / Links:

American Water Works Association U.S. EPA Water Water Resources Advisory Council Statewide Resource Network SEMCOG

- 22. Offer incentives for residents and businesses to retrofit all lighting systems with energy-efficient bulbs.
- 23. Target major institutions and industries for an educational campaign about ways to reduce energy consumption.
- 24. Create a program to help residents replace older air conditioning and refrigeration units with more efficient models.
- 25. Implement real-time pricing of electricity to show residents the increased cost they experience during peak demand times.

26. Partner with nonprofit organizations and governmental agencies for the purpose of retrofitting existing facilities to improve energy efficiency.

27. Develop and implement programs to conserve energy used in transportation, including but not limited to:

- Employee flex time programs;
- Promoting use of satellite work centers;
- Development and promotion of zoning guidelines or requirements that promote energy efficient development;
- Development of infrastructure such as bike lanes and pathways and pedestrian walkways;
- Synchronization of traffic signals;
- State/local/regional integrated planning activities (i.e. transportation, housing, environmental, energy, land use)
- with the goal of reducing greenhouse gas emissions and vehicle miles traveled;
- Improvements in operation and system efficiency of the transportation system such as implementation of intelligent transportation system (ITS) strategies;
- Idle-reduction technologies and/or facilities to conserve energy, reduce harmful air pollutants, and greenhouse gas emissions from freight movement; and
- Installation of solar panels on interstate rights-of-way to conserve energy in highway operations and maintenance activities.

28. Implement distributed energy resource technologies that significantly increase energy efficiency, including:

- District heating and cooling systems
- Combined heat and power systems
- Cogeneration systems
- Energy storage systems
- Absorption chill
- Desiccant humidifiers
- Micro turbines
- Group source heat pumps

29. Consider the implementation of technologies to reduce, capture, and, to the maximum extent practicable, use methane and other greenhouse gases generated by landfills or similar waste-related sources, such as wastewater treatment plants, operations producing food waste, dairy farms and other animal operations.

Resources / Links:

The Michigan Climate Action Plan

- 30. Replace traffic signals and street lighting with energy efficient lighting technologies, including light emitting diodes; and any other technology or equal or greater energy efficiency.
- 31. Update government buildings by developing, implementing and install onsite renewable energy technology that generates electricity from renewable resources, including solar energy, wind energy, fuel cells, and biomass.
- 32. Consider any other appropriate activities which have been outlined within a community's Energy Efficiency and Conservation Strategy as developed under the EECBG program.

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