

Request for Proposals – Buildings Program Labelling Pilots

Natural Resources Canada (NRCan) is presently involved in an activity to develop a voluntary energy labelling system for commercial and institutional buildings across Canada. For more information, please read our Web pages at www.oeec.nrcan.gc.ca/commercial/regulations-standards/labelling.cfm.

NRCan invites proposals from qualified provincial, territorial, regional and/or municipal governments (see **Appendix D: Definitions**) to pilot test voluntary building energy labelling systems in applicable building types (see **Appendix A: Applicable Building Types**) within their jurisdictions.

While the focus of the pilots is expected to be government-owned and operated buildings, governments may propose to work cooperatively with non-government organizations to include non-government-owned and operated buildings.

Note: An Evaluation Criteria grid is included at the end of this request for proposals (RFP). This grid serves as a checklist for proponents as well as a tool for NRCan to verify that all listed items are met, as well as to award a score to the proposals received.

Response information

Questions

Questions about this RFP should be directed by e-mail to info.services@nrcan.gc.ca and cite **Labelling Pilot RFP** in the subject line.

Deadline

The deadline to submit a proposal is 4pm EST, **Friday, November 16, 2007.**

Format

Please provide proposals in

- 8 ½ x 11 paper copy format, OR
- electronic format (as Microsoft Word™, WordPerfect™ or PDF files)

Address

Paper format (hard copy) must be sent via registered mail or courier (requiring signature) to:

NRCan, Buildings Division
1 Observatory Crescent
Building # 3
Ottawa, Ontario
K1Y 4X2
Attn: Senior Officer, Labelling

Electronic format must be e-mailed to info.services@nrcan.gc.ca.

1 Objectives

The broad objective is to test a voluntary building labelling methodology, tools and implementation within controlled market sectors (notably public sector buildings) to evaluate the potential for wider energy performance labelling of buildings across Canada. Each pilot must specifically address how they will implement **both** the mandatory objectives and **at least one** of the optional objectives noted below.

Mandatory objectives

- 1.1 Assess and document client steps required to apply for the "draft" label (see **Appendix D: Definitions**) and to record time spent on labelling activities in order to broadly determine the cost and attendant technical/human resources required both by label applicants and administrative bodies.
- 1.2 Identify and report energy-use data for building type(s) being investigated in the pilot.

Optional objectives

- 1.3 Test the accuracy of one or more energy use validation tools for both new and existing buildings.
- 1.4 Determine the value of building labelling when a commercial building is sold or renovated, for example, and report and assess stakeholder issues.
- 1.5 Test the label design, which may include the addition of additional items to the label template that are related to regional identification or regional objectives.

2 Proposal Information

- 2.1 A multi-year Contribution Agreement for funding support will be developed by NRCan with the lead proponent in a successful project. NRCan support may only cover work under successful pilot projects undertaken between the date of signing of Contribution Agreements with NRCan and March 31, 2009.
- 2.2 NRCan funding for a successful project shall not exceed 75 percent of the total estimated project costs, or \$80,000, whichever is less. Preference will be given to proposals with significant proponent co-funding.
- 2.3 Pilots may start as soon as Contribution Agreements have been signed by all parties and may continue for as long as the participants deem suitable. However, NRCan funding commitments will only apply to the period stipulated in NRCan's Contribution Agreements.
- 2.4 It is anticipated that between four and five pilot projects will be supported under this RFP. While it is anticipated that no more than one pilot will be awarded in any province or territory, if submissions warrant, NRCan reserves the right to award up to two pilots in any one province or territory.
- 2.5 NRCan will provide the data that will be used for "least efficient in class" (see **Appendix B: Label**) for the draft label. Proponents are invited to supply data they own and have validated to supplement NRCan data.
- 2.6 NRCan will undertake to model energy-use data supplied under the pilots through a commercially available energy management software (e.g. FASER, Metrix, Market Manager, EnergyCap, Energy Watchdog) to normalize for weather.

2.7 NRCan will produce all labels used in the pilots, using data provided by proponents.

2.8 NRCan will perform a file audit (see **Appendix D: Definitions**) on a percentage of the data submitted under the successful pilot.

3 Proposal Requirements

3.1 Participants

3.1.1 Proposals must be supported by a provincial, territorial or municipal government with either funding or in-kind support or both. The fair market value of any and all in-kind support must be identified in the proposal cost estimate.

3.1.2 Proposals must identify all partners and their contributions (financial or in-kind) to the project.

3.1.3 Eligible recipients include individuals, not-for-profit organizations, corporations, industry associations, research associations, academic institutions, provincial, territorial and regional governments and their departments or agencies.

3.2 Objectives and Processes

3.2.1 Proposals must identify the specific objectives of the pilot and show how they relate to NRCan's mandatory and optional stated overall objectives above.

3.2.2 Proposals must identify how their stated objectives will be met, providing a logistical outline of the administrative functions already in place or activities/tasks to be established, staff or contractors who will be allocated the work, etc.

3.2.3 Proposals must identify the total estimated costs of the project by activity/task.

3.2.4 Proposals must identify timelines for the project. NRCan will consider supporting work for successful pilot projects completed on or before March 31, 2009.

3.2.5 Proposals must identify how labelling will be promoted/ marketed in the region or to the market segment identified and what marketing issues the proponent anticipates addressing in the pilot.

3.2.6 Proposals must identify what, if any, aspects of the label will change from the existing template.

3.3 Building types

3.3.1 Only building types outlined (with examples) in **Appendix A: Applicable Building Types** will be used in the pilot.

3.3.2 Proposals must identify building type(s) and estimated number(s) in each type that the pilot will label.

3.3.3 Both new and existing buildings must be labelled in the pilot. It is understood and anticipated that there will be more retrofit/existing building labels than new building labels in any pilot set proposed.

3.3.4 Preference will be given to projects that plan to provide a minimum of twenty (20) buildings of each building type assessed in the pilot. However, if a proposal provides a plan for a disparate number of building types and lower numbers of each type, NRCan is willing to consider it. Such proposals must provide a rationale that identifies the benefits of investigating their particular group of buildings.

For example,

- NRCan would understand if only a limited number of buildings were to be labelled at point of sale (to understand issues resulting from labelling at sale) because large commercial buildings do not sell very often and there is a limited time to capture data in the pilot.
- Similarly, labelling a range of different buildings within a city may be useful to help define a city's processes and identify potential costs or staffing requirements.

3.4 Data and Reporting

3.4.1 Building data will be reported as required under clauses 3.7.3 and 3.7.5 of this proposal. In addition, proposals must identify how their pilot results that are not building data sets (e.g. for marketing results, or for identification of market barriers) will be tabulated and reported.

3.4.2 Proposals must obtain consent from the participants to share all pilot data with NRCan and all DSMWG Labelling Committee (see **Appendix D: Definitions**) representatives and to show building data in a publicly available web site or publication both as data related to a specific building and in aggregate form.

3.4.3 Labels created by NRCan for each building in the pilot will be public documents (See 3.7.6).

3.5 Tools

3.5.1 For **new building** (see **Appendix D: Definitions**) **designs** the NRCan Screening Tool (www.screen.nrcan.gc.ca) must be used to estimate designed energy performance.

3.5.2 If a new building design is complex and validation data exists from a tool recognized by NRCan to provide more accurate assessments of the energy design (such as an EE4 file that has been third-party validated), data from such a model can be submitted **as well as** a screening tool file. The EE4 energy-use data would be used on the draft label that NRCan will produce.

3.5.3 For **existing buildings** (see **Appendix D: Definitions**) actual energy bills must be used to determine energy performance.

- Bills must have been issued within a 24-month period prior to labelling.
- The bills must provide twelve continuous months of energy billing.
- No retrofits or re-commissioning can have taken place in the 12-month period for which energy bills are supplied.
- The building must have been occupied in the months for which bills are supplied.
- Energy bills must be supplied for all forms of energy used in the building.

3.6 Verified labels

3.6.1 Proposals must identify a mandatory process to follow up and reissue "verified" (see **Appendix D: Definitions**) labels to all buildings that participate in the pilot within two years of the initial labelling process. NRCan will provide the "verified" label. It is NRCan's intent to support such activity in future.

3.6.2 The "verified" label will only be provided when the building has been fully commissioned (documentary proof of commissioning will be required) and actual energy bills are available for 12 continuous months for which the building has been occupied.

3.6.3 Buildings “draft” labelled in a pilot may also be given the opportunity to receive a “verified” label during the pilot.

3.7 Certifications

3.7.1 Proposals must certify that common tools, processes and reporting mechanisms stipulated in this outline will be used.

3.7.2 Proposals must commit to providing participants with a draft label produced by NRCan. Some local modifications to the label template in **Appendix B: Label** will be acceptable provided they have first been approved by the DSMWG Labelling Committee.

3.7.3 **Appendix C: Typical Data to be Collected** identifies data that must, at a minimum, be reported to NRCan.

3.7.4 Proposals must commit to share the data sets and documentation for each building participating in the pilot with NRCan in a consistent manner, as a part of the NRCan reporting mechanism of the pilot.

3.7.5 Proposals must certify that data will be provided to NRCan in Excel™ spreadsheet format. Paper documentation such as commissioning reports will be provided electronically as PDF files.

3.7.6 Proposals must commit to making it a requirement of participating in the pilot that the resulting “draft” building energy label will be displayed in a prominent place in the entrance foyer area of the building.

3.7.7 Proposals must commit to observe the definitions cited in **Appendix D: Definitions** of this document.

Appendix A: Applicable Building Types

1) Provincially, municipally or institutionally-owned or operated new and existing buildings without refrigeration (i.e. not arenas or retail food stores for example).

2) New and existing commercial buildings without refrigeration that conform to the *National Building Code of Canada*, Part 3, and listed below.

Terminology: Where possible the terminology used below matches that of the North American Industry Classification System (NAICS) for commercial and institutional buildings. Terminology used in the Model National Energy Code for Buildings (MNECB) is added for clarity.

RESIDENTIAL ACCOMMODATION (not in NAICS) e.g.

Dormitory/ Student Residence

Multi-Unit Residential Building MURB (greater than 10,000 m²)

Multi-Unit Residential Building MURB (less than 10,000 m²)

INFORMATION AND CULTURAL INDUSTRIES (ASSEMBLY under MNECB) e.g.

Auditorium/Cinema/Theatre/Studio sets with audience/Convention Centre

Community Centre without Arena

Library/Museum/ Exhibition Space/ Visitor Centre/Passenger Terminal

EDUCATION e.g.

College or CÉGEP Classroom or Office Building

University Classroom or Office Building

Educational Facility (year-round use)

Elementary School (closed summer)

Secondary School (closed summer)

HEALTH CARE (*Hospitals are excluded for these pilots*) e.g.

Long-term Care/Nursing Home

Rehabilitation Centre (live-in)

Includes DETENTION from MNECB: e.g. Police Station with Cells

OFFICE e.g.

Finance and Insurance

Real Estate Rental and Leasing Offices

Professional, Scientific and Technical Services

Public Administration Office Building

Emergency Services (e.g. Police Station with no Cells)

Commercial Office

RETAIL (*non-food only for pilots*) e.g.

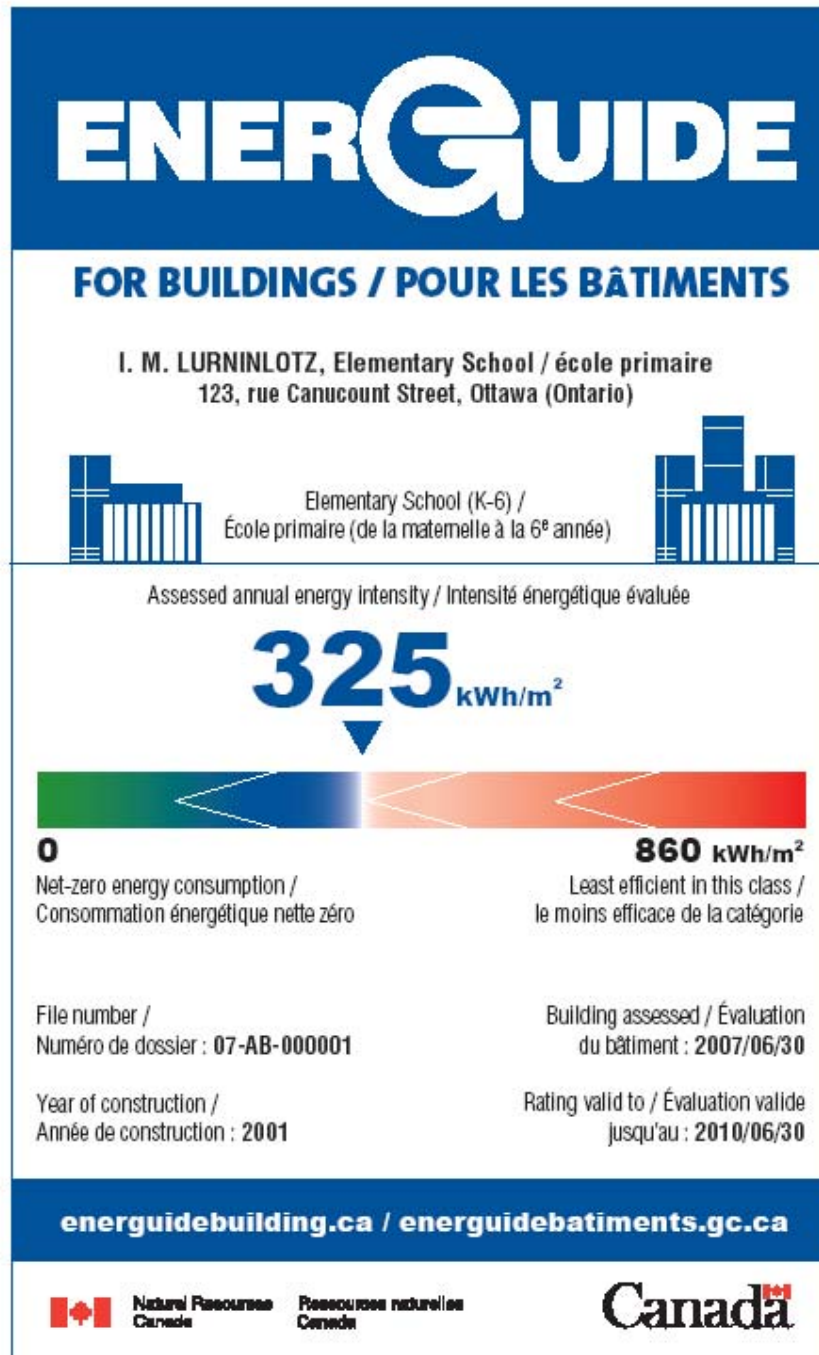
Big Box or Warehouse Store (e.g. Leon's, Costco)

Department Store

Strip Mall

Store

Appendix B: Label



Appendix C: Typical data to be collected

- Building name
- Building type: using a consistent set (see **Appendix A: Applicable Building Types**)
- City
- Province
- Area of conditioned space (see **Appendix D: Definitions**)
- Occupancy data (e.g. seasonal, percent occupied)
- Total Energy Used by equivalent kW units and percentage of total energy that represents (e.g. 400 kWh – 50 percent electricity, 200 kWh equivalents – 40 percent gas) for Electricity; Gas; Oil; Propane; Renewables. NRCan will provide the equations to render these figures in kWh equivalents
- Demand data for electricity data
- Where proponent buildings have an Energy Management Control Systems (EMCS) installed, indicate such and provide a sample list of relevant control points and frequency for automatically trend logs to be archived in an MS-office text file format
- Key building characteristics (proposed list below)
 - Primary Heating System (Type)
 - Efficiency of Primary Heating System
 - Primary Cooling System (Type)
 - Efficiency of Primary Cooling System
 - Window to wall ratio
 - Average Window RSI
 - Average Wall RSI
 - Average Roof RSI
 - Installed Exhaust Air Heat Recovery
 - Efficiency of HRV
 - Average Lighting Power Density
 - Installed Lighting Controls (Type)
 - Percentage of Lighting Controlled
 - Installed Renewable Energy
- Date of building permit/major renovation/commissioning/re-commissioning
- If a building energy audit has been performed by a qualified engineer in the last 3 years, a PDF file of the report document

Appendix D: Definitions

Area: the area of a building shall be defined by the conditioned space of the building.

Building: the pilot studies shall report on buildings that meet Part 3 of the *National Building Code of Canada* only.

Building Energy Audit: a building energy audit is a process to visit a building by a qualified engineer to record and evaluate its envelope, energy-using equipment and processes, energy management practices, energy costs and energy-saving opportunities. The goal of a building energy audit is to identify and report short- and long-term energy improvement opportunities, and estimate costs and pay-back schedules prior to retrofit.

Conditioned space: conditioned space is defined as any space that is heated to 15 degrees or more throughout the heating months in that region and intended for regular occupancy/use. Conditioned space **excludes** basements that are not heated to 15 degrees, are not intended for habitation/occupancy but may contain machinery, and unheated parking garages.

Consumed energy: consumed energy is the total energy used to run installed and plug-load equipment within the building or external to the building but serving just the building. It includes

1. energy purchased from external suppliers such as hydro, oil or gas suppliers
2. energy from a central plant that is provided to or recycled through the building

Draft Label: a draft label shows initial pilot results only.

DSMWG Labelling Committee: This committee is a provincial-territorial working group supported by the Council of Energy Ministers of Canada.

Existing Building: an existing building is completed and occupied.

File Audit: a file audit is a process to perform a third-party evaluation of received data to verify that the data is of reasonable quality and accurate.

Government: a government organization includes municipal, provincial/territorial and federal governments, and utilities that are provincial Crown Corporations.

New Building: a new building is one that is in design or under construction or completed but is not occupied.

Purchased Energy: purchased energy is the energy purchased from external suppliers such as hydro, oil or gas suppliers.

Verified Label: a verified label shows results that have been updated from pilot results to include, at a minimum, refinements to baseline data or energy use per m² data as a result of refinements to data sets, verification of actual energy usage as a result of access to billing information or upgrades to the building.

NRCan Labelling Pilot projects: October 2007

Evaluation Criteria

- 1) Each listed item **MUST** be reflected in (“**MEET**”) the proposal, except item 2.2.
- 2) This grid serves as a checklist for proponents as well as a tool for NRCan. NRCan will use this list to verify that all listed items are met, as well as to award a score to the proposals received.
- 3) “**POINTS**” indicates total number of possible points for this item.
- 4) “**SCORE**” indicates actual number of points awarded for this item during the evaluation process.
- 5) A proposal that fails to score any points for a point-rated item may not be considered for funding
- 6) A proposal that has a final score of less than 90 points of the maximum 130 will not be considered for funding.

	Meets	Points	Score
1.1 Documentation of steps to apply for label and record time		25	
1.2 Documentation of process to identify and report data		20	
1.3/4/5 Documentation that at least one of the three optional objectives is a goal		0	
2.2 Documentation shows significant proponent co-funding	Yes/No		
Proposal requirements			
3.1.1 Documentation of government support		0	
3.1.2 Documentation citing the lead partner, all other partners, and their contributions to project		0	
3.1.3 Project lead organization is an eligible recipient		0	
3.2.1 Documentation of objectives of the pilot being submitted and explanation of how those objectives relate to NRCan mandates		10	
3.2.2 Documentation of how pilot objectives will be met providing a logistical outline of work load and human resources		35	
3.2.3 Documentation of total estimated costs of project		0	
3.2.4 Documentation of timeline for the project		0	
3.2.5 Documentation of marketing activities		15	
3.2.6 Identification of what changes will be requested to draft label		0	
3.3.1 All buildings to be labelled in the proposal are noted under		0	
Appendix A: Applicable Building Types			
3.3.2 Documentation of building type(s) and quantities to be labelled.		0	
3.3.4 Documentation that at least 20 buildings per type are to be labelled or, if not, a rationale for the lower number is provided		10	
3.4.1 Documentation showing how non-data related results will be		10	

tabulated			
3.4.2 Certification that consent will be obtained from participants to share all pilot project data		0	
3.4.3 Certification is provided that labels will be public documents		0	
3.5.1 Certification is provided that Screening Tool will be used for new buildings		0	
3.5.2 Certification is provided that should a third-party validated EE4 file be submitted, screening tool data will also be included		0	
3.5.3 Certification is provided that existing building data will meet clause 3.5.3		0	
3.6.1 Documentation of the definition of a mandatory process to reissue verified labels within two years		5	
3.6.2 Certification that the “verified” label will only be issued after commissioning/re-commissioning and with provision of twelve continuous months of occupied billing data		0	
3.6.3 Certification of the requirements of clause 3.6.3		0	
3.7.1 Certification of the requirements of clause 3.7.1		0	
3.7.2 Certification of the requirements of clause 3.7.2 and notification of any modifications to the label that may be required		0	
3.7.3 Certification that data cited under Appendix C: Data to be Collected , will be reported to NRCan		0	
3.7.4 Certification that pilot project data will be collected as noted in the RFP and shared with NRCan		0	
3.7.5 Certification that pilot project data and documents will be provided to NRCan as stipulated in clause 3.7.5		0	
3.7.6 Certification that participants will be required to display labels in a prominent place in the entrance foyer of the building		0	
3.7.7 Certification that definitions cited in Appendix D: Definitions will be observed		0	