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***Green Buildings & Infrastructure Program
Commercial, Industrial, & Institutional Initiative***

**Feasibility Study
and
Design & Construction
GRANTS**

Background, Guidelines, Application Forms and Instructions
Solicitation No. 2004-GB-01

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1. Summary

The Massachusetts Technology Collaborative (MTC), as administrator of the Renewable Energy Trust (RET), is seeking applications to participate in the MTC's Commercial, Industrial and Institutional Initiative Feasibility Study and Design & Construction Grants.

This Solicitation invites grant applications for up to \$40,000 per feasibility study or up to \$650,000 per design & construction project for development of at least 10 kilowatts (100 kilowatts for wind) of eligible renewable energy generation system(s) at commercial, industrial, and institutional facilities that are connected to the local electric distribution grid in Massachusetts and consume more than 50% of the renewable energy on-site. The applicant project site(s) must be a customer of one of the investor-owned electric distribution utilities in Massachusetts.

2. Who We Are

2.1. The Massachusetts Technology Collaborative

The Massachusetts Technology Collaborative (MTC) is an independent economic development agency chartered by the Commonwealth to serve as a catalyst for growing the state's innovation economy. MTC brings together leaders from industry, academia, and government to advance technology-based solutions that lead to economic growth and a cleaner environment in Massachusetts. MTC energizes emerging markets in the high-tech sector by filling gaps in the marketplace, connecting key stakeholders, conducting critical economic analysis, and providing access to intellectual and financial capital. For additional information about MTC and its programs and initiatives, please visit our website at www.masstech.org.

2.2. The Renewable Energy Trust

MTC administers the Commonwealth's Renewable Energy Trust Fund (the Trust) to help build a sustainable, competitive market for renewable energy in the Commonwealth. The Trust was created by the Electric Utility Restructuring Act of 1997. MTC's legislative mandate is to increase the supply of and demand for green power while expanding economic activity in the state's renewable energy industry. The Trust's grant making activities are focused in the following four areas: Education and Public Awareness, Industry Support, Green Buildings and Infrastructure, and Green Power.

2.3. Green Buildings & Infrastructure Program

The Green Buildings & Infrastructure Program is one of several areas of current Trust focus. The goal of the Green Buildings & Infrastructure Program is to stimulate the increased construction of green buildings in general, and the use of renewable energy technologies in particular in order to increase knowledge about the benefits of green buildings and renewable energy technology among building professionals and the general public. The Program makes investments in projects ranging from renewable energy retrofit projects to new construction of buildings incorporating green building design and renewable energy systems.

3. Commercial, Industrial & Institutional Initiative

Under the Commercial, Industrial & Institutional Initiative ("CI³"), MTC has committed \$6 million of Trust funds to expand the production and use of renewable energy technologies in Massachusetts at commercial, industrial, and institutional facilities that are connected to the local electric distribution grid. CI³ includes two main activity areas: Feasibility Study Grants and Design & Construction Grants. The objective of the CI³ is to investigate and demonstrate the application of renewable energy technologies that are appropriate for the commercial, industrial and institutional market sectors. MTC seeks to focus this initiative on where and how these large energy users can use renewable energy to generate electricity on-site, where it has the greatest value as an offset to power purchases and/or a relief of grid congestion.

CI³ grant opportunities offered via this Solicitation are for Feasibility Studies and Design & Construction. These grant awards may be used to facilitate the installation of distributed renewable energy generation projects on existing buildings (retrofits) or in conjunction with major renovation/addition projects or new construction projects. Eligible building types include commercial, industrial, or institutional. The \$6.0 million budget is allocated as follows:

- 10% or \$600,000 for **Feasibility Study Grants**
- 90% or \$5,400,000 for **Design & Construction Grants**

The CI³ will offer funding in a series of competitive rounds over a period of three (3) years. Two (2) competitive rounds are scheduled to be offered during each calendar year. Applicants are required to submit proposals for **either** a Feasibility Study Grant or a Design & Construction Grant depending on the stage of development of their project. MTC seeks to develop a diverse project portfolio and therefore, reserves the right to adjust support levels for technologies over time to affect this project mix. Other adjustments in the allocation of funding levels may also be necessary on future rounds to ensure diversity of business types or locations. MTC retains sole discretion to make any and all such adjustments it deems appropriate.

3.1. Overview - Feasibility Grants

MTC will award cost-sharing grants for Feasibility Studies not to exceed \$40,000 per proposed renewable energy project. A successful applicant will be required to contribute at least 20% of the total study cost or \$5,000, whichever is less. The applicant is required to identify the lead consultant/engineer employed or retained to complete the proposed feasibility study. MTC's feasibility study funding may only support activities related to the investigation of the use of renewable energy technologies.

Eligible applicants will propose renewable energy projects that address MTC's mission and the applicant's business purposes. Such projects could include:

- Distributed Renewable Energy electricity generation (e.g. hydroelectric, solar, wind, biomass, fuel cell applications);
- Hybrid systems (i.e. combining such Renewable technologies with non-renewable system back-up);
- Combined heat and power distributed generation with an eligible Renewable-fueled electricity generation component; and
- Green building design and/or load shedding in combination with the above.

Partial payment for the Feasibility Study is contingent upon presentation of the technical and economic analyses to the project customer. Final payment is contingent upon submission to MTC of the final feasibility report with an original signed invoice and a copy of the invoice from the lead consultant/engineer. The report is required to include technical and financial evaluations of the proposed project, discussion of barriers to implementation, and a thorough return on investment analysis. MTC may use this information to present and promote promising ideas to others.

Applicants are encouraged to review Attachment C for Feasibility Study Requirements and Attachment E for an example of the Project Grant Agreement.

3.2. Overview - Design & Construction Grants

MTC will award grant funding simultaneously for both the Design phase and the Construction phase of a project. Applicants are required to apply to MTC for support of both design and construction phases via one proposal. The applicant will request a funding level for each phase as part of their application. After MTC awards have been made, separate grant agreements will be executed first for the design phase and then for the construction phase.

The **total** MTC incentive level for the design and construction phases will be determined on an **incentive-per-watt of renewable energy capacity basis** as described in Section 4.5.2. The matrix of incentives

will vary with project scale and type of renewable energy technology. MTC's design and construction incentive-per-watt will be capped at maximum levels as established below:

- The **total** maximum payment for design and construction will not exceed **\$650,000 or 50%** of the total incremental design and construction costs, whichever is less.
- The maximum level of MTC's **Design** phase support will not exceed **\$150,000 or 50%** of the total incremental design costs, whichever is less.
- The maximum level of MTC's **Construction** phase support will not exceed **\$500,000 or 50%** of the total incremental construction costs, whichever is less.

The design portion of any award must be twenty-five (25%) percent or less of the entire design and construction award. The applicant must submit separate budgets for the design and construction phases.

According to the table in Section 4.5.2, the design and construction incentive-per-watt can be increased by adding additional features to a particular project. For example, employing energy storage for critical load support into the project will result in added incentives-per-watt for the project. Also, for new construction projects that include high performance green design features, an additional incentive-per-watt is available to allow for some funding of the energy efficiency components. In all cases, the maximum grant caps will remain the same.

The only technology which follows a different formula for calculating the design and construction incentive is purchased biofuel. Consult the design & construction section for more information regarding the biofuel incentive.

Lastly, for new construction projects achieving LEED certification within two (2) years of project completion, MTC will offer an additional incentive to support the certification process. This incentive level will be based upon the level of LEED certification achieved and it will be a separate MTC payment beyond the design and construction award. An additional application will not be required, but evidence of certification acceptable to MTC shall be required.

Design & Construction grant payments will be made on a milestone basis. After each significant project milestone, the recipient will submit evidence of completion of that milestone including bid specifications, detailed designs, commissioning reports, etc. Please consult the example Project Grant Agreements in Attachment F and G for more information about the details of the payment process for each type of agreement.

MTC gives preference to projects that create particular public benefits (e.g. system congestion relief, homeland security) and may consider funding larger amounts on a case-by-case basis.

Applicants for Design & Construction support are not required to first receive Feasibility support from MTC through this Solicitation, but MTC expects that feasibility work has been completed and it must be submitted with the application.

After completion of the design phase and construction bidding process, MTC reserves the right to re-evaluate the award amount if the planned project has undergone any changes.

4. Grant Requirements and Guidelines

4.1. Eligible Applicants

An "eligible applicant" is defined as any commercial, industrial, or private institutional entity in Massachusetts that contributes to the Massachusetts Renewable Energy Trust Fund. Examples of such entities include: universities, hospitals, manufacturing facilities, office buildings, multi-unit residential properties, and retail operations. The applicant must be the end user, i.e. the consumer of the electricity generated by the proposed renewable energy system.

Prior to any MTC award for project development or implementation, an applicant will be required to document to MTC the steps it has taken to reduce and manage electricity consumption and the results

achieved, through participation in utility-sponsored energy efficiency programs, installation of energy efficient equipment, and/or other energy efficiency investments.

Public organizations (federal, state, or local) and small residential properties are encouraged to wait for future Solicitations that MTC plans to offer which would target these market segments. To be eligible for this Solicitation, a proposed renewable energy system for residential properties must have a capacity of at least 10kW (100kW for wind).

4.2. Eligible Renewable Technologies

In general, commercially available renewable energy technologies that are supported by the Trust legislation are eligible for this Initiative. These technologies include: wind energy, fuel cells, hydroelectric, landfill gas, and low emission, advanced biomass power conversion technologies such as gasification using biomass fuels such as wood, agricultural or food wastes, energy crops, biogas, biodiesel or organic refuse-derived fuel.

NOTE: For Round 2 of the Initiative, photovoltaic applications are not eligible. MTC is currently undertaking a review of its activities with respect to photovoltaic (PV) technologies through an ad hoc advisory group to the Renewable Energy Trust called the PV Collaborative.

The PV Collaborative will assist the Trust in formulating a long-term strategy and policy framework for PV support, identifying specific programs for PV technology in general, and for the Massachusetts based PV industry in particular. The PV Collaborative is composed of a variety of individuals covering a broad spectrum of experience and PV affiliation including customers, regulatory agencies, labor, government, educational groups, environmental advocacy, electric utilities, PV manufacturers, PV installers, business advocacy, etc.

Because of this extensive evaluation effort that is currently underway, funding for photovoltaic projects will be suspended for Round 2 of this Solicitation while funding for all other renewable energy technologies will remain unchanged. Photovoltaic projects include any feasibility study or design and construction project that incorporates any type of photovoltaic technology including building-integrated photovoltaics.

Results of the PV Collaborative's efforts and any MTC Board decisions affecting PV policy at the Trust will be incorporated into future rounds of the Commercial, Industrial, and Institutional Initiative.

Round 2 of the CI³ Solicitation is on target to receive proposals by September 17, 2004 for all other eligible technologies including: wind energy, fuel cells, hydroelectric, landfill gas, and low emission, advanced biomass power conversion technologies such as gasification using biomass fuels such as wood, agricultural or food wastes, energy crops, biogas, biodiesel or organic refuse-derived fuel.

Projects proposing to use naturally flowing water and hydroelectric must be renovation or development projects at existing dams.

Projects proposing to use biomass technology must receive an Advisory Ruling of eligibility for the Massachusetts Renewable Energy Portfolio Standard pursuant to 225 CMR 14.00 (available at <http://www.state.ma.us/doer/rps/index.htm>) before MTC funding will be made available.

This Initiative is not intended to support projects using ocean thermal, wave or tidal energy.

All equipment funded in part or in whole by MTC must be new. The equipment seller must provide at least a one year warranty and offer the owner the ability to purchase service support after the warranty period.

4.3. Eligible Projects

Projects must be distributed generation projects of eligible technologies located in Massachusetts within the service territory of an investor-owned electric distribution company. The nameplate capacity of the proposed renewable energy system must be greater than or equal to 10 kW (100kW for wind power projects) and greater than 50% of the renewable energy produced must be consumed on-site. The building or facility utilizing the power generated by the renewable energy technology must be grid-connected. Applications can be made for any type of building.

Renewable distributed generation retrofit projects (to existing buildings) which will commence within one year and be completed (commissioned) within 2 years of the grant award are acceptable projects. Applications will also be considered for projects that involve either new construction or major renovation or rehabilitation that will commence construction within two years and will be completed within five years of the date of the grant award.

Retrofit projects can also include hybrid systems which incorporate a renewable energy component with a non-renewable system but any MTC support will only apply to the renewable generation portion.

Applicants receiving awards through other Trust programs for their proposed project are eligible for assistance under this Solicitation. However, the value of the other MTC award(s) made to a particular project under other Trust programs will be deducted from the assistance available for that project under this Initiative.

Design and construction funding applicants are required to apply for, and to take maximum advantage of energy efficiency programs funded by the energy efficiency charge on bills rendered by Massachusetts investor-owned electric and gas utilities. A copy of an energy audit or feasibility study performed within the past 3 years by a certified energy manager (CEM) or professional engineer (PE) is a requirement of all applications. Copies of utility energy efficiency applications and / or copies of paid invoices are required as evidence of the applicant's attempt to implement the audit recommendations. Applicants may perform the necessary energy audit and implementation activities in conjunction with their application to MTC. MTC Awardees must present the evidence of implementation of recommendations **prior to** entering into an agreement with MTC for their project. For new construction and major renovation projects seeking MTC support for green building elements, energy audits are not required but energy modeling is as described in Section 6.

4.3.1. New Construction / Major Renovation or Rehabilitation Projects:

In order to be eligible for the additional green building assistance under this Solicitation, the project must be a "green building." The U.S. Green Building Council's ("USGBC") Leadership in Energy and Environmental Design ("LEED") rating system is the preferred benchmark for the Initiative. The LEED system promotes sustainability by asking project owners and developers to review siting, design and construction decisions with specific reference to the project's impact on the environment, by evaluating buildings against a series of standards for various green attributes, and by assigning points based on the degree to which the building incorporates these attributes. For information about LEED, see: <http://www.usgbc.org/programs/leed.htm#ratingsystem>.

Applicants seeking the additional green building assistance under this Solicitation are required to register their proposed project with LEED. Applicants may seek a waiver of this requirement if, e.g., there is no applicable LEED standard for the project. Applicants seeking a waiver must propose an alternative project assessment method as a benchmark for "green", and must specifically document the alternative method's comparability to LEED. It is MTC's understanding that the USGBC continues to broaden and adapt the LEED system. Accordingly, only fairly unique circumstances will result in a well-documented waiver request, and waivers are granted in the sole exercise of MTC's discretion.

The additional MTC support for green building elements is only available for energy efficiency products that are not eligible for utility rebate programs.

4.3.2. Electricity-generating (non-renewable) technologies not requiring additional fuel:

MTC is offering an opportunity to include, as part of a renewable energy system project for purposes of this Solicitation, certain technologies that produce additional electricity without the introduction of additional fuel (e.g. in-line turbines for high pressure steam). Systems of this type are eligible for an additional incentive as described in section 6. The incentive is limited to one-third of the entire award and it cannot exceed fifty (50) percent of the actual incremental design and construction costs associated with the technology.

NOTE TO APPLICANTS:

The next two Sections (5 and 6) are specific to the particular type of grant (Feasibility Study OR Design & Construction) one is seeking.

If you are interested in the Feasibility Study Grant, read Section 5; then skip to Section 7.

If you are interested in the Design & Construction Grant, skip to Section 6, and then be sure to read the remainder of the Solicitation which applies to both grant types.

5. Feasibility Study Grant Specifics

5.1. Required Activities and Deliverables to be Provided by Grantee - Feasibility

Feasibility grants will be used to support a thorough technical and economic feasibility analysis of one or more renewable energy technologies. Activities shall include but are not limited to:

- Site evaluation
- Renewable energy resource assessment
- Environmental impact and regulatory analysis
- Development of a base concept case including technical/engineering feasibility
- Evaluation of potential development financing arrangements
- Development of preliminary pro-forma financials

Comprehensive study requirements are detailed in Attachment D.

Feasibility study grants may not be used to reimburse or otherwise write down costs already incurred or performed prior to the date of the award and the execution of the project grant agreement.

Feasibility study grants are not a prerequisite for applying for a design & construction grant.

5.2. Project Funding and Financial Incentives - Feasibility

MTC has allocated \$600,000 for Feasibility Study grants for eligible applicants and projects. The maximum amount allowable for a single grant is \$40,000. The grants require at least a 20% applicant cost-share, not to exceed \$5000. **The applicant cost share must be a cash contribution to the project.** The grants will be awarded on a competitive basis during each round. MTC intends to award the feasibility study funds in the earlier rounds of this Solicitation in order to develop a queue of projects that would be eligible for later rounds of Design & Construction funding.

Feasibility study funds of \$200,000 per round will be available during the first three rounds. Funds not awarded in any given round will carry forward to the next round. Projects that do not receive funding in any given round may reapply for funding in a subsequent round upon reapplication.

MTC reserves the right to amend or otherwise alter the allocation of funds and is under no obligation to fund any application. All such changes will be posted on the MTC website. No grant funds may be used to reimburse or write down costs incurred prior to the execution of the Project Grant Agreement.

5.3. Selection Process - Feasibility

Projects will be selected on a competitive basis according to the criteria outlined below. MTC staff and a panel of outside reviewers will review the applications, and will present their recommendations for funding to the MTC Board of Directors.

(a) Threshold Criteria

MTC reserves the right to make awards only to projects that, in its sole judgment, meet the following threshold criteria and beneficially contribute to the objectives of this Initiative:

- The applicant, renewable energy technology, and project meet the established eligibility criteria;
- The proposal is complete and responsive to the Solicitation's requirements;
- The clarity, specificity, and consistency of the proposal is sufficient to be deemed credible;
- There is sufficient evidence of the project's commitment to serious investigation of the use of renewable energy technologies;
- The project is not technically duplicative of other projects funded by MTC to the same owner or developer;
- The project is otherwise consistent with the goals of the Trust; and
- The applicant has committed to the required cash cost-share.

(b) Qualitative Criteria

The review committee will use the following qualitative criteria to assess and rank proposals:

- Technical merits including: the delineation and completeness of the proposed tasks and the strategy for addressing risks and development barriers;
- Payback period that the applicant requires for the project and the possibility of the proposed project to meet or exceed this payback threshold;
- Applicant's commitment to proceed to installation if project payback is within acceptable range;
- Qualifications and experience of the key technical personnel in providing similar services for other projects; and
- Reasonableness of the proposed budget, including the proposed cost share

(c) Other Criteria

MTC reserves the right to consider other criteria in making competitive awards among comparably qualified applicants, including:

- Achieving geographic distribution of projects throughout the Commonwealth;
- Diversifying participation by limiting multiple awards to the same applicant;
- Diversification of renewable energy technologies and building applications supported by MTC;
- A project's potential contribution to the Commonwealth's economic development objectives, such as location in an Economic Opportunity Area; and
- A project's potential for replicability and for public visibility and access.

6. Design & Construction Grant Specifics

6.1. Required Activities and Deliverables to be Provided by Grantee – Design & Construction

The design and construction assistance grant is a performance-based award. The assistance offered through the Trust is contingent on the project, as built, substantially complying with the proposed project plan upon which the grant award was based.

For the **design** phase, MTC will provide funding support for activities occurring after the site and technology have been selected and prior to construction of the proposed renewable energy system. Activities that are eligible for design phase funding under this Solicitation may include, but are not limited to, one or more of the following:

- preparation of renewable energy system design, technical specifications, and securing of equipment/construction quotations;
- completion of renewable energy interconnection studies and execution of Interconnection Service Agreement between the grantee and the grantee's electric distribution company;
- preparation of permitting documents;
- preparation of environmental impact studies and reports, if applicable;
- refinement of ownership strategy; and
- for projects seeking the MTC incentive for green buildings, energy modeling demonstrating a 20% improvement (measured in source Btu) over the state energy code is mandatory. MTC's incentive for green building may also be used for design of energy efficiency elements not supported by utility rebate programs.

For the **construction** phase, MTC will provide funding support for activities related to the construction of the proposed renewable energy system. Activities that are eligible for construction phase funding under this Solicitation may include, but are not limited to, one or more of the following:

- purchase of the renewable energy equipment;
- installation of the renewable energy system;
- commissioning of the renewable energy system;
- documentation and user training; and
- for projects seeking the MTC incentive for green buildings, installation of energy efficiency elements not supported by utility rebate programs.

Requirements for Design & Construction Grants:

- Technical Requirements: The Grantee and project must comply with the minimum technical requirements for contracts, system equipment, system installation, and consumer protection described in Attachment C.
- Commissioning: An independent commissioning agent must commission the renewable energy technology. Commissioning is the process of ensuring that building systems are designed, installed, functionally tested, and capable of being operated and maintained according to the approved design and the owner's operational needs.
- Final Project Report: Grantees and their project teams must prepare a final project report (for both the design and construction phases) that describes all activities undertaken by the grantee during the course of the project, summarizes the lessons learned, evaluates the overall success of the project, and makes recommendations for future renewable energy Design & Construction grants.
- Production Tracking System: MTC will require ongoing automated reporting of the output of the installed eligible renewable energy technologies to MTC's Production Tracking System for a period of five years after the project's completion and commissioning. This will allow MTC to assess and quantify the actual performance of the renewable energy generator. See Attachment C for more details on meter requirements and auto-reporting.
- Case Study Development Participation: Grantees and their project teams will be expected to provide good faith cooperation with the Trust's evaluation activities, including the development of case study materials for public dissemination. Grantees must agree to participate in process evaluation interviews, information-sharing workshops with other grantees and peers, and periodically to provide basic information about building performance, including but not limited to energy costs and building occupancy. Grantee must also commit to a limited number of demonstration tours sponsored by MTC. These tours shall be arranged to not interfere with the operation of the facility.
- Green Buildings: For the design phase of a MTC-supported green building, energy modeling demonstrating a 20% improvement (measured in source Btu) over the state energy code must be provided.

6.2. Project Funding and Financial Incentives – Design & Construction

MTC has allocated \$5.4 million for Design & Construction Grants. The maximum allowable grant is \$650,000; up to \$150,000 for design activities and up to \$500,000 for construction activities. Grants will be awarded on a competitive basis during each round. Rounds will occur semi-annually and six (6) rounds will be held. **The Design & Construction grants require a minimum 50% applicant cost-share which must be a cash contribution to the project.**

The total Design & Construction Incentive amount offered by MTC is technology dependent. To calculate the maximum potential design & construction incentive, consult the table below:

Project – Medium Scale	Wind		Fuel Cell		Hydroelectric		Biomass*	
	Scale Range (kW-AC)	\$/W AC						
Renewable Energy Technology	100-250	\$ 1.50	10-60	\$ 4.00	10-60	\$ 4.00	10-60	\$ 3.50
Support critical loads (i.e. Homeland Security) with storage	ADD	\$ 0.10		n/a		n/a	ADD	\$ 0.50
Green Building Design – LEED standard** And/Or Fuel-less electricity generator	ADD	\$ 0.75	ADD	\$ 2.00	ADD	\$ 2.00	ADD	\$ 1.75

Project – Large Scale

Renewable Energy Technology	> 250	\$ 0.75	> 60	\$ 3.00	> 60	\$ 3.00	> 60	\$ 3.00
Support critical loads (i.e. Homeland Security) with storage	ADD	\$ 0.10		n/a		n/a	ADD	\$ 0.50
Green Building Design – LEED standard** And/Or Fuel-less electricity generator	ADD	\$ 0.38	ADD	\$ 1.50	ADD	\$ 1.50	ADD	\$ 1.50

Maximum Incentives

Design Support	\$	150,000
Construction Support	\$	500,000

To determine the maximum amount available to a proposed project, MTC recommends the use of our project calculator found on our web site at:

http://www.masstech.org/Grants_and_Awards/GBP/GreenBuildingsandInfrastructureProgram.htm

The design portion of any award must be twenty-five (25%) percent or less of the entire design & construction award. The applicant must submit separate budgets for the design and construction phases.

For biofuel projects employing new generation equipment, applicants should use the biomass incentive-per-watt to calculate the potential maximum award. If the potential maximum award for the equipment exceeds 50% of actual design & construction costs, then MTC will allow the use of this difference to offset 100% of the incremental cost of the fuel for up to 2 years.

For example: a 100kW biodiesel-fired generator system may have design & construction costs of \$100,000. The biomass incentive-per-watt would result in a \$300,000 amount (\$3.00 per watt x 100,000 watts). Because the MTC award is capped at 50% of the actual costs, the equipment award for this project would be \$50,000. This would leave a remainder of \$250,000 on the incentive-per-watt calculation which could be used to cover the incremental cost of the biodiesel for up to 2 years.

For green building construction projects seeking LEED certification no later than two (2) years after completion of project commissioning, MTC will offer an additional incentive to support the certification process. This incentive level will be based upon the level of LEED certification achieved as follows:

- Platinum: \$14,000
- Gold: \$12,000
- Silver: \$10,000
- Certified: \$8,000

This incentive will be paid upon MTC's receipt and acceptance of a copy of the LEED certificate or award letter.

6.3. Selection Process – Design & Construction

Projects will be selected on a competitive basis according to the criteria outlined below. MTC staff and a panel of outside reviewers will review the applications, and will present their recommendations for funding to the MTC Board of Directors.

(a) Threshold Criteria

MTC reserves the right to make awards only to projects that, in its sole judgment, meet the following threshold criteria and beneficially contribute to the objectives of this Initiative:

- The applicant, renewable energy technology, and project meet the established eligibility criteria;
- The proposal is complete and responsive to the Solicitation's requirements;
- The clarity, specificity, and consistency of the proposal is sufficient to be deemed credible;
- There is sufficient evidence of the project's commitment to proceed to construction within the targeted time period;
- The project is not technically duplicative of other projects funded by MTC to the same owner or developer; and
- The project is otherwise consistent with the goals of the Trust.

(b) Qualitative Criteria

The review committee will use the following qualitative criteria to assess and rank proposals:

- **Quality and Value of Proposed Project:**
 - Amount of eligible renewable energy capacity to be installed
 - Estimated amount of renewable energy produced and the amount used on-site
 - In order to maximize the value and benefit of the renewable energy system, the host facility plans to participate in available utility demand side management and energy efficiency programs to the maximum extent, and/or has demonstrated best available energy efficiency systems are in place.
 - Overall strategic approach and rationale for project scope with realistic goals and timetables.
 - Value of potential public benefits of project including location in an electric utility capacity constrained area; improvement of Homeland Security; education and public awareness; etc.
 - For new construction or major renovation projects seeking the additional green building incentives, evidence of overall level of proposed green attributes using LEED or a comparable system as an evaluation benchmark.
- **Probability of Success:**
 - Evidence of co-funding commitments from other sources including pre-commitment letter and/or conditional contracts in place from applicant assuring the project will go forward subject to availability of MTC incentives.
 - Economic analysis supporting the ability of proposed project to meet or exceed the end user's target payback threshold.
 - Qualifications and experience of the key technical personnel in providing similar services for other projects
 - Extent of extended warranties or other means to ensure that the renewable energy system continues to operate beyond the warranty period.
- **Cost Effectiveness:**
 - Reasonableness of the budget relative to the proposed level of activity and deliverables.
 - The magnitude of cost sharing from non-MTC sources.

(c) Programmatic Criteria

MTC reserves the right to consider other criteria in making competitive awards among comparably qualified applicants, including:

- Diversification of projects based on renewable energy technologies, building applications, and geographic distribution throughout the Commonwealth

- A project's potential contribution to the Commonwealth's economic development objectives, such as location in an Economic Opportunity Area or use of locally manufactured products and/or labor, etc
- Potential for replicability - the degree to which the project provides lessons applicable to other projects
- Potential for public visibility and access
- Green Building design for new construction and major renovation projects

7. Proposal Process

7.1. How to Apply

Applicants must complete and submit a formal application for funding for **either** a Feasibility Study Grant or a Design & Construction Grant as described below. The application forms and instructions are included in this Solicitation as Attachment A. A separate application must be submitted for each proposed project. If a project has already been developed beyond the feasibility phase, applicants may apply directly for a Design & Construction Grant. Applicants seeking a Feasibility Study Grant may **not** apply for a Design & Construction Grant during the same round.

The following items must be submitted to MTC as part of an application package:

- one bound application with original signatures;
- ten bound copies (no three-ring binders) of the application;
- one unbound copy of the application; and
- an electronic copy (in MSWord/Excel or Adobe Acrobat format).

Applicant is cautioned to review Section 8.1 hereof, prior to submitting an electronic copy of their application. In accordance with the procedures set forth in Section 7.1, any information that Applicant has identified as "sensitive information" in the hard copy of their application should be deleted from the electronic copy prior to submission to MTC.

It is the sole responsibility of the Applicant to ensure that its application to this Solicitation is complete and is properly submitted to MTC. Completed applications will be accepted according to the schedule contained in Section 6.4.

Applications must be submitted to:

**Feasibility Study and Design & Construction Solicitation
Solicitation No. 2004-GB-01**
Massachusetts Technology Collaborative
Innovation Center
75 North Drive
Westborough, MA 01581-3340

Applications must be received at MTC by 4:00 PM on the applicable due date.

7.2. Applicants' Questions and Answers

Questions concerning this Solicitation should be submitted in writing (e-mail, mail, and fax) to the Official Contact listed below. All inquiries should reference the Solicitation (no. 2004-GB-01). MTC provides a link on its website to a listing of all questions and answers. MTC will periodically update this listing and Applicants are encouraged to visit the website frequently for updates to the questions and answers. Only answers posted on the web site should be treated as MTC's official response to any question.

Official Contact: James Christo
Massachusetts Technology Collaborative
75 North Drive - Innovation Center
Westborough, MA 01581
ci3@masstech.org
Phone: 508-870-0312 Fax: 508-898-9226

7.3. Selection of Grantees

MTC staff will evaluate completed proposals in accordance with the Selection Process described in Section 5. MTC staff may contact the Applicant to request supplemental information prior to formal review. MTC may also request an interview with qualified Applicants.

All awards are subject to external peer review and final approval by MTC's Board of Directors.

Regardless of the number of applications received, MTC reserves the right to make no awards, to award less than the Applicant requests, and/or to award less than the maximum amount of funds potentially available through this Solicitation.

7.4. Application Timeframe and Instructions

The schedule for this Solicitation is outlined in the table below. The target dates following the application due date are subject to change. Applicants are advised to periodically visit our web site at www.masstech.org/Grants_and_Awards.htm for updates to the schedule.

Summary of Funding Cycles and Allocations:

The \$6 million available for CI³ is anticipated to be allocated as follows (Please note that the table has been updated to reflect the results of completed rounds and carry-over of unawarded funds):

Round	Due Date	Amount for Feasibility	Amount for Design & Construction	Total
1	June 4, 2004	\$146,242	\$1,024,337	\$1,170,579
2	September 17, 2004	\$253,758	\$775,663	\$1,029,421
3	March 18, 2005	\$200,000	\$1,200,000	\$1,400,000
4	September 16, 2005	\$0	\$600,000	\$600,000
5	March 17, 2006	\$0	\$1,200,000	\$1,200,000
6	September 15, 2006	\$0	\$600,000	\$600,000
TOTAL		\$600,000	\$5,400,000	\$6,000,000

Funds not awarded in any given round will carry forward to the next round. Projects that do not receive funding in any given round may reapply for funding in a subsequent round upon reapplication.

MTC reserves the right to amend or otherwise alter the allocation of funds. All such changes will be posted on the MTC website. No grant funds may be used to reimburse or write down costs incurred prior to the execution of the Project Grant Agreement.

Original Solicitation Posted	April 16, 2004
Solicitation Amendment 1 Posted:	August 20, 2004
Round 2: Applications due to MTC	September 17, 2004 – 4:00PM
Round 3: Applications due to MTC	March 18, 2005 – 4:00PM

8. **General Conditions**

8.1. Notice of Public Disclosure.

8.1.1. General Statement.

Funds awarded are public funds and any information submitted to MTC by the applicant in response to this grant Solicitation or generated in relation thereto is subject to public disclosure requirements as set forth in the Massachusetts Public Records Act, M.G.L. c. 66 (the "Public Records Act"), which governs the retention, disposition and archiving of public records. For purposes of the Public Records Act, "public records" include all books, papers, maps, photographs, recorded tapes, financial statements, statistical tabulations, or other documentary materials or data, regardless of physical form or characteristics, made or received by MTC.

The foregoing notwithstanding, "public records" do not include certain materials or data which fall within one of the specifically enumerated exemptions set forth in the Public Records Act or in other statutes, including MTC's enabling act, M.G.L. Chapter 40J. One such exemption that may be applicable to documents submitted by the applicant in response to the grant Solicitation is for any documentary materials or data made or received by MTC that consists of trade secrets or commercial or financial information regarding the operation of any business conducted by the applicant, or regarding the competitive position of such applicant in a particular field of endeavor (the "Trade Secrets Exemption").

It is MTC's expectation and belief that the overwhelming percentage of documents it receives from applicants does not contain any information that would warrant an assertion by MTC of an exemption from the Public Records Act. Applicants should therefore take care in determining which documents they submit to MTC in response to a grant Solicitation, and should assume that all documents submitted to MTC in response to the grant Solicitation are subject to public disclosure without any prior notice to the applicant and without resort to any formal public records request.

8.1.2. Procedures for Handling Documents Identified as "Sensitive Information."

In the event that applicant's response to the grant Solicitation includes the submission to MTC of documents that applicant believes may be proprietary in nature and may fall within the parameters of the Trade Secrets Exemption and/or some other applicable exemption, the following procedures shall apply:

- A) At the time of the applicant's initial submission of documents to MTC, the applicant must provide a cover letter, addressed to MTC's General Counsel, indicating that it is submitting documents which it believes are exempt from public disclosure, including a description of the specific exemption(s) that applicant contends is/are applicable to the submitted materials, a precise description of the type and magnitude of harm that would result in the event of the documents' disclosure, and a specific start date and end date within which the claimed exemption applies. If different exemptions, harms and/or dates apply to different documents, it is applicant's responsibility to provide detailed explanations for each such document.
- B) At the time of the applicant's initial submission of documents to MTC, the applicant must also clearly and unambiguously identify each and every such document that it contends is subject to an exemption from public disclosure as "Sensitive Information." It is the applicant's responsibility to ensure that all such documents are sufficiently identified as "Sensitive Information," and applicant's designation must be placed in a prominent location on the face of each and every document that it contends is exempt from disclosure under the Public Records Act.

Information submitted to MTC in any form other than a hard copy document will not be subject to the procedures set forth in this Section 7.1. For example, information submitted by e-mail, facsimile and/or verbally will not be subject to these procedures and may be disclosed at any time without notice to applicant.

- C) Documents that are not accompanied by the written notification to MTC's General Counsel or are not properly identified by the applicant as "Sensitive Information" at the time of their initial submission to MTC are presumptively subject to disclosure under the Public Records Act, and the procedures for providing the applicant with notice of any formal public records request for documents, as set forth below, shall be inapplicable.
- D) At the time MTC receives documents from applicant in response to the grant Solicitation, any such documents designated by applicant as "Sensitive Information" shall be segregated and stored in a secure filing area when not being utilized by appropriate MTC staff for purposes of evaluating the application for funds. By submitting a signed grant application to MTC, applicant certifies, acknowledges and agrees that (a) MTC's receipt, segregation and storage of documents designated by applicant as "Sensitive Information" does not represent a finding by MTC that such documents fall within the Trade Secrets Exemption or any other exemption to the Public Records Act, or that the documents are otherwise exempt from disclosure under the Public Records Act, and (b) MTC is not liable for the subsequent disclosure of any documents submitted to MTC by the applicant, whether or not such documents are designated as "Sensitive Information" or MTC was negligent in disclosing such documents.
- E) In the event that MTC receives an inquiry or request for documents submitted by applicant in response to the grant Solicitation, MTC shall produce all responsive documents without notice to applicant. In the event that the inquiry or request entails documents that the applicant has previously designated as "Sensitive Information", the inquiring party shall be notified in writing that one or more of the documents it has requested has been designated by the applicant as "Sensitive Information", and that a formal, written public records request must be submitted by the requesting party to MTC's General Counsel for a determination of whether the subject documents are exempt from disclosure.
- F) Upon the General Counsel's receipt of a formal, written public records request for documents that encompass materials previously designated by applicant as "Sensitive Information", the applicant shall be notified in writing of MTC's receipt of the public records request, and MTC may, but shall not be required to provide applicant an opportunity to present MTC with information and/or legal arguments concerning the applicability of the Trade Secrets Exemption or some other exemption to the subject documents.
- G) The General Counsel shall review the subject documents, the Public Records Act and the exemption(s) claimed by the applicant in making a determination concerning their potential disclosure.

The General Counsel is the sole authority within MTC for making determinations on the applicability and/or assertion of an exemption to the Public Records Act. No employee of MTC other than the General Counsel has any authority to address issues concerning the status of "Sensitive Information" or to bind MTC in any manner concerning MTC's treatment and disclosure of such documents.

Furthermore, the potential applicability of an exemption to the disclosure of documents designated by the applicant as "Sensitive Information" shall not require MTC to assert such an exemption. MTC's General Counsel retains the sole discretion and authority to assert an exemption, and he may decline to exert such an exemption if, within his discretion, the public interest is served by the disclosure of any documents submitted by the applicant.

- H) MTC shall provide the requesting party and applicant with written notice of its determination that the subject documents are either exempt or not exempt from disclosure.

- I) In the event that MTC determines that the subject documents are exempt from disclosure, the requesting party may seek review of MTC's determination before the Supervisor of Public Records, and MTC shall notify the applicant in writing in the event that the requesting party pursues a review of MTC's determination.
- J) In the event the requesting party pursues a review of MTC's determination that the documents are exempt from disclosure and the Supervisor of Public Records concludes that the subject documents are not exempt from disclosure and orders MTC to disclose such documents to the requester, MTC shall notify the applicant in writing prior to the disclosure of any such documents, and applicant may pursue injunctive relief or any other course of action in its discretion.
- K) In the event that MTC determines that the subject documents are not exempt from disclosure or the General Counsel determines that, under the circumstances and in his discretion, MTC shall not assert an exemption, MTC shall notify the applicant in writing prior to the disclosure of any such documents, and applicant may pursue injunctive relief or any other course of action in its discretion.

Applicant's submission of a grant application, with or without supporting documentation, shall require a signed certification that applicant acknowledges, understands and agrees with the applicability of the foregoing procedures to any documents submitted by applicant in response to the grant Solicitation, including but not limited to the acknowledgements set forth in Section 7.1.2(D), and that applicant shall be bound by the procedures set forth in this Section 7.1.

All documents submitted by applicant, whether designated as "Sensitive Information" or not, are not returnable to applicant, except in the case of returning late submissions as indicated in Section 5.

8.2. Contractual Requirements

MTC intends to enter into a Project Grant Agreement containing certain standard provisions. Copies of the standard agreements are appended hereto as Attachments E, F, and G. MTC reserves the right to amend the agreement without further issuance of another Solicitation. **APPLICANTS ARE REQUIRED TO SPECIFY ANY EXCEPTIONS TO THE APPLICABLE PROJECT GRANT AGREEMENT AND TO MAKE ANY SUGGESTED COUNTERPROPOSAL WITH THEIR APPLICATION. A FAILURE TO SPECIFY EXCEPTIONS AND/OR COUNTERPROPOSALS WILL BE DEEMED AN ACCEPTANCE OF THE APPLICABLE PROJECT GRANT AGREEMENT'S TERMS AND CONDITIONS, AND NO SUBSEQUENT NEGOTIATION OF SUCH PROVISIONS SHALL BE PERMITTED.**

8.3. Waiver Authority

MTC reserves the right, at its sole discretion, to waive minor irregularities in submittal requirements, to request modifications of the application, to accept or reject any or all applications received, and/or to cancel all or part of this Solicitation at any time prior to awards.

8.4. Disclaimer

This Solicitation does not commit MTC to award any funds, pay any costs incurred in preparing an application, or procure or contract for services or supplies. MTC reserves the right to accept or reject any or all applications received, negotiate with all qualified applicants, cancel or modify the Solicitation in part or in its entirety, or change the application guidelines, when it is in its best interests.

8.5. Changes/Amendments to Solicitation

This Solicitation has been distributed electronically using MTC's website. It is the responsibility of applicants to check MTC's website for any addenda or modifications to a Solicitation to which they intend to respond. MTC, the Commonwealth of Massachusetts, and its subdivisions accept no liability and will provide no accommodation to applicants who submit an application based on an out-of-date Solicitation document.

Attachment A – Authorized Applicant Signature and Acceptance Form



*Commercial, Industrial, & Institutional Initiative
Feasibility Study and Design & Construction Grants (2004-GB-01)*
Authorized Applicant’s Signature and Acceptance Form

The undersigned is a duly authorized representative of the applicant listed below. The applicant has read and understands the Solicitation requirements. The undersigned acknowledges that all of the terms and conditions of the Solicitation are mandatory. The applicant specifically acknowledges the application of the procedures regarding disclosure of sensitive information as set forth in Section 8.1 of the Solicitation, and specifically agrees that it shall be bound by those procedures. The undersigned agrees that the Solicitation will be incorporated into and made part of any Agreement resulting from the applicant’s application to the Solicitation. The undersigned further agrees to the terms and conditions in the Project Grant Agreement appended hereto as Attachments E, F or G and acknowledges and agrees that exceptions and counter proposals to such terms and conditions are required to be submitted with this Application. The undersigned further acknowledges and agrees that the failure to submit such exceptions and counterproposals with this Application shall be deemed a waiver and such terms and conditions as contained in the Agreement appended hereto as Attachments E, F or G shall not subject to further negotiation. The applicant understands that, if selected by MTC, the applicant and MTC will execute written agreements specifying the mutual requirements of participation. I certify that the statements made in this application, including all attachments and exhibits, are true and correct to the best of my knowledge.

Applicant: _____
(Printed Name of Applicant)

By: _____
(Signature of Authorized Representative)

Name: _____

Title: _____

Date: _____

Attachment B – Application and Budget Instructions and Forms

**Please see separate MS Word document for Attachment B -
Application and Budget Instructions and Forms**

Attachment C – Technical Requirements

All grantees and projects must comply with the minimum technical requirements set forth in this attachment.

Warranties / Service Contract

The renewable energy system(s) receiving MTC support:

- **must** be covered by a minimum one (1) year full warranty to the purchaser against breakdown or excessive degradation of electrical output. The warranty shall cover the full cost, including labor, of repair or replacement of defective components or systems.
- should present the system owner with options to service their system beyond the warranty period..

Meter

Each electricity-producing renewable technology proposed for MTC funding will have a dedicated meter that:

- records only the system's AC output;
- shall be separate from the utility billing meter and may not interfere with utility billing or net-metering;
- must be a standard utility revenue quality meter that conforms to applicable American National Standards Institute (ANSI) C-12 standards and shall be installed on the output side of the renewable system's isolation transformer; and
- shall have a visible display of cumulative energy produced by the renewable energy system and be available for periodic testing and/or re-calibration, if necessary.
- More information about meter requirements can be found at: <http://ar.masstech-pts.org/downloads/>

Automated Reporting

All renewable energy systems supported through MTC funding must include an Automated Reporting system which meets the requirements described below. Automated Reporting offers an alternative to the process of manual meter reading and subsequent reporting to the MTC Production Tracking Systems (PTS). This option is only available for systems tracked by a Data Acquisition System (DAS).

There are three options for establishing automated reporting to the PTS:

- 1) Vendor-Supplied System: A DAS that has local PTS-incorporated Automated Reporting features.
- 2) Vendor-Supplied Service: A DAS with a service that offers remote monitoring that has PTS-incorporated Automated Reporting features.
- 3) Sample Source Code Integration: A DAS vendor or service provider can customize the software of their system to incorporate this data transfer functionality.

For options 1 and 2, MTC has approached DAS vendors and service providers about incorporating PTS Automated Reporting capabilities into their products. Your vendor or service provider may have already included this capability in your DAS, or have the ability to add the capability. Contact your vendor or contact MTC for a list of products that have incorporated Automated Reporting capabilities.

More information about Automated Reporting requirements can be found at: <http://ar.masstech-pts.org/downloads/>

Attachment D – Feasibility Study Requirements

Outline for Feasibility Studies:

1. Technical Feasibility Analysis:
 - a. Site Evaluation
 - i. Site characteristics
 - ii. suitability of existing structure(s)
 - iii. site ownership
 - b. On-site energy use opportunity
 - i. Description of current energy facilities
 - ii. Existing energy profiles and loads
 - c. Assessment of resource(s) required by renewable energy technology
 - d. Base Concept Case (may include a range of options)
 - i. Technology and equipment
 - ii. Scale
 - iii. Location
 - iv. Output usage
 - v. Estimated production of energy
 - vi. Related infrastructure
 - e. Environmental Impact and Regulatory Analysis (local, state, other)
 - i. Potential impacts plus their severity and mitigation options
 - ii. Required approvals and permits, processes and procedures, timeframes
 - iii. Interconnection and engineering requirements
 - f. Deliverable: Technical Analysis including a comparison of options
2. Economic Feasibility Analysis
 - a. Project development, construction, and management costs under different development and management structures
 - b. Project financing options with costs under the recommended or alternative development/management structures
 - c. Project revenue and cash flows for energy and attributes, including assumptions for long term contracts as appropriate
 - d. Preliminary project pro-forma(s) (for recommended or alternative development/management structures)
 - e. Deliverable: Economic Analysis including a comparison of options
3. Presentation of Technical & Economic Analyses to Project Decision Maker(s)
4. Feasibility Study Summary & Recommendations
 - a. Draft Final Report
 - b. Final Report
 - i. Technical Analysis
 - ii. Economic Analysis
 - iii. Narrative summary of proposed project
 - iv. Recommendations for Action
 - v. Issues requiring resolution or further study
 - vi. Next steps
 - c. Optional: Business Plan for proposed project