



Natural Resources
Canada

Ressources naturelles
Canada

Market Development Incentive Payments Fund and the Clean Energy Fund

Combined Heat and Power Demonstrations

Round Two

Request for Project Proposals Applicant's Guide

Ce document est aussi disponible en français. Veuillez envoyer un courriel à mdip-piemg@nrcan-rncan.gc.ca en indiquant à la ligne Objet « Guide de démonstration » (sans les guillemets).

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Preface - Request for Project Proposals Process

This Applicant's Guide outlines the Request for Project Proposals (RPP) process for Combined Heat and Power (CHP) demonstrations to be funded under the Clean Energy Fund (CEF) and the Market Development Incentive Payments (MDIP) Fund, the Program¹. It explains how Natural Resources Canada (NRCan) will review, in a consistent, fair, and transparent manner, Project Proposals submitted in response to the RPP in order to identify, select, and approve an allocation of funding to those projects that best fit with the Program's objectives.

The deadline for **submission** of Project Proposals is **11:59 p.m. EDT, February 18, 2013**. Submission of a Project Proposal and other required information does not imply that the proposed project will be approved for funding. Failure to provide all of the requested information may lead to the rejection of the proposal.

This Applicant's Guide provides guidance on the project documentation to be submitted. Proposals will be evaluated and ranked according to the criteria outlined in this document. The project proposal process is a competitive process as it is expected that more eligible projects will be submitted than there is funding available.

Any approvals under this process will be conditional upon the execution of a contribution agreement. Until a written contribution agreement is signed by both parties, no commitment or obligation exists on the part of NRCan to make a financial contribution to any project, including any costs incurred or paid prior to the signing of such contribution agreement.

NRCan officials will not entertain any request by potential proponents to review or revisit NRCan's project approval decisions.

NRCan reserves the right to alter or cancel the currently envisaged process and deadlines at its sole discretion. Any changes will be communicated to applicants via e-mail or through its website (www.alternativefuels.gc.ca).

¹ The scope of the activities that will be funded is set out in Appendix 1.

1. Introduction and Objectives

The Program's main objectives are to identify new innovative applications for natural gas and make greater use of technologies that reduce GHG (greenhouse gas) emissions from energy production, and thus, contribute to the Government's overall commitments of reducing Canada's total GHG emissions by 17 percent from 2006 levels by 2020 and that 90 percent of Canada's electricity needs to be provided by non-emitting sources.

Cogeneration or combined heat and power (CHP) is the concurrent production of electrical and thermal energy from a single fuel source and has the potential to reduce primary energy consumption and associated GHG emissions.

This RPP will seek to allocate \$1.2 million from the date of signing a contribution agreement to **October 31st, 2016**, towards demonstration projects.

The Program Objectives

The objective of the Program is to support research and development (R&D) activities in the demonstration and deployment of viable CHP technologies.

The scope of the activities that will be funded is set out in Appendix 1.

2. Expected Outcomes

Expected outcomes from the demonstration projects will include new technical knowledge on the performance and operational characteristics of the technologies demonstrated and what, if any, further development is required before they can be commercially deployed and replicated, as well as knowledge and solutions to institutional barriers.

3. Description of the Program

The Program has the following terms and conditions. These features will be incorporated within contribution agreements entered into with selected applicants.

3.1 Definitions

“Contribution” means cash provided by the Minister under the contribution agreement.

“Total Demonstration Project Cost” means the Contribution and cash and/or in-kind contributions received by the Proponent toward the project, the value of which is agreed to by the Minister.

“Eligible Costs” means those costs/expenditures incurred between the signing of a contribution agreement and **October 31st 2016**, either directly by the Proponent or through a third party, which are cash disbursements made with respect to the activities set out in the Proposal.

“Incurred and Paid” – means, in relation to an Eligible Expenditure, that goods and/or services have been received by, or rendered to, the Proponent and paid for.

"Fiscal Year" means the period beginning on April 1st of any year and ending on March 31st in the next year.

“In-Kind” means a contribution from a Proponent and/or project partners which is not a cash contribution, but which is verifiable and is directly attributable to the project.

“Proponent” in respect of a project, means the person, body, federal authority or government that proposes the project.

“Partners & Collaborators” means organizations or individuals who are contributing towards the project, through either verifiable in-kind or cash contributions.

“Consultants / Contractors (or sub-contractors)” means organizations or individuals who provide goods or renders a service for a fee and is paid for the service.

3.2 General Features

The administration of the project proposal review phase of the Program will occur in three parts: (1) preparation and submission of a project proposal package for review; (2) formal review of proposals by a multi-disciplinary team; and (3) negotiating and entering into a contribution agreement acceptable to NRCan. NRCan will make the final decision as to which projects will receive funding, and the level of support that will be available to each project.

A proponent may withdraw its proposal without penalty at any stage of the evaluation process.

All non-confidential communications in relation to this process must be in writing via e-mail to mdip-piemg@nrcan-rncan.gc.ca

3.3 Timeframe for Funding

The timeframe for funding support under this Program is from the date of signing a contribution agreement as a result of the announcement of the Request for Project Proposals (RPP) to **October 31st, 2016**. Any expenses incurred prior to signing a contribution agreement will not be counted towards Total Project Cost of the project considered by the Program and should be excluded from the cost tables included in the Project Proposal (although they may be included as

background and supporting information only). Until a written contribution agreement is signed by both parties, no commitment or obligation exists on the part of NRCan to make a financial contribution to any project, including any costs incurred or paid prior to the signing of such contribution agreement.

3.4 Eligible Recipients

For Demonstration Projects, eligible recipients are: for-profit and non-profit organizations who are legally incorporated or registered in Canada, including but not limited to electrical and gas utilities, industry associations and research associations, Canadian academic institutions, Canadian provincial, territorial and regional and municipal governments and their departments and agencies, but excluding sole-proprietorships.

3.5 Project Location

The project location will be in Canada.

3.6 Funding

Financial support for projects is constrained by the total amount available, the timeframe for projects and project selection criteria. Total funding available is \$1.2 million until October 31st, 2016.

3.7 Maximum Amount Payable per Project

The Program may pay up to 50% of Total Demonstration Project Costs per project. However, collaboration and leveraging are required, and these will be included among the evaluation criteria. The Program will provide for Eligible Costs incurred in Canada. Refer to 3.10.

The Proponent's contribution, and that of its partner(s), may be partially in the form of eligible and verifiable in-kind support, provided that it directly supports the project. Refer to Appendix 2.

3.8 Basis and Timing of Payment

Contribution agreements will set out the required terms for payments made based on measurable, pre-defined project milestones and upon receipt of proper documentation as defined in the contribution agreement.

Final payment will not be made until all project activities have been completed by a Proponent and are deemed acceptable to NRCan. To ensure appropriate project oversight, a percentage of

the contribution will be withheld until all conditions of the contribution agreement have been met. The percentage withheld will be determined based on the nature of the project, and will be stated in the contribution agreement.

Proponents under the Program may be audited at project completion or at NRCan's discretion during the project and at any time up to five (5) years after the project completion date.

3.9 Stacking of Assistance

Prior to signing contribution agreements, applicants will be required to disclose all sources of funding on individual projects, including contributions from other federal, provincial/territorial, and municipal governments and industry sources.

For Demonstration projects, total Canadian government assistance (federal, provincial/territorial and municipal governments, not including investment or funding from Crown or municipally-owned utilities) will not exceed 75% of Total Demonstration Project Costs.

Upon completion of a project funded by the Program, the Proponent will be required to disclose all sources of funding to that project, including contributions from other federal, provincial/territorial, municipal and industry sources.

3.10 Eligible Costs

Eligible Costs under this Program will be directly related to the approved project and will include:

- Salaries and benefits;
- Overhead expenses* considered on a case-by-case basis;
- Professional, scientific and contracting services;
- Travel, including meals and accommodations;
- Printing services;
- Data collection services, including processing, analysis and management;
- License fees and permits;
- Field testing services;
- Equipment and products, including diagnostic and testing tools and instruments; and
- Laboratory and field supplies and materials.
- Expenses related to the construction and operation of demonstration and pre demonstration (R&D) projects, including plant and equipment, but excluding land.

Only those eligible costs specifically approved and detailed in the contribution agreement will be eligible under the Program, to a maximum amount as set out in the contribution agreement.

(* Overhead expenses are legitimate eligible costs in the implementation of a project and should be included in the total project costs. Refer to Appendix 2 for details).

3.11 Reporting Requirements

For Demonstration projects, Proponents will submit regular financial statements to NRCan summarizing the expenses incurred as per the terms and conditions of the contribution agreement.

Regular communication between NRCan and the Proponents will be implemented to monitor progress.

On a quarterly basis, the following reports will be provided by the Proponent:

- i) A financial report which outlines Eligible Costs Incurred by task, signed by the Chief Financial Officer or Duly Authorized Officer of the organization;
- ii) An updated project cash flow statement and budget when requesting an advance payment.
- iii) A project technical progress report.

On an annual basis²:

At the conclusion of the government's fiscal year (March 31st of each calendar year), Proponents will submit an annual report to NRCan. These annual reports will include:

- The progress and results (e.g. outputs and outcomes) of projects undertaken linking science & technology and non-technical activities to the work plans
- An assessment of performance measurement (indicators and activities)
- A financial report providing actual costs incurred by project
- An updated budget for the next, or remaining, period

At the completion of the project:

i) A financial report that shall demonstrate how the contribution was spent, with a declaration as to the total amount of contributions or payments received from other sources in respect of the Project.

ii) A final narrative report to describe how project activities have contributed to the achievement of the objectives of the Project, including: (1) a review of the results of the project in comparison to the original deliverables and work plan, with explanations of any deviations, (2) a description of the benefits that have or will accrue as a result of the project including energy efficiency, environmental impact, costs and paybacks, and any other appropriate measures such as productivity and quality improvements.; and (3) a final project cost table.

² For large projects with significant Program funding the reporting period requested may be increased to quarterly

iii) As applicable in each individual case, copies of any reports prepared during the course of the project, such as engineering & design studies, GHG emission reduction assessments, etc.

iv) A fact sheet about the project, including major achievements and their impact, graphics, photos, and schematics from material included in the final report. The fact sheet could be used by NRCan for public information dissemination.

v) A report which describes the Proponent's knowledge dissemination activities. In addition, the Proponent will provide NRCan with an information package of materials that can be shared with industry and with the general public. This information will be provided in soft copy to NRCan. NRCan will have the right to post this information on its web site and make it available to the industry and the public, through various means, for example by making it available at public and international conferences. The package of information materials that can be shared with industry and the public will include:

Required:

- Non-proprietary technical results that can be widely shared

If applicable:

- Copies of PowerPoint and other presentation materials presented at conferences and other public events
- Links to web pages posted on public web sites
- Copies of journal articles (or journal article abstract and links to the journal article if it is a paid publication)
- Case studies

For a period of 5 years following the completion of the funded project:

(i) Annually, an updated Outcomes Report, using a template supplied by NRCan to report on short term, intermediate term, and long term outcomes.

- Short term outcomes will include: knowledge transfer and collaboration.
- Intermediate outcomes will include: awareness and understanding of technologies and processes associated with reducing air emissions; a capability to develop new and improved energy systems and technologies that contribute to clean air objectives; strengthened Canadian capacity for the implementation of clean energy alternatives; and commercialization activities.
- Long term outcomes will include: evidence of progress along the innovation spectrum and potential for GHG reduction.

Also to be included in the Report is an update to any knowledge dissemination activities, as well as any new information that can be made available to the industry and the public.

(ii) Annually, a financial report on the profitability of the project, based on generally accepted accounting principles.

3.12 Repayable Contributions

Transfer Payments for Demonstration projects may be repayable. See Appendix 2 for details.

3.13 Other Terms and Conditions

- All Intellectual Property that arises in the course of the Project shall vest in the Proponent. The Proponent will supply to Canada the reports and documents described in the funding agreement and the Proponent will grant to Canada a non-exclusive, irrevocable, world-wide, royal-free license in perpetuity to use the data and information contained in such reports and modify such reports and documents for non-commercial government purposes.
- No Member of the House of Commons shall be admitted to any share or part of the contribution agreements, or any resulting benefit.
- Funding may be cancelled or reduced in the event that departmental funding levels are reduced by Parliament. Agreements will include provisions for cancellations or reduction of transfer payments in the event that departmental funding levels are changed by Parliament.
- NRCan will have the right to, and plans to, audit records and documents of all approved projects, at any time during the course of the project and for a period of five (5) years following completion of the project. NRCan will stipulate dates of scheduled audits in the contribution agreement.
- Each contribution agreement will include a clause of indemnity by the Proponent for any claims against the Crown arising from the approved project.
- As part of project monitoring requirements, NRCan will have the right to visit and inspect all project sites, upon providing a reasonable notice to the project proponents.
- Failure of the applicant to enter into a contribution agreement acceptable to NRCan by the end of the respective calendar year may result in the cancellation of the project approval.

3.14 Official Languages:

Where applicable, NRCan will comply with the *Official Languages Act*, (<http://www.laws-lois.justice.gc.ca/eng/acts/O-3.01/>) related regulations, as well as federal government policies in this regard.

Application guidelines, and any other public documents provided by NRCan, will be made available concurrently in both official languages, and official communication with proponent will be in the official language of choice of the proponent.

3.16 Conflict of Interest:

If the applicant, or any individual working for the applicant, formerly provided consultancy services to the Minister that are related to this request for proposal, particularly any services associated with developing the Program or developing the Project which is the subject of this request for proposal, the applicant is considered to be in a real, perceived, or potential conflict of interest situation and must declare this in its application.

4. Confidentiality and Security of Information

The *Access to Information Act*, (www.laws-lois.justice.gc.ca/eng/acts/A-1/) (the “Act”) governs the protection and disclosure of information, confidential or otherwise, supplied to a federal government institution. This Act is a law of public order which means that the government of Canada, including NRCan, can not contract out of it.

Paragraph 20 (1) (b) of the Act states that:

a government institution [such as NRCan] shall refuse to disclose any record requested under the Act that contains financial, commercial, scientific or technical information that is confidential information supplied to a government institution by a third party and is treated consistently in a confidential manner by the third party.

Paragraph 20(1) (b) of the Act sets out two mandatory criteria in order to protect applicant’s confidential information supplied to NRCan from disclosure. First, the applicant’s documents supplied to NRCan must contain financial, commercial, scientific or technical information. Second, the applicant must consistently treat such information in a confidential manner.

In other words, NRCan will protect the applicant’s confidential information in its possession as much as the applicant protects said confidential information in its own establishment: if the applicant chooses to send the proposal or other confidential information to NRCan by e-mail, NRCan will respond to the Proposal by e-mail. Similarly, if the applicant’s correspondence is through regular mail, NRCan’s response will be in like manner. However, in all cases, NRCan will use e-mail correspondence to the applicants for all non-confidential matters.

For more information on this subject, a careful reading of the entire section 20 of the *Access to Information Act* is greatly encouraged.

5. Application Schedule and Process

5.1 Applications - Schedule

The following is the current schedule for the application and review process:

Start of Solicitation for Project Proposals	December 24, 2012
Final date for submission of Project Proposals	February 18, 2013
Project Selection by a Government Expert Committee	February, 2013
Applicants notified of NRCan's decision	March, 2013
Negotiation of contribution agreements	April, 2013

The above schedule is subject to change. Any changes will be communicated to applicants via e-mail and posted on NRCan's website (www.alternativefuels.gc.ca).

5.2 Submitting a Project Proposal

A submission must include a completed Project Proposal template (Appendix 3) without which it will not be considered. Please also review and comply with any Environmental Assessment requirements (refer to Appendix 4).

An applicant may provide supporting material for any aspect of the proposal. Applicants are required to submit all of the above documents **by 11:59 p.m. EDT, February 18th, 2013**. It is the applicant's responsibility to retain proof of time the documentation package was sent to NRCan. This may be required in the event that NRCan does not receive the documentation package by the deadline for reasons that are beyond the control of the sender.

As per Section 4 above, NRCan recognizes that e-mail is not a secure means of communication, and NRCan cannot guarantee the security of confidential information sent via email while it is in transit. Nonetheless, applicants who regularly use email to communicate confidential information within their own organizations may choose to submit their documentation packages by e-mail to: mdip-piemg@nrcan-rncan.gc.ca

Applicants may also submit their documentation by courier or registered mail to:

The Market Development Incentive Payment (MDIP) Fund
Fuels Policy and Programs Division
Natural Resources Canada
580 Booth St., 18th floor,
Ottawa, ON K1A 0E4

In all cases where applicants submit by courier or registered mail, we request that an electronic version on a memory stick or CD-ROM be included in the package, clearly marked with the name of the organization and the title of the project.

5.3 Supporting Documents and Requests for Supplementary Information

If you are providing supporting material, we request that it be in electronic format, preferably PDF. However, please note that the maximum total size of e-mail attachments is 10 MB. If your electronic submission would exceed the maximum, we suggest you submit the material by courier or registered mail, on a memory stick or CD-ROM, clearly marked with the name of the organization and the title of the project. We request that you restrict additional material to that which is directly relevant to, and in support of, your project proposal.

Supplementary information may be requested at various points in the review process. These requests will be made via e-mail, and responses should be by e-mail. Any additional material and documentation provided in response as attachments should be in electronic format, preferable PDF. Presentations by the applicants may also be requested, either in person or by teleconference, during the review process.

6. Selection Criteria

Applicants must address all of the criteria below in their Project Proposals, providing supporting documentation for all assertions. Note that the description of the individual criteria below are indicative of the factors considered by reviewers, but are not meant to be all inclusive.

Applicants are urged to submit all information they feel would be relevant in addressing the criteria in their proposals. Project Proposals will be rated and ranked on a comparative basis, against other proposals being reviewed, based on the following criteria and on an overall assessment of individual Project Proposals.

6.1 Selection Criteria - Summary

Mandatory Criteria:

Proposals will be evaluated by the Program Management Committee using the following mandatory criteria:

Mandatory Criteria	
Is the applicant an eligible recipient of funding under this RPP?	Yes/No
Has the applicant demonstrated and clearly proven an acceptable company governance structure?	Yes/No
Has the applicant demonstrated and proven good financial standing?	Yes/No
Does the project meet the scope of the RPP as defined in Appendix 1?	Yes/No
Do the total project costs fall within the allowable minimum and maximum limits?	Yes/No

Is the proposal complete, with all requested documentation?	Yes/No
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Evaluation Criteria:

Proposals that meet the mandatory criteria listed above will then be reviewed and ranked using the criteria given in Section 6.2. Supporting explanations can be found in Appendix 6. All criteria are given equal weight.

6.2 Selection Criteria - Detailed

Relevance

- How well does the project technology and concept meet both the objectives of the Program and the more specific scope and objectives as set out in Appendix 1?
- Does the project demonstrate collaboration between stakeholders in order to share costs and reduce barriers to the eventual deployment of the technology?

Risk

- What is the ability of the project manager, the technical and scientific team, and partner organizations to deliver the project over the lifetime of the project? (i.e. the ability to guarantee the performance and execution of the project)
- What is the complexity of the project? (i.e. number of project steps, number and magnitude of project unknowns and uncertainties)
- What is the business risk of the project? (i.e. financial strength of the proponent and partners; clear evidence of financial guarantee should a default arise; adequate evidence of co-funding, etc.)
- What is the quality of the project plan in terms of risk management strategies, achievable timelines, and clear decision points as part of well-planned project management?

Impact

- What is the potential impact of the technology if ultimately developed to a commercial scale, from technical, economic and environmental perspectives?
- Does the project show clear potential to significantly replace or improve current conventional technology and to thereby reduce environmental impacts?
- Is the project innovative?
- Is there evidence of adequate and abiding receptor capacity and interest to use the results of the Demonstration project?

6.3 Other Criteria

Portfolio Considerations:

In addition to the above criteria, other departmental priorities including US collaboration and regional balance may be considered in the final project selection.

7. Proposal Review and Selection Process

Government Expert Committees will be responsible for reviewing proposals, on the basis of the above assessment criteria.

Appendix 1: Request for Project Proposals for Demonstrations of Combined Heat and Power Systems

Objective: The objective of the Program is to support R&D activities directly involved in the demonstration of pre-commercial technologies that point the market towards new and innovative uses of natural gas that will, when fully deployed, contribute meaningfully towards the reduction of GHG emissions.

Eligible Technologies: Eligible technologies may include Internal combustion engines, Stirling engines and fuel cells which are configured as follows:

- Small scale CHP systems (1 – 10 kWelectric)
- Medium scale CHP systems (10 – 100 kWelectric)
- Large scale CHP systems (100 – 500 kWelectric)

Systems (as outlined above) that feature cooling in addition to, or instead of, heating will also be considered, especially where they can be shown to decrease grid demands during peak periods.

Finally, systems (as outlined above) that feature the use of natural gas fired heat pumps will also be considered, especially where they can be shown to decrease grid demands during peak periods.

Eligible Applicants: Eligible recipients are: for-profit and non-profit organizations legally incorporated or registered in Canada, including electrical and gas utilities, industry associations and research associations; Canadian academic institutions, Canadian provincial, territorial and regional and municipal governments and their departments and agencies, but excluding sole proprietorships.

Funding Available: A total of \$1.2 million is available to co-fund projects from the date of signing a contribution agreement to **October 31st, 2016**.

Project Size: Projects must have a minimum Contribution of \$600,000 (six hundred thousand).

Leverage: The maximum Contribution per project will not exceed 50% of Total Demonstration Project Costs. Total Canadian government assistance (federal, provincial/territorial and municipal governments, not including investment or funding from Crown or municipally-owned utilities) will not exceed 75% of Total Demonstration Project Costs.

Appendix 2: Costing Memorandum

This memorandum is for the guidance of potential proponents participating in a shared cost project under the Program. It outlines which costs incurred on the project are eligible for payment by the Minister and clarifies the following:

1. general conditions;
2. eligible costs;
3. non-eligible costs;
4. recovery of costs;
5. accounting records; and
6. in-kind support.

All references to the Minister refer to the Office of Energy Efficiency, Alternative Fuels Programs Division, Natural Resources Canada.

1. *General Conditions*

- (a) Contribution payments will be made as reimbursement of costs incurred by the Proponent for approved project activities. Payments will be made based on measurable, pre-defined project milestones, as well as upon the receipt of proper documentation as defined in the contribution agreement and the memorandum.
- (b) Final payment will not be made until all project activities have been completed by a Proponent and are deemed acceptable to NRCan. A percentage of the contribution will be withheld until all conditions of the contribution agreement have been met. The percentage withheld will be determined based on the nature of the project, and will be stated in the contribution agreement.
- (c) Quarterly advance payments will be allowed for both demonstration and R&D projects, based on the Proponent's forecast of cash flow requirements. The advance payment will be based on the Program's share of eligible expenditures in each fiscal year covered by the funding agreement.
- (d) If applicable, goods or services purchased other than in Canadian currency shall be reimbursed, based on receipts indicating the exchange rate used. When these costs are not supported by receipts, the monthly average Bank of Canada currency exchange rate shall apply wherein the transaction occurred. Consult the Bank of Canada website at www.bankofcanada.ca/rates for applicable rates.

2. Eligible Costs

Eligible costs shall consist only of expenditures made by the Proponent that are directly related to the project. These are defined as:

- Salaries and benefits;
- Overhead expenses* considered on a case-by-case basis;
- Professional, scientific and contracting services;
- Printing services;
- Data collection services, including processing, analysis and management;
- License fees and permits;
- Field testing services;
- Travel, including meals and accommodations;
- Equipment and products, including diagnostic and testing tools and instruments;
- Laboratory and field supplies and materials;
- Expenses related to the construction and operation of demonstration and pre-demonstration (R&D) projects, including plant and equipment, but excluding land.

(*Overhead expenses are legitimate eligible costs in the implementation of a project and should be included in the total project costs to a maximum of 15% of eligible costs. See also Point 6 below: Overhead Expenses.)

Salaries: Salaries include wages for all personnel with direct involvement in the project such as engineers, scientists, technologists, draftsmen, researchers, laboratory, experimental and shop labour. All eligible personnel must be employees on the Proponent's payroll. Payment in terms of shares, stock, stock options and the like are not eligible. The amount invoiced shall be actual gross pay for the work performed and shall include no mark-up for profit, selling, administration or financing.

The eligible payroll cost is the gross pay of the employee (normal periodic remuneration before deductions). Normal periodic remuneration rates are the regular pay rates for the period excluding premiums paid for overtime or shift work. The payroll rate does not include any reimbursement or benefit conferred in lieu of salaries or wages. When hourly rates are being charged for salaried personnel, the hourly rates shall be the periodic remuneration (annual, monthly, weekly, etc.), divided by the total paid hours in the period including holidays, vacation, paid sickness time.

Labour claims must be supported by suitable records such as time sheets and records, and be held for verification at time of audit. Management personnel are required to maintain appropriate records of time devoted to the project.

Benefits: Benefits are defined as a reasonable pro-rated share of expenses associated with the direct labour cost such as the employer's portion of Canada Pension Plan, Quebec Pension Plan and Employment Insurance, employee benefits such as health plan and

insurance, Worker's Compensation, sick leave and vacation plus any other employer paid payroll related expenses. Those items which have no relationship to the project or which have been charged on an indirect basis are non-eligible.

Materials: Materials include those consumed in carrying out the project, including those utilized in the production and operation of models, prototypes and pilot plants. Only utilities consumed to operate equipment or processes are eligible and may be metered and reported separately from the total utility cost. Utilities used for buildings are not eligible.

Materials purchased solely for the project and issued from the Proponent's inventory are eligible. All materials shall be charged to the project at the net price excluding GST after deducting all trade discounts and similar credits. Surplus materials shall be credited to the project at the original purchase price.

Equipment: Equipment consists of equipment acquired or constructed exclusively for the project. In order to be eligible, such equipment must be identified in the project cost estimate, and approved by the Minister. All such equipment shall be charged to the project at the net price (excluding GST) after deducting all trade discounts and similar charges.

Where such equipment is obtained from another division of the Proponent or from a related company, the eligible costs shall not exceed fair market value and shall not include any mark-up for profit, administration, selling or financing expense.

Sub-Contractors and Consultants: The nature of goods or services to be acquired shall be set out in the proposal estimate. The amount eligible from a sub-contractor or a consultant shall be the actual contract amount.

Testing Services: Eligible testing services are those conducted by testing organizations or accredited laboratories, such as the Canadian Standards Association, Underwriters Laboratories and must be essential to the success of the project. Testing services shall be charged at actual cost. Regulatory costs, where required may be eligible e.g. testing to comply with Environmental Standards. All such costs should be identified in the original proposal cost estimates.

Travel, Meals and Accommodation costs: Unless stated otherwise in the Contribution Agreement between the NRCan and the proponent, Treasury Board rates that are in effect at the time of signing the Contribution Agreement shall be used in reimbursing the following expenses:

- Travel, food and lodging costs to meet with NRCan officials;
- Travel, food and lodging costs necessary for other project activities, e.g. field trials and demonstrations at locations away from the proponents usual location; project planning and review meetings between the principal proponent and its partner(s)

3. Non-Eligible Costs

Federal and Provincial Taxes

4. Recovery of Costs

Transfer payments are not intended to allow Proponents to generate profits or to increase the value of their business. If a transfer payment to a project leads to a profit related to a demonstration project, the Proponent will be required to repay the transfer payment. The requirements that may trigger repayments will be detailed in the Contribution Agreement, along with the process for repayment.

For demonstration projects, as part of the reporting requirement, Proponents will be required to provide a financial statement on the profitability of their project, using generally accepted accounting principles, on an annual basis. If a profit is generated, then the amount to be repaid will be: profit times the proportion of CEF Program funding to Total Project Cost. The repayability period will start on the day following Project Completion and end on March 31, 2019

5. Records and Accounts

The Proponent shall maintain acceptable accounting records which clearly disclose the nature and amounts of the different items of cost pertaining to the project.

Records of original entry and supporting documents must be preserved in a form available for ready reference and audit for a period of at least five (5) years after the end of the Contribution Agreement period.

Divisions or related companies of the Proponent which have supplied goods or services to the Proponent shall be required to maintain such records as are required by the Proponent. These records must also be preserved in a form available for ready reference and audit for a period of at least five (5) years after the end of the Contribution Period. The definition of Eligible Costs of such goods or services shall be the same for the division or the related company as for the Proponent.

It is important to stress that labour charges shall in all instances be supported by records of the time and date when the work was performed. Pro-rated costs will be eligible only if allocated on a basis that is reasonable in the opinion of the Minister.

6. Overhead Expenses

Overhead costs will be negotiated on an individual basis with project proponents. They will not exceed 15% of eligible costs.

With regard to Overhead Expenses, they may include:

- administrative support provided directly to the project by the proponents employee(s), valued on the same basis as professional staff time (as described under category 1);
- routine laboratory and field equipment maintenance, based on the actual cost to the proponent that is directly related to the project;
- heat, hydro, and office operating costs (e.g. faxes, telephone), provided they are directly related to the project.

Guidelines for Estimating the Value of In-kind Support

IMPORTANT NOTE:

Proposed in-kind contributions that are deemed acceptable by NRCan officials must be supported by a formal commitment from the project proponent to provide them, prior to any commitment on Program funding to the proposed project being made.

Purpose:

The purpose of this guide is to identify the kinds of non-cash contributions (in-kind support) that are acceptable as part of the overall funding for the project from the project proponent³, and to provide guidance on how to put a value on those contributions.

Definitions:

- In-kind support - a cash-equivalent contribution in the form of an asset⁴ for which no cash is exchanged but that is essential to the project and that would have to be purchased by the project proponent on the open market, or through negotiation with the provider, if it were not provided by the project proponent.
- Fair market value - the average dollar value the project proponent could get for a contributed asset in an open and unrestricted market, between a willing buyer and a willing seller (the proponent) who are acting independently of each other. As a guide, it should approximately represent the original cost minus the depreciation.
- Most favoured customer - a customer given the deepest discount from the normal selling price for a good or service sold to it by the project proponent.

³ Unless otherwise indicated, “project proponent” in this section refers to the project applicant and its partners and collaborators

⁴ Asset in this section means a useful and valuable good, service or other support provided to the project.

Eligibility of in-kind contributions:

To be eligible as an in-kind contribution:

- The contributed asset must be from one of the categories identified below under the heading “Categories of Eligible In-Kind Support”
- It must be essential to a projects’ success and would otherwise have to be purchased by the project proponent
- Its value must be determinable and verifiable
- Its valuation must be confirmed by NRCan officials, and agreed upon by the project applicant and NRCan, prior to signing the contribution agreement

Assessing the Value of In-kind Contributions:

Two different approaches to the valuation of in-kind support are possible:

- Using the fair market value, as described above.
- Using the incremental cost – the cost to the project applicant or its partners and collaborators of providing the contributed asset over and above normal operating costs.

Categories of Eligible In-Kind Support

1: Salaries and Benefits

This category addresses the provision of the project proponents’ employees time to undertake work, such as research, technology development and assessment, and expert analysis that is wholly and directly in support of the project.

- Services of an employee of the project proponent shall be valued at the employee's regular rate of pay (plus an amount of fringe benefits that is reasonable, allowable, and allocable, but exclusive of overhead costs), provided these services are consistent with the duties for which the employee is normally paid.

2: Professional, Scientific and Contracting Services

This category addresses the provision of analytical and technical services. Analytical and technical services include routine laboratory and field technical services such as data collection, laboratory analyses and measurements, and field measurements, exclusive of equipment maintenance. These services may be provided by a component of the project proponents overall organisation, or provided to the project proponent by a third party.

The value of analytical and technical services provided by or to the proponent should be the lesser of the project proponents internal rate⁵ for the service if that service is provided internally (i.e., within the project proponents organization), or the incremental cost to the project proponent if it is provided by a third party.

⁵ Internal rate means the rate that would be charged by the component of the project proponent that *provides* the service to the component of the proponent that *receives* it.

3: Provision of Equipment and Laboratory and Field Supplies and Materials

This category includes equipment, laboratory supplies and field supplies that are provided by or to the project proponent, and the provision of access to, and use of, proprietary software and databases owned by or provided to the project proponent.

Values assessed for equipment and laboratory and field supplies and materials provided to the project must meet the following criteria:

- The value of supplies and materials shall not exceed the selling price to the providers most favored customer at the time of provision.
- The value of equipment shall not exceed the fair market value of equipment of the same age and condition at the time of provision.
- If the equipment is special purpose, one-of-a-kind, its value shall not exceed the cost to the provider of its design, testing and manufacture.
- The value of access to, and use of, proprietary software and databases should be the incremental costs to the project proponent of providing that access and use, such as staff time involved, including providing any required instruction on their use. Costs associated with developing the software or databases are ineligible as an in-kind contribution.

4: Travel, Meals and Accommodation costs

Unless stated otherwise in the Contribution Agreement between the NRCan and the proponent, Treasury Board rates that are in effect at the time of signing the Contribution Agreement shall be used in assigning a value to the following expenses.

- Travel, food and lodging costs to meet with NRCan officials.
- Travel, food and lodging costs necessary for other project activities, e.g. field trials and demonstrations at locations away from the proponents usual location; project planning and review meetings between the principal proponent and its partner(s).

5: Overhead expenses

Overhead costs will be negotiated on an individual basis with project proponents. They will not exceed 15% of eligible costs.

With regard to Overhead Expenses, they may include:

- administrative support provided directly to the project by the proponents employee(s), valued on the same basis as professional staff time (as described under category 1 above);
- routine laboratory and field equipment maintenance, based on the actual cost to the proponent that is directly related to the project;
- heat, hydro, and office operating costs (e.g. faxes, telephone), provided they are directly related to the project.

Appendix 3: Project Proposal Template

CONFIDENTIAL WHEN COMPLETED⁶

Notes

1. Unless otherwise specified, the “proposed project” or the “project” or the “proposal” in this template refers to the proposed project submitted in response to the RPP process undertaken by the Program.
2. Completion and submission of this Project Proposal template to NRCan does not imply that the proposed project will be approved for co-funding by the Program.
3. Applicants, their partners and collaborators must submit all information required under this request. Failure to provide the necessary information will lead to the proposal being rejected.
4. The completed Project Proposal must be submitted by e-mail, courier or registered mail by **11:59 p.m. EDT, February 18th, 2013**. Please refer to section 5.2 of this guide for the submission procedure. **Submissions sent after that time will not be accepted.** It is the responsibility of the applicant to retain proof of time the documentation package was sent to NRCan. This may be required in the event that NRCan does not receive the documentation package by the deadline for reasons that are beyond the control of the sender.

1. General Information and Applicant’s Attestations

Please note that the applicant’s name, project partners’ names, project title, non-confidential overview, expected benefits, and amount awarded will be public information if the proposal is selected for funding by the Program.

1. Project Title	
2. Project applicant’s legal name of company or organization	
3. Organization Structure: - Years founded (incorporated) - Proof of legal structure for for-profit - Proof of registration for not-for-profit - Number of employees	

⁶ Except where noted in section 1

- Management structure (please provide evidence of legal registration) - Governance structure	
4. Project partners (legal names of companies, utilities, provinces, etc)	
5. Project Start Date: the date a contribution agreement is signed by both parties	6. Project Completion Date: by October 31st, 2016
7. Project Location and Province /Territory	
8 Combined Heat and Power (CHP) Project Technology: If projects involve or related to multiple technologies, please list all relevant technologies, and describe the nature of the relationship.	
9. Project Summary (max.1 page) (non-confidential)	
10. Expected Benefits (non-confidential)	
11. Total Project Cost	
12. Funding amount Requested from the Program	
13. Has this proposal been submitted to other funding organizations? (Y/N), if Y, please list their names and contact information) <i>As part of its due diligence process, NRCan would like to contact these other potential funders. If you do not want NRCan to contact these organizations, please provide your reasoning below.</i>	
<p>Attestations</p> <p>By submitting this proposal, the project applicant attests that:</p> <ul style="list-style-type: none"> • It is acting on behalf of all partners and collaborators and has received written permission from them to do so. • It is legally registered or incorporated in Canada. • The project duration begins upon successful signing of a contribution agreement and concludes by October 31st, 2016. • Barring unforeseen events that could reduce their capacity, the applicant and participating partners and collaborators have, and will retain over the lifetime of the project, the technical and personnel capacity to undertake and complete the project, and that they have contingency plans in place to minimize, as far as possible, the impact of any such unforeseen events. • All funding (cash and in-kind) identified by the applicant and its partners and collaborators in the proposal is expected to be available for commitment at the time of the signing of the Contribution 	

Agreement by duly authorized representatives of the project applicant and its partners and collaborators.

- It agrees with the terms and conditions of the Program as well as the process described in the Applicant’s Guide provided to Applicants.
- Any proprietary or confidential information provided as part of the submission, by any party, is provided with the approval of that party. Federal reviewers are bound by the requirements of the *Access to Information Act* and the *Privacy Act* (www.laws-lois.justice.gc.ca/eng/acts/A-1/) regarding the treatment of confidential information.
- It understands and acknowledges that should the project be accepted for co-funding from the Program, no liability and no commitment or obligation exists on the part of NRCan to make a financial contribution to the project until a written contribution agreement is signed by both parties, and, furthermore, that any costs or expenses incurred or paid by the applicant prior to the execution of a written contribution agreement by both parties are the sole responsibility of the applicant, and no liability exists on the part of NRCan.
- It understands and acknowledges that NRCan officials will not entertain any request by project proponents to review or revisit NRCan's project approval decisions.
- It understands and acknowledges that NRCan reserves the right to alter or cancel the currently envisaged process at its sole discretion.
- The individual signing below attests that he/she has the authority to sign a legally binding contribution agreement between NRCan and the project proponent.

<p>Please sign below to confirm these attestations:</p> <p>_____</p> <p>Print name of signatory who must be a Duly Authorized Officer for Applicant:</p> <p>_____</p> <p>Title: _____</p>	<p>_____</p> <p>Date</p>
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2. Project Details

The information provided in this section should be concise, but sufficient to provide reviewers with a sound understanding of the proposed project, and to enable them to assess the likelihood of success of the project. Note the following sections so that information is not repeated. Please take into account the selection criteria outlined in section 6 of the Applicant’s Guide and definitions in Appendix 5. The template is laid out so that reviewers can find information in the project description relevant to the selection criteria.

2.1 Project Description and Relevance

This section should provide a general overview of the project and provide information on the project relevance to the Program and the specific scope requirements in Appendix 1 of the Applicants Guide:

- Explain the reasons for undertaking the proposed project, including why the various parties are involved in its implementation.
- What are the specific objectives that are to be achieved from the work that would be carried out under this project proposal? How do the project's objectives align with those of the Program? How well does the project align with the specific intent of the demonstration scope as stated in Appendix 1.

Why is it important the project be done in the next three and a half (3 ½) years, why should this project take priority over other projects, what opportunities might be lost if the project is not funded.

- Describe past work that the proposed project builds upon, if any. Please provide references to the results and conclusions of that past work that have been used in developing this project proposal.
- If this proposal is for a specific component of a larger, multi-component project (for which Program funding is not being requested), please explain the role of the proposed work and its relationship to the non Program funded components.
- If the project focuses on Smart Grid and/or integration technologies explain how the project will advance the greenhouse gas reduction objectives of the Program.
- Explain how the project will contribute to reduced greenhouse gas and other air emissions. If it is a component of a larger project, explain its role in attaining those reductions.

2.1.1 Partners and Collaborators

Please list here all partners and collaborators, including the applicant, and explain the nature of their role in, and contribution to, the project. Why are these other stakeholders and collaborators involved, what values do they bring to the project; how might they be involved in further deployment of the project concept. How will they interact with each other, what legal understandings are expected?

Organization	Type of contribution to the project - e.g. financial, (cash and/or in-kind); technical; both – if technical, please explain the nature of the contribution.
(add rows as required)	

2.2 Project Methodology and Risk Mitigation

This section is the statement of work for the project and how project risks might be mitigated.

2.2.1 Project Team

Please list here all members of the project team and describe their contribution to the proposed project and the experience and expertise they would bring to it. Refer to similar projects in which they have been involved. Please identify the Project Manager and provide sufficient information on all team members for reviewers to be able to assess whether the team provides the necessary management, engineering, research and technical capacity and capability, combined with the appropriate mix of expertise, to do the proposed work.

Team Member: Organization: Role in project: Expertise and experience:
Team Member: Organization: Role in project: Expertise and experience:
(add rows as required)

2.2.2 Project Statement of Work

- Describe in detail the “what and how” of the project: what work will be carried out under this proposal, and how it will be done. Describe the different phases (if appropriate) and activities. Identify and explain the key stage decision points. Explain clearly how the project will be managed and coordinated. Refer to the tables in section 2.2.3 below to avoid duplication.
- Clearly describe how the project’s progress will be managed and monitored, including identifying performance indicators, and the data that will be used to measure them.

2.2.3 Project Milestones, Outputs and Budget

Please provide the following information:

- Table A1 (see example in Appendix 3(a)) summarizing the principal phases / activities to be completed (identified under 2.2 above) on a year-by-year basis, with expected completion dates. Include principal milestones and outputs. Please refer to Appendix 3(a) of this template for an example table, and to Appendix 5 - Guide to Outputs and Outcomes, of this *Applicant's Guide*.
- Table A2 (see example in Appendix 3(b)) showing the entire project year-by-year budget by activity/phase broken down by eligible cost. Please refer to Appendix 3(b) in this *Applicant's Guide* for guidance on the costs that NRCan will consider eligible for reimbursement from the Program to the project, and how they may be estimated. Please provide sufficient detail for reviewers to be able to assess whether the proposed costs are reasonable and appropriate, both in terms of costs for each activity and the types of cost apportioned to each activity.

2.2.4 Summary of Project Funding Sources and Contributors

Please provide information on all funding sources and contributions, summarized by source category in the tables in this section. For in-kind contributions include, on a separate sheet (or sheets), a breakdown of the types of in-kind support offered, with the assessed value for each and the basis upon which the valuation was made (refer to Appendix 2 – Costing Memorandum, of this *Applicant's Guide*).

TABLE 1: TOTAL FROM APPLICANT				
	Fiscal Year (April 1- March 31)	Cash (1000\$)	In-kind (1000\$)	Total (1000\$)
	2013-14			
	2014-15			
	2015-16			
	1 Apr – 31 Oct 2016			
TOTAL APPLICANT (CASH + IN-KIND)				

TABLE 2: TOTAL FROM PRIVATE SECTOR⁷ AND ACADEMIC SECTOR				
Names of Contributors	Fiscal Year (April 1- March 31)	Cash (1000\$)	In-kind (1000\$)	Total (1000\$)
Contributor 1 (specify)	2013-14			
	2014-15			
	2015-16			
	1 Apr – 31 Oct 2016			
Contributor 2 (specify)	2013-14			
	2014-15			
	2015-16			
	1 Apr – 31 Oct 2016			
TOTAL PRIVATE AND ACADEMIC (CASH + IN-KIND)				

TABLE 3: TOTAL FROM FEDERAL⁸ GOVERNMENT if applicable (NOT PROGRAM funding)				
Names of Contributing Departments or Agencies	Fiscal Year (April 1- March 31)	Cash (1000\$)	In-kind (1000\$)	Total (1000\$)
Contributor 1 (specify)	2013-14			
	2014-15			
	2015-16			
	1 Apr – 31 Oct 2016			
Contributor 2(specify)	2013-14			
	2014-15			
	2015-16			

⁷ Other than applicant (if applicable). Include any funding from Sustainable Development Technology Canada in this box.

⁸ Other than the Program

	1 Apr – 31 Oct 2016			
TOTAL FEDERAL GOVERNMENT² (CASH + IN-KIND)				

TABLE 4: TOTAL FROM PROVINCIAL / TERRITORIAL / MUNICIPAL GOVERNMENTS				
Names of Contributing Governments	Fiscal Year (April 1- March 31)	Cash (1000\$)	In-kind (1000\$)	Total (1000\$)
Contributor 1 (specify)	2013-14			
	2014-15			
	2015-16			
	1 Apr – 31 Oct 2016			
Contributor 2 (specify)	2013-14			
	2014-15			
	2015-16			
	1 Apr – 31 Oct 2016			
TOTAL PROVINCIAL / TERRITORIAL / MUNICIPAL GOVERNMENT (CASH + IN-KIND)				

TABLE 5: TOTAL REQUESTED FROM THE PROGRAM	
Fiscal Year (April 1 - March 31)	Amount (1000\$)
2013-14	
2014-15	
2015-16	
1 Apr – 31 Oct 2016	
TOTAL PROGRAM FUNDS	

TABLE 6: SUMMARY OF PROJECT FUNDING				
Funding Source	Total Cash (1000\$)	Total In-Kind (1000\$)	Total Cash + In-Kind (1000\$)	Percentage of project total
Applicant				
Private Sector and Academic				
Federal Government (other than Program funds)				
Provincial / Territorial / Municipal Governments				
Program Funds				
TOTAL PROJECT				100%

2.2.5 Financial Structure & Business Case for Funding Assistance

Please provide a business case justifying the level of government funding requested. This should include some information on expected revenues and costs of the different components of the proposed project over time and identification of a gap in funding that could be met with government support, from all orders of government (federal, provincial / territorial, and municipal).

Also, please explain how the project will be funded, and answer questions such as: what is the financial ability of the applicant to fund the project? Have project budgets been fully or partially approved to cover all of the financial commitments to the project? What are the financial risks and how good is the mitigation plan? Is the proportion of government funding proposed within the Program limits? Is the co-funding to be provided by partners and other orders of government in place? How strong is the justification for government support? How realistic and strong is the business case (i.e. operating revenues and costs well justified)?

Applicants are advised that NRCan will carry out financial due diligence on the applicant and the project business plan as part of the process prior to signing of a contribution agreement.

2.2.6 Risks and Risk Mitigation Strategy

Please provide a review of the project risks in terms of technical risk, business risk, financial risk, project performance risk and other risks (environmental review, permitting etc). The project will be evaluated based on how well the risks have been identified and each of the risk mitigation strategies. It is understood that demonstrations carry risks, which is why government funding is required as part of risk mitigation strategies. What is needed is for the applicant to demonstrate that they understand the risks at various stages of the project development and that there is a well thought out plan to execute the project in such a manner that risks are mitigated to a reasonable degree.

2.3 Impact and Expected Outcomes

2.3.1 Innovation

Describe how the project technology or concept is innovative. Has the project been field trialled in Canada? Has the concept been deployed in other countries and if so provide information in terms of deployment history (hours of operation, number of units). Explain why the concept is new in the Canadian context and why the concept is significant from an innovation perspective.

2.3.2 Impact of Future Deployment

Describe what the potential impact of the project might be if the demonstration is successful. What might the deployment plan be to the 2020 period and further to 2050? Describe the potential impact in terms of technical development, economic impact to Canada, and also identify environmental impact of full scale deployment. If a project is being identified as of particular significance for remote and northern communities it is recognised that the GHG impact of deployment may be modest. In this case identify the impact within the region where this technology or concept might be deployed.

2.3.3 Evidence of Receptor Interest

Future deployment of the technology or concept will depend critically on receptors to continue to either develop the concept (fabrication companies), deploy the concept (energy companies or utilities), assist in the promotion or support through tariffs or funding (local levels of governments) or purchase the technology or concept (customers and business owners). Provide evidence that this receptor interest exists, is there evidence of market pull? Are receptor interests involved on the project team? Are they passive interests or do they have financial commitments to the project.

2.3.4 Information Dissemination

As the project is developed, it is important that there is an information plan that can provide relevant information to interested receptors. While confidential information is to be respected, the impact of a demonstration will be made, in part by how well the project development information is transferred to interested external parties. This is not a PR plan but rather a plan identified in the proposal to sets out over the duration of the project how project information will be provide to those interested in the project technology or concept. In addition to this plan there will be formal project reporting requirements which are detailed in the *Applicant's Guide* and in the contribution agreement. This section should deal with any information concepts outside the minimum requirements. Participation by project proponent members on Canadian and international code committees is an eligible project cost as part of information dissemination.

Appendix 3(a)

Example of Table for Section 2.2.3

If applicable, the following is an example of a table summarizing the principal phases / activities and completion dates for the project. It is for a hypothetical Combined Heat and Power (CHP) project involving the applicant developing, testing and deploying equipment; contracting service providers to manage the deployed equipment and to collect and manage data; the applicant analyzing and interpreting the results of the project, and contracting printing of final reports. Please also refer to Appendix 5 - Guide to Outputs and Outcomes, of the *Applicant's Guide*.

Please note that activities should be defined by fiscal year from April 1st to March 31st. Also note that the examples below have been greatly simplified and that it is expected that the level of detail will be significantly greater in the project proposals to be prepared for the Program. The dates below are for **illustrative purposes only** and are not an expectation as to realizable project completion dates. **You are required to replace these dates with accurate dates for your project.**

Table A1

Activities	Fiscal Year	Principal Milestones	Completion date	Outputs - identify whether interim (I) or final (F)
Reporting	All		As required	Progress reports as specified in contribution agreement
Phase 1 – Project Design				
Project Design	2011-12	Methodology determined and approved by project team Review of applicable regulatory, certification, code and standard requirements Detailed Engineering Design approved	As examples: October 31, 2011 November 30, 2011 Dec 31, 2011	Final detailed project plan (I) Report on application codes, standards certification requirements and regulations (I) Detailed Engineering Design report (I)
Equipment procurement		Vendors selected for long lead time items Long lead time items orders placed	February 20, 2012 March 10, 2012	Letters of Intent from Suppliers (I) Purchase Orders (I)
Environmental Assessments & permits (assumes Canadian Environmental Assessment Act requirements are met)	2011-12	Site selected All permits obtained Environmental Assessment completed Power Purchase Agreement Obtained	June 30, 2012	Site Assessment. (I) Permits (I) Environmental Assessment (F) Power Purchase Agreement

Appendix 3(b)

Example of Costing Table for Section 2.3.1

The following is a list of costs that NRCan will consider eligible for reimbursement.

- salaries and benefits of team members, pro-rated to the amount of time they work on the project;
- overhead expenses negotiated on an individual basis with project applicants on a case-by-case basis;
- professional, scientific and contracting services;
- printing services;
- data collection services, including processing, analysis and management;
- licence fees and permits;
- field testing services;
- travel, including meals and accommodations;
- equipment and products essential to the project, including diagnostic and testing tools and instruments; and
- laboratory and field supplies and materials.
- if applicable and negotiated with project applicants on a case-by-case basis, expenses related to the construction and operation of demonstration and pre demonstration (R&D) projects, including plant and equipment, but excluding land.

The following table is an example of a costing table for section 2.3.1. It is for a hypothetical three-phase project involving the applicant developing, testing and deploying equipment; contracted service providers to manage the deployed equipment and to collect and manage data; the applicant analysing and interpreting the results of the project, and contracted printing of final reports.

Again, please note that activities should be defined by fiscal year from April 1st to March 31st. Also note that the examples below have been greatly simplified and that it is expected that the level of detail will be significantly greater in the project proposals to be prepared for the Program. The dates below are for illustrative purposes only and are not an expectation as to realizable project completion dates.

Table A2

Year / Phase / Activity	Expenditure Type (from Eligible Costs)	Total Cost	CEF Contribution
2013/2014			
Phase I – Project Design			
Project Design	Salaries and benefits (applicant) Overhead expenses Professional, scientific and contracting services Field testing services		
Equipment procurement	Salaries and benefits (applicant) Overhead expenses Capital expenses		
Environmental Assessments & permits	Salaries and benefits (applicant) Overhead expenses Professional, scientific & contracting services License fees and permits Printing services		
Phase 1 Project Management (incl. planning meetings)	Salaries and benefits (applicant) Professional, scientific and contracting services		
2014/2015			
Phase 2 - Project Implementation			
Permit to deploy equipment	License fees and permits		
Construction	Capital equipment		
Field Installation	Salaries and benefits (applicant)		
Field Testing	Field testing services		
Data Collection and Processing	Data collection services, including processing, analysis and management		
Phase 2 Project Management (incl. review meetings)	Salaries and benefits (applicant) Professional, scientific and contracting services		
Field Testing and Monitoring (continued)	Field testing services		
Data Management	Data collection services, including processing, analysis and management		
2015/2016			
Field Testing and Monitoring (completed)	Salaries and benefits		
Data Management	Data collection services, including processing, analysis and management		
Phase 2 Project Management (incl. review meetings)	Salaries and benefits (applicant) Professional, scientific & contracting services		

TOTAL Phase 2			
Phase 3 – Analysis and Reporting			
Data analysis	Salaries and benefits (applicant) Data collection services, including processing, analysis and management		
Preparation of Draft Report(s)	Salaries and benefits (applicant)		
Review meeting(s)	Travel for team members		
Printing and dissemination of knowledge products	Printing services		
SUMMARY			
Total Phase 1			
Total Phase 2			
Total Phase 3			
Project Total			

Appendix 4: Compliance with Legislation and Regulations

General

Applicants must ensure they are in compliance with applicable federal, provincial and municipal legislation and regulations.

Environmental Assessment

Federal environmental assessment (EA) legislation can place certain obligations on Natural Resources Canada as a funding department. Among these may be a requirement to withhold funds until a federal EA is complete and a decision has been rendered.

Canadian Environmental Assessment Act, 2012

The [Canadian Environmental Assessment Act, 2012](#) (CEAA 2012) and its regulations establish the legislative basis for the federal environmental assessment (EA) process, and is applicable in all Canadian provinces, certain areas of the of the offshore and, to a certain very limited extent, Canada's territories. It is administered by the [Canadian Environmental Assessment Agency](#).

Certain large projects (i.e. 'designated projects') are subject to CEAA 2012. Regulations define the [types of projects](#) subject to CEAA 2012, the information to be provided in [project descriptions](#) and what [costs can be recovered](#) from proponents.

Any project on federal land, or occurring outside of Canada, is also subject to CEAA 2012.

Proponents should indicate in their application whether their project is subject to CEAA 2012.

Environmental Assessment Legislation in the Territories

In Canada's three territories, specific legislation also imposes EA obligations on Canada (i.e., the [Nunavut Land Claims Agreement Act](#) and the proposed [Nunavut Planning and Project Assessment Act](#), the [Mackenzie Valley Resource Management Act](#), and the [Yukon Environment and Socioeconomic Assessment Act](#)). These Acts establish different obligations for Responsible Ministers or federal Decision Bodies, depending on the nature of the department's responsibility for authorizing a project to proceed.

Proponents should indicate in their application whether their project proposal may be subject to any of the above listed legislation.

Appendix 5: Guide to Outputs and Outcomes

(Reference: Section 2.2.2 under Appendix 3 of the Project Proposal Template)

Output – Outputs are the products of the project. They are classed into two groups:

- **Interim Outputs** are not generally intended for dissemination beyond the project team and NRCan. They are indicators of progress in the project, in logical steps. Examples are project status reports, working papers, test reports, draft technical reports and analyses, and beta-version software products (including databases) for limited distribution for testing purposes. Some interim outputs (e.g. progress reports) may be required under the terms of the contribution agreement, should the project be approved for Program funding.
- **Final Outputs** are the products to be delivered at the end of the project that are intended for dissemination to, and use by, the intended beneficiaries of the project (including NRCan) - the stakeholders. Examples: technical reports and analyses; engineering analyses; prototype /early-stage technologies and systems developed and demonstrated; technology assessments; new measurement techniques and protocols; pilot installations; software products. Intended final outputs will be identified in the contribution agreement.

Outcome – Outcomes are the consequences attributed, in whole or in part, to the project. They are the changes or impacts to which the project leads. Outcomes are classed as short-term, medium-term and long-term (sometimes referred to as immediate, intermediate, and final, respectively).

- **Short-term Outcome:** Short-term (less than one year after completion of the project) flow directly from the project's final output(s). Example: new knowledge is made available, e.g. operating parameters, lessons learned regarding the implementation of an energy project, information on commissioning energy systems, how barriers to deployment of the energy system were overcome, etc.
- **Medium-term Outcome:** Medium-term outcomes (typically one to five years after completion of the project) flow from the short-term outcomes. Examples: the project has been in full operation for some time; greenhouse gas reductions have been documented; CO₂ credits have been claimed; other benefits have been achieved; the project is intended to be replicated; lessons learned regarding cost reductions, operations, etc.
- **Long-term Outcome:** Long-term outcomes (typically more than five years after completion of the project) represent the raison d'être of the project. They flow from the medium-term outcomes: for example, from the wide scale deployment and operations of a new technology leading to large and sustained reduction of greenhouse gas emissions from an industrial process.

Appendix 6: Selection Criterion

(Reference: Section 6 of the *Applicant's Guide*)

	Criteria	Evidence
A	<p>Compliance with Program requirements</p> <p>Technical capacity of the team: to include background and experience relative to the proposed project (resumes included)</p> <p>Project management capacity of the team: to include background and experience relative to the proposed project (resumes included)</p> <p>Project schedule included with reasonable milestones and decision points</p>	<p>Clear identification of how the project aligns with the Program's objectives</p> <p>The applicant team has appropriate scientific and technical personnel to perform the work in order to meet the project objective and milestones</p> <p>The applicant team has appropriate project management and financial experience and capacity to perform the work in order to meet the project objective and milestones</p> <p>Project milestones and timelines are realistically noted</p>
B	<p>Reach: the degree to which the project involves Canadians – locally, regionally and nationally</p>	<ul style="list-style-type: none"> - The expected use of Canadian goods and services and/or the expected degree of transfer of foreign technology and expertise - Participation by Canadian partners who are able to exploit the results - Participation by Canadian stakeholders thought to be important to the success of the project - Appropriate involvement of other Canadian collaborators, governments, organizations or agencies thought to be important to the success of the project
C	<p>Resource Management: the degree to which the project is properly resourced in human and financial terms</p>	<ul style="list-style-type: none"> - A description of the financial plan (budget) including the identification of all sources of funding (including direct and in-kind contributions) - The eligible costs of the proposal and the amount of leverage that may be achieved by the proposed federal contributions(s) - Adequate human and financial resources thought to be important to carry out the project in the allowed timeframe

D	<p>Technology Innovation and Leadership: the degree of innovation of the technology; sound technical due diligence, knowledge of potential competitors in the near term marketplace; sound intellectual property strategy and the degree to which the innovation will truly be disruptive in the marketplace by changing the status quo</p>	<p>- Description of the current status of the technology, SWOT (Strength, Weaknesses, Opportunities and Threats) analysis, identification of competitors, technical gap being addressed, specific innovation involved, status and ownership of intellectual property, third party technical due diligence (if any)</p> <p>- Description of the business model leading to market launch, what are the value streams? who will benefit from their exploitation? what elements of the business model are truly disruptive to the status quo?</p>
E	<p>Replication Potential: the application will be assessed on its replication potential of the project in Canada, which should identify number of potential installations and any known potential sites</p> <p>New Markets: the applicant will be assessed on how this technology will create new markets for natural gas in Canada and any potential impacts on the supply chain</p> <p>Natural Gas Volume Potential: clearly state annual natural gas volume represented by pilot opportunity (one unit) and for limited deployment (multiple units)</p>	<p>Description of near term market opportunities for the resulting technology (next 5 (five)years)</p> <p>Description of the natural gas market transformation potential for the resulting technology (next 5 (five) years)</p>
F	<p>GHG Emission Reduction Potential: clearly state attributable GHG reduction potential for pilot opportunity (one unit) and for limited deployment (multiple units)</p> <p>Cost-Effectiveness: the degree to which the project represents good value for money in terms of GHG emission reduction potential</p> <p>Energy Savings Potential: clearly state total primary energy savings potential for pilot opportunity (one unit) and for limited deployment (multiple units)</p> <p>Cost-Effectiveness: the degree to which the project represents good value for money in terms of primary energy savings potential</p> <p>Ancillary Benefits: the degree to which the project will provide benefits other than GHG emission reduction (e.g. time savings, operating costs reduction, air quality improvements, energy security, energy reliability)</p> <p>Socio-Economic Benefits: the degree to which the project will provide opportunities such as training, job creation etc</p>	<p>Description of the potential project benefits / impacts</p>
G	<p>Performance Metrics: sound list of performance metrics, and description of how they will be used during the project and afterwards, in order to monitor and assess the potential market impact of the technology innovation</p>	<p>List potential performance indicators and method for evaluation of each on an ongoing basis</p>

