



EnerGuide for New Houses
**EnerGuide for New Houses:
Administrative and
Technical Procedures**

January 2005



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EnerGuide for New Houses: Administrative and Technical Procedures

Produced by Natural Resources Canada
Office of Energy Efficiency

EnerGuide is the official Government of Canada mark associated with the labelling and rating of the energy consumption or energy efficiency of household appliances, heating equipment, air conditioners, houses and vehicles. EnerGuide for New Houses (EGNH) offers home energy evaluations by unbiased, qualified and licensed service organizations in communities across Canada. Energy advisors use their expertise in combination with energy modelling software to help homebuilders and homebuyers make informed decisions while choosing energy upgrades before building a new house. The report includes an EnerGuide label and rating. Visit our Web site at energuidefornewhouses.gc.ca.

EnerGuide for New Houses: Administrative and Technical Procedures

Issued: January 2005

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1 Introduction

- 1.1 *EnerGuide for New Houses: Administrative and Technical Procedures* has been developed by Natural Resources Canada (NRCan) to provide uniformity in the delivery of the EnerGuide for New Houses¹ (EGNH) service. These procedures are intended to provide a methodology and framework for the implementation of an energy efficiency evaluation service and rating system in conformity with good business practices in the residential construction and renovation industry. There is also an EnerGuide for Houses service for the existing housing market for use by homeowners and contractors renovating an existing home. This document applies to the EGNH service only.
- 1.2 The goal of EGNH is to increase the energy efficiency of low-rise housing (as defined in section 2.5) across Canada. The purpose of an EGNH evaluation is to encourage energy efficiency upgrades while maintaining or improving a house's indoor environment and durability in order to reduce the impact of housing on the environment. The EGNH services also provide homeowners and homebuilders with an energy efficiency rating label that enables them to compare the efficiency of houses in their region and across Canada.
- 1.3 An EGNH evaluation is an energy efficiency assessment only. It does not include a detailed consideration of the overall physical condition of the house, and it is not intended to replace a professional home inspection or supersede the applicable building code(s). The EGNH report includes a disclaimer to this effect.
- 1.4 There are individual and national benefits for Canadians from improved home energy efficiency. Energy efficiency upgrades can lead to a significant reduction in home operating costs while increasing the comfort of occupants. As well, by using energy more efficiently, Canadians can reduce the production of greenhouse gas (GHG) emissions that contribute to climate change and address other energy-related environmental problems, such as acid rain, the flooding of valleys for hydro-electric projects and the generation of nuclear waste.

¹ *EnerGuide for New Houses* is an official mark of Natural Resources Canada.

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1.5 The EGNH service is typically used by the construction industry prior to building a new home.

1.5.1 For the purpose of the EGNH service,

1.5.1a “Existing Housing” means units that are covered under the EGH Administrative and Technical Procedures manual for the existing housing market. This document does not apply to this service.

1.5.1b “New Housing” means units that are covered under section 2.5 of this document and that are in the legal possession of the builder. It includes houses that are still at the planning stage prior to construction. New houses are those that would benefit from using the EGNH service during construction planning.

1.5.1c “Sold” is used with reference to new housing throughout this document to mean the legal transfer of a home from a builder to a homeowner.

1.5.2 When the EGH service for the existing housing market is used in the renovation of an existing home, the energy advisor performs a walk-through of the home (the “home visit”) to collect information about the mechanical and energy-using aspects of the home, size and orientation of windows and insulation levels. A “blower door” test is performed to assess air-leakage levels. The information collected is then modelled in the required software, and a report providing recommendations of energy upgrades as well as the EGH label for existing houses showing the energy efficiency of the house are prepared for the homeowner.

1.5.3 The EGNH service is most often used in the construction planning for a new home. It begins when the energy advisor, working with the HOT2 XP or HOT2000 software, works with the builder to develop a series of energy efficiency upgrades. Typically these upgrades are offered to customers in bundled cost effective “upgrade packages” that have increasing levels of efficiency and EGNH rating values. Once the house has been built, a third-party energy advisor performs a walk-through review of the house and a blower door test to assess air leakage (the “as built” or “N” evaluation). The builder is given a homeowner report and rating label to supply to the homeowner upon sale of the house. The homeowner report and label confirm the house’s energy efficiency rating and show the energy efficiency of the house.

These procedures were designed for tract builders and will be adapted on a case by case basis for owner-builders or spec builders.

² HOT2 XP is a registered trademark of Natural Resources Canada.

³ HOT2000 is an official mark of Natural Resources Canada.

- 1.5.4 The results of the energy evaluation belong to the client who purchased the evaluation.
- 1.6 To be eligible for a rating, the house shall be evaluated by an energy advisor trained and certified by the regional EGNH service organization. Only active energy advisors trained and certified in accordance with NRCan's *EnerGuide for New Houses: Administrative and Technical Procedures* are authorized to perform the EGNH service.
- 1.7 The energy efficiency report and label shall be provided to the homeowner. Where an evaluation is performed for a builder on a house that has not yet been sold, the report and label shall be provided to the builder, who will affix the label to the home (typically on the electric panel) and deliver the report to the homeowner, once the house is sold.
- 1.8 If environmental conditions that have the potential to be health risks or to affect structural integrity in the home are noted during the evaluation, such conditions shall be discussed with the client and noted in the homeowner report. Under these circumstances the energy advisor or the service organization may decide not to issue an EGNH rating or label. If a rating is provided, issues of a severe nature shall be identified with a warning on the label.
- 1.9 The following documents are referenced in *EnerGuide for New Houses: Administrative and Technical Procedures*. The NRCan documents noted below may be obtained through the contact points cited at the end of this chapter. Documents marked with an asterisk (*) below are not produced by NRCan. Participants who wish to obtain copies of non-NRCan documents may do so at their own expense.
- *EnerGuide for Houses: Evaluation Procedures Using HOT2 XP*. This document is the manual for the use of the HOT2 XP software.
 - *EnerGuide for New Houses: Energy Advisor Workshop Kit*. This is the training manual and service delivery kit provided to all EGNH energy advisors.
 - *EnerGuide for Houses: Maps of Climate Data*. This booklet contains maps showing various locations and surrounding zones where weather data files can be applied.

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- *EnerGuide for New Houses: Data Collection Form.* This form helps energy advisors gather information on the house during the as-built evaluation.
- “Service Organizations User Guide: Electronic File Transfer for EnerGuide for Houses.” This document provides the information needed to transfer files to NRCan’s EGNH database.
- “EnerGuide for New Houses: NRCan Quality Assurance Guidelines.” This document provides details of NRCan’s quality assurance procedures. (This document was not yet available at the time of printing).
- Licence Agreement Related to EnerGuide for New Houses (hereafter referred to as "Licence Agreement") and all attached Schedules to the agreement.
- **National Building Code of Canada, 1995, Part 9 and part 2 for mobile homes.* This part of the code defines low-rise housing.
- *CAN/CGSB-149.10-M86, Canadian General Standards Board (CGSB) standard, “Determination of the Airtightness of Building Envelopes by the Fan Depressurization Method”
- *CAN/CSA-F326-M91, Canadian Standards Association, “Residential Mechanical Ventilation Systems”
- *CAN/CGSB-51.71-95, CGSB standard, “The Spillage Test: Method to Determine the Potential for Pressure-Induced Spillage from Vented, Fuel-Fired, Space Heating Appliances, Water Heaters and Fireplaces”
- “Personal Information Protection and Electronic Documents Act”, or in the province of Quebec, the “Act Respecting the Protection of Personal Information in the Private Sector”.
- **Complying with Residential Ventilation Requirements in the 1995 National Building Code (Canada Mortgage and Housing Corporation [CMHC] Cat. No. NHA 6451E)*

Contact Information

- 1.10** EGNH documents are subject to revision. For more information or to receive a copy of the most recent version of this, or any of the EGNH documents cited above, send an e-mail to energide-newhouses@nrcan.gc.ca, call 1 800 387-2000 or fax your request to (613) 996-3764.

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If you are enquiring about the aspect of the service that addresses existing home retrofits contact the service by e-mail at energideforhouses@nrcan.gc.ca, call 1 800 387-2000 or fax your request to (613) 996-3764.

2 Technical Requirements

- 2.1 The energy efficiency rating is determined using the energy efficiency rating procedures detailed in Appendix A of this document.
- 2.2 EGNH is fuel and technology neutral. It encourages energy efficiency improvements. No fuel type, construction material, equipment or building technology can be favoured over another.
- 2.3 An airtightness test shall be conducted on every house. Airtightness shall be tested in accordance with the EGH “as operated” airtightness test procedure noted in *EnerGuide for Houses: Energy Advisor Workshop Manual, Module 3 – “Conducting a Blower Door Test.”* A default airtightness can be used for the purpose of plan evaluation only.
- 2.4 The environmental conditions used to rate a house shall be selected from the geographical zone having a climate most similar to the area where the house is located, as delineated in *EnerGuide for Houses: Maps of Climate Data*.
- 2.5 To be eligible for an EGNH evaluation, the house shall
 - 2.5.1 Be covered under Part 9 of the *National Building Code of Canada* (low-rise, detached, semi-detached and row houses) or under Part 2 (for mobile homes on a permanent foundation only), 1995.
 - 2.5.2 Not share heated areas, ventilation systems or heating systems with other dwelling units. Under special circumstances there is some flexibility in this requirement. Service organizations/energy advisors shall consult with NRCan for its prior approval of special circumstances for a unit that does not comply with these parameters.
 - 2.5.3 Meet provincial/territorial and local building codes or requirements or, in the absence of such codes or requirements, the requirements of the current version of the *National Building Code of Canada*.
 - 2.5.4 Be complete and habitable (i.e. complete building envelope, functional mechanical systems in place, etc.) prior to the as-built evaluation.

- 2.6 The evaluation shall take into account the house as a system – considering that changing one component may affect another.
- 2.6.1 Energy advisors shall ensure that neither the house’s environmental and structural integrity nor the health and safety of occupants will be compromised by recommended energy efficiency upgrades.
- 2.6.2 Evidence of structural problems, combustion-spillage susceptibility, inadequate ventilation, moulds on interior surfaces or the presence of pollutant sources could constitute urgent health risks. Problem environmental conditions that have the potential to be health risks or to affect structural integrity in the home that are noted during the evaluation shall be documented and addressed in the EGNH report.
- 2.7 The evaluation shall take into account issues of combustion spillage. To do this, energy advisors are required to determine whether the operation of exhaust devices in the house will result in negative pressures large enough to create the potential for combustion spillage.
- 2.7.1 A spillage test shall be performed for all houses that have heating appliances that are susceptible to combustion-gas spillage. The test shall be performed with ALL exhaust appliances (including those with an exhaust rate of less than 75 litres per second, such as bathroom fans, dryers, range hoods and central vacuum systems) turned on. The test may be performed in accordance with any of the following:
- 2.7.1a the current version of the Canadian General Standards Board (CGSB) standard CAN/CGSB 51.71, “The Spillage Test: Method to Determine the Potential for Pressure-Induced Spillage from Vented, Fuel-Fired, Space Heating Appliances, Water Heaters and Fireplaces;”
- 2.7.1b the EGH procedure that is based on the current CGSB version above, as noted in *EnerGuide for Houses: Energy Advisor Workshop Manual*; or
- 2.7.1c the Heating, Refrigeration and Air Conditioning Institute of Canada’s (HRAI’s) method as noted in the *Residential Mechanical Ventilation* training manual, or
- 2.7.1d the current version of the Canadian Standards Association’s F326 procedures.

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Canada Mortgage and Housing Corporation (CMHC) has issued the following warning regarding compliance with Part 9 of the *National Building Code of Canada (NBC)*, 1995:

It is possible for the levels of unbalanced exhaust permitted in the NBC to cause significant levels of combustion-appliance spillage, particularly in small or airtight houses. It is possible that depressurization will exceed the levels permitted in the codes regulating the installation of vented combustion appliances (e.g. CAN/CGA B149 – “Natural Gas and Propane Installation Codes Series”). The most effective ways to avoid this risk are to

- install combustion appliances that are resistant to pressure-induced spillage
- avoid using unbalanced exhaust appliances
- install make-up air systems so that exhaust airflows are balanced at all times by an equal supply of make-up airflow.

Additional information is available in the CMHC document *Complying with Residential Ventilation Requirements in the 1995 National Building Code* (Cat. No. NHA 6451E).

2.7.2 In all cases where combustion-spillage susceptibility is noted, the energy efficiency evaluation report and label shall state the existence of the problem as defined in the EGH: Energy Advisor Manual. Where there is evidence of combustion spillage or flue blockage, the energy advisor shall recommend that the client contact a qualified heating and cooling specialist to further investigate the problem.

2.7.3 Where installed combustion appliances do not vent to the outdoors, a health and safety warning shall be included on the EGNH label and in the energy efficiency evaluation report provided to the client.

2.8 An energy efficiency rating is based on common permanent features and fixtures (also referred to as “standard operating conditions”): the energy performance of the building envelope, the installed mechanical equipment (including heating, domestic water heating and ventilation equipment) and the energy consumption of standard lighting and appliances.

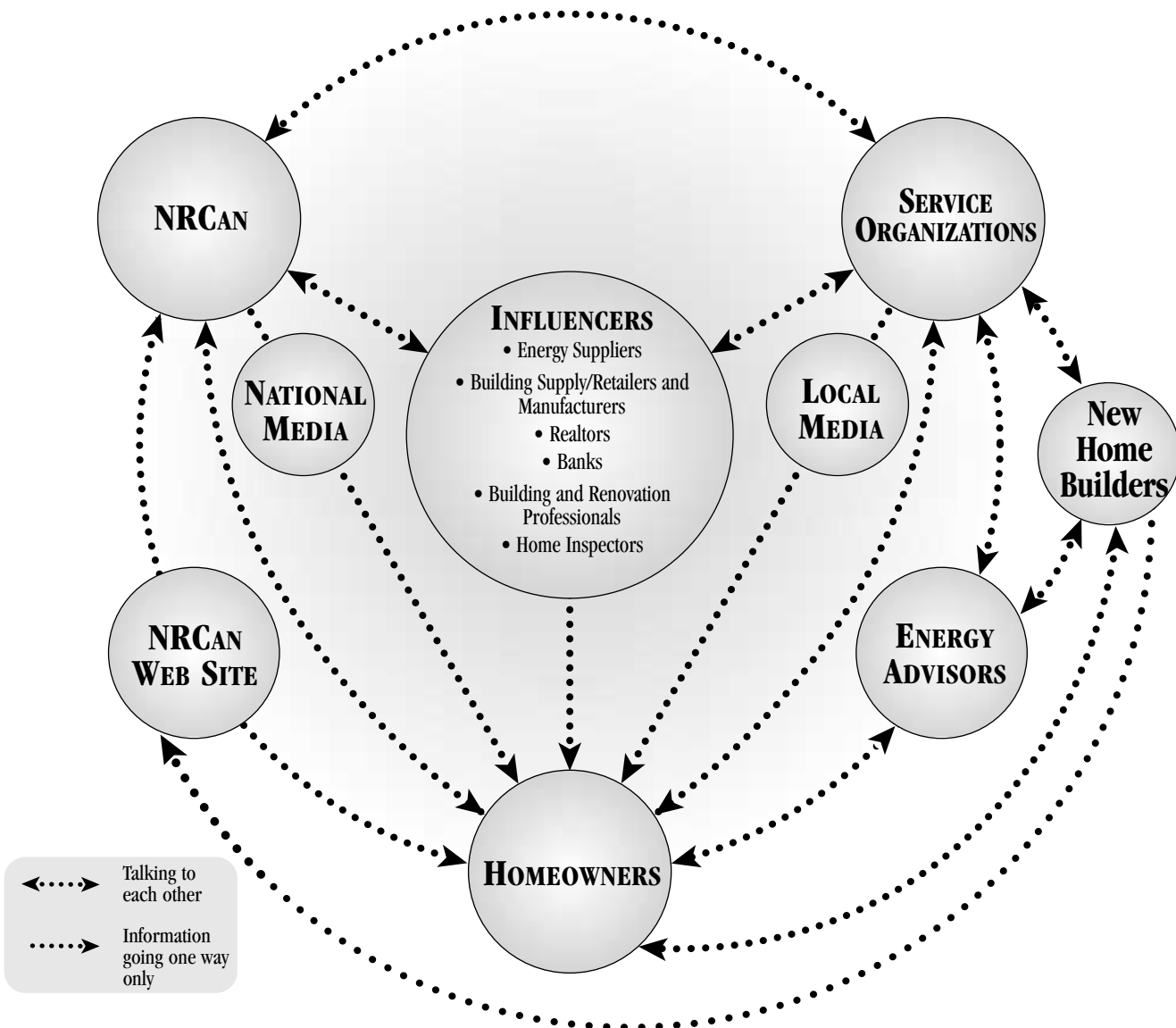
- 2.8.1 Less common features – such as swimming pools, pottery kilns and workshops – are not included in the rating, as this would hinder house-to-house comparisons. However, it should be noted in the report that these features are not included in the rating.
- 2.8.2 EGNH is intended to rate the house and its permanent equipment, not the occupants or their lifestyle-related energy consumption. For this reason, a standard set of parameters is used. This approach allows the efficiency of installed equipment to be part of the evaluation but does not allow two identical houses, located side by side, to have different ratings as a result of lifestyle factors. These conditions are defaulted when the EGNH calculation procedure is performed using HOT2 XP and HOT2000. The following standard occupancy and operational conditions are used for all energy efficiency evaluations:
- 2.8.2a four occupants (two adults and two children) present in the house 50 percent of the time;
 - 2.8.2b a temperature set-point of 21°C for the main floors and 19°C for the basement;
 - 2.8.2c consumption of 225 litres of domestic hot water per day;
 - 2.8.2d electricity consumption for lighting and appliances of 24 kilowatt hours (kWh) per day; and
 - 2.8.2e the amount of ventilation required is determined using the calculation detailed in Appendix B of this document.
- 2.8.3 In cases in which the parameters noted in 2.8.2 are NOT applicable, for example where the family size is substantially different or the house is kept at a significantly different temperature than noted, a second, or “General,” run could be carried out noting differences. This will provide information that is more accurate.
- 2.9 A balanced non-heat-recovery system is assumed in the calculation to ensure that a house without adequate ventilation will not receive a better rating than a properly ventilated house. The ventilation will also be adjusted to the house’s volume. Mechanical ventilation is added, if needed, only during the heating months (October through April) when the total minimum average ventilation rate, which combines natural air leakage and mechanical ventilation, is lower than the ventilation target as calculated in Appendix B.

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- 2.9.1 NRCan will not authorize the production of a label for a new house that has a combined natural and mechanical ventilation rate of less than 0.15 air changes per hour (ACH) during the critical month. The critical month is September in Yukon Territory and the region “north of 60°,” November in British Columbia and October in the rest of Canada.
- 2.10 NRCan’s two home energy efficiency evaluation software tools, HOT2000 and the EnerGuide “express” version of HOT2000, entitled HOT2 XP, are intended for use by energy advisors, the building industry and related service sectors. HOT2 XP uses the calculation engines from the detailed HOT2000 software, but sets out a quicker and simpler method of performing an energy efficiency evaluation.
- 2.11 NRCan will provide active EGNH service organizations with copies of the most recent versions of HOT2000 and HOT2 XP for use by their energy advisors. The document *EnerGuide for Houses: Evaluation Procedures Using HOT2 XP* has been prepared by NRCan as a guide for users of the software. An electronic “Help” tool has also been created to function within the software itself.
- 2.12 Service organizations providing the EGNH service are required to use either the latest version of HOT2000 or HOT2 XP.

3 Roles and Responsibilities

3.1 The EGNH delivery framework identifies all target audiences as key players in the program. The following diagram illustrates NRCAN's relationship with other key players and the hierarchy of the communication flow between the different groups.



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Roles and Responsibilities of NRCan

- 3.2 NRCan's role in the implementation and delivery of EGNH is to coordinate the administration of EGNH at the national level and advise and support service organizations in the field.
- 3.3 NRCan's roles and responsibilities include, but are not limited to, the following:
 - 3.3.1 Recruiting regional service organizations to implement and deliver EGNH.
 - 3.3.2 Providing support materials, including workshop and other technical publications, for use by service organizations in maintaining and applying the EGNH methodology.
 - 3.3.2a NRCan will provide, one-time only, train-the-trainer sessions for all new service organizations.
 - 3.3.3 Organizing and chairing national steering committees.
 - 3.3.4 Providing the recommended EGNH methodology and evaluation software to service organizations.
 - 3.3.5 Maintaining and modifying, as necessary, the HOT2 XP and HOT2000 software with input from service organizations.
 - 3.3.6 Supporting and maintaining the EGNH database to
 - 3.3.6a ensure an efficient method for file transaction
 - 3.3.6b store house-evaluation files and a list of all certified EGNH energy advisors
 - 3.3.6c generate statistics concerning Canadian household energy use and the potential for energy efficiency improvements
 - 3.3.7 Maintaining a national quality assurance program to determine customer (homeowner and new home builder) satisfaction with the EGNH service and the delivery of the service by service organizations and their personnel, by ensuring that quality assurance of a percentage of files received from each active service organization is performed, in the manner detailed in *EnerGuide for New Houses: NRCan Quality Assurance Guidelines* and in chapter 8 of this document.

- 3.3.8 Providing national marketing strategies and products to promote brand awareness of EGNH to home buyers, homeowners, building professionals and key influencer groups, using vehicles that are national in their distribution or impact.
 - 3.3.8a Producing and disseminating national marketing products for homeowners, builders and influencer groups that promote brand awareness and support a service organization's own local marketing efforts. Examples include national advertising and media activities and the production of informational materials and documents to raise awareness.
 - 3.3.8b Conducting periodic client surveys to determine clients (builder and homebuyer) level of satisfaction with the EGNH service.
- 3.3.9 Administering the Licence Agreements for influencers, service organizations and influencer builders.
 - 3.3.9a Facilitating Licensee's marketing efforts by providing the necessary approvals for all communications that, by permission of their Licence Agreements, mention the Government of Canada or use the relevant trademarks.
- 3.3.10 Issuing EGNH builder numbers.

Roles and Responsibilities of Service Organizations

- 3.4 An EGNH service organization is any organization whose role, under a contract or contribution agreement with NRCan, is to implement and deliver the EGNH service at the local or regional level.
 - 3.4.1 A service organization authorized to deliver the EGH service for existing houses is not automatically authorized to deliver EGNH and vice versa.
- 3.5 Prior to beginning to deliver the service, service organizations shall be in possession of all contracts or contribution agreements and marketing licences that are necessary for its delivery.
- 3.6 Service organizations shall manage the business relationship with the personnel providing the service to builders and the public. An EGNH evaluation shall be performed by an "energy advisor" who, in the judgement of the service organization, is trained to meet the requirements for the delivery of the service as outlined in Chapter 5 of this document.

An EGNH service organization is any organization whose role, under a contract or contribution agreement with NRCan, is to implement and deliver the EGNH service at the local or regional level.

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- 3.6.1 Service organizations shall ensure that all freelance and subcontracted personnel who are contracted to work as energy advisors in the delivery of the EGNH service on their behalf observe the requirements of the service organization's licence for the promotion of the EnerGuide marks and when necessary have completed a copy of Schedule "E" of the Service organization's licence agreement.
- 3.6.2 Service organizations (or their subcontractors on their behalf) shall have a service agreement in place with an energy advisor before the energy advisor begins to offer the service to the public.
- 3.7 Service organizations shall comply with all applicable laws, ordinances, rules, regulations and codes in the province(s) or territory(ies) of Canada in which they do business.
- 3.8 Although it is not a requirement of EnerGuide for New Houses, NRCan recommends that service organizations and energy advisors, like all businesses and professionals, carry appropriate levels of insurance coverage.
- 3.9 Service organizations are required to coordinate and implement the EGNH service at the local or regional level by
 - 3.9.1 Guaranteeing the integrity and administration of the EGNH service at the local or regional level.
 - 3.9.2 Recruiting qualified energy advisors and administering their certification and decertification by
 - 3.9.2a identifying, recruiting, pre-qualifying and training energy advisors as outlined in Chapter 5 of this document;
 - 3.9.2b when requesting that NRCan activate newly trained advisors, providing NRCan with
 - a completed and signed copy of Appendix D;
 - notification in writing whether the advisor is an employee or subcontractor, and, if a subcontractor, supplying a copy of a completed Schedule E of the Licence Agreement related to EnerGuide for Houses; and
 - confirmation that the energy advisor has met the EGNH training requirements as described in chapter 5 of this document.

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- 3.9.2c providing update training sessions as needed to all active energy advisors and informing NRCan a minimum of 30 days in advance of the date and location of the training. It is anticipated that these sessions should be held once per year.
- 3.9.2d developing a temporary and a permanent decertification procedure that includes the removal of all unused copies of the EGNH label template, the software, and all other EGNH documentation including a copy of all completed files and files in progress.
- 3.9.2e ensuring that each energy advisor actively working for the organization is provided with an ID card that indicates, at a minimum, his or her name and the name and contact address and telephone number of the organization for whom he or she is acting as an EGNH energy advisor.
- 3.9.2f providing NRCan with an updated list of their qualified energy advisors, including their two-digit identification number, within seven working days of an advisor being added to or removed from active service with their organization; and
- 3.9.2g Assisting newly certified advisors to gain access to the required software by instructing them to:
- first register at http://www.buildingsgroup.nrcan.gc.ca/software/software_register_e.asp to obtain a user ID and password;
 - then forward a request to the EGNH Account Manager requesting the new advisors' access to the EGH version. This request must include the new user(s) e-mail address, full name, and username that they used when registering initially.
 - Pending their successful certification, NRCan will activate their access to the EGH version of the HOT2 XP and HOT2000 software for future download.

Note: If the new user has already downloaded the software in the past, they'll have to download it again. Only certified energy advisors and service organizations are permitted to have access to the EGH versions of the software. There is a separate non-EGH version that builders may use.

- 3.9.3 Service organizations shall identify the individual(s) who will be instructors for their organization responsible for training and mentoring energy advisors. Training activities will include:
- conducting training workshops using the *EnerGuide for New Houses: Energy Advisor Workshop Kit* and conducting on-site evaluations;
 - the supervision of house evaluations and the review of house files; and
 - providing update training to energy advisors, as required.

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- 3.9.4 Providing house evaluation files to NRCan for the EGNH database in the manner outlined in the most recent version of “Service Organizations User Guide: Electronic File Transfer for EnerGuide for New Houses.”
- 3.9.4a Providing to NRCan, within 60 days of an “N” evaluation, electronic copies of any new data files (including the P and N file) evaluated, including, where necessary as noted in section 6.3.3, a written explanation justifying the acceptance of “manual intervention” files (hereafter referred to as “X” files). No matter how the “P” file was created, or by whom, it is the responsibility of the service organization to ensure that both a “P” and an “N” file are generated and transferred to NRCan.
- 3.9.4b Ensuring that their energy advisors maintain up-to-date regional fuel cost information within their fuel cost library.
- 3.9.4c Maintaining the printed/written records and/or soft-copy electronic files produced in the course of their service delivery for the duration of their contract or contribution agreement plus two years for the purposes of NRCan’s quality assurance file review. Files shall be maintained by the service organization for a period of no less than three years from the date the evaluation was performed. Printed/written records and/or soft-copy electronic files include, but are not limited to, the following:
- soft-copy files of HOT2 XP or HOT2000;
 - either hard or soft copies of documentation (e.g. building plans, data collection forms and sketches) used or created at the time of the performance of the evaluation;
 - printouts of blower door tests;
 - either hard or soft copies of the details of the energy efficiency rating of the builder’s standard model, as well as details of the upgrade recommendations package that was selected by the homeowner; and
 - the required written approval confirming that the data may be transmitted electronically to NRCan as per the EGNH report produced by the required energy simulation software. (found on pages 5 and 6 of the EGNH energy efficiency report)
- 3.9.5 Reporting *immediately* to NRCan when an energy advisor has recognized a serious problem in the home and when the service organization has decided not to issue a label.
- 3.9.6 Maintaining energy-advisor-performance quality assurance processes as per the quality assurance requirements set out in Chapter 8 of this document.

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- 3.9.6a Providing to NRCan the name of a single person within the organization who will be responsible for coordinating QA materials and files from the organization, its regional offices, franchisees or subcontracted personnel, when such materials are required for quality assurance purposes by NRCan or NRCan's QAA contractors.
 - 3.9.6b Providing to NRCan or their Quality Assurance Auditor (QAA) representatives, within 14 calendar days of a request, all materials and information required for NRCan to perform quality assurance in accordance with that set out under the section called "Quality Assurance by NRCan" in this document.
 - 3.9.6c Submitting, at a minimum every six months or at NRCan's request and prior to the completion of the contracted period, written reports to NRCan on the quality assurance performed for EGNH as outlined in Chapter 7.
 - 3.9.6d Taking immediate remedial action to address concerns brought to light by NRCan's quality assurance process and reporting any actions taken and their results to NRCan within two weeks (if a date is not otherwise stipulated by NRCan) of having been notified of the problem by NRCan.
 - 3.9.6e Where any remedial action has been requested by NRCan (whether determined through QAA work or other process), all payments for that service organization may be held immediately in abeyance until such time as remedial action has been reported and accepted by NRCan
- 3.9.7 Ensuring the appropriate maintenance of blower door equipment as recommended by the blower door manufacturer.
- 3.9.7a Upon request, owners of the blower door equipment (i.e. service organizations or their subcontractors) are required to produce documentation that certifies that equipment and software used to provide the evaluation service is in proper operating condition in accordance with the most recent manufacturer's recommendations/specifications, and has been serviced and periodically calibrated as required.
- 3.9.8 Providing to NRCan for their region, as they renew or implement a service agreement with NRCan, a one-year plan to market the EGNH service.
- 3.9.8a NRCan may require that a marketing strategy or plan be modified to exclude activities or messages that are unacceptable to NRCan.
 - 3.9.8b Establishing and maintaining a system or systems to track marketing data and results.
 - 3.9.8c Reporting in writing to NRCan on the results of their and their subcontractors' marketing activities (including the activities of any new home builders with whom they have service agreements) at NRCan's request or prior to the completion of the contracted period.

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- 3.9.8d Dedicating a portion of their own promotional budgets to the pursuit of such activities as: producing and distributing local and regional marketing materials to energy advisors and influencers to market the service to homeowners and home buyers; undertaking regional public relations; and, participating in local and regional home shows.
- Public relations includes, but is not limited to, activities such as participating in press interviews and radio and other media opportunities, participating in local special events related to EGNH themes, making informational presentations to local interest groups, developing press releases about EGNH or its activities and doing other similar activities to promote and sell the service to homebuilders and home buyers.
 - Service organizations are required to inform NRCan of any regional and local public relations activities as soon as possible in advance of their implementation.
 - Where service organizations have responded to a request from the media about EGNH, NRCan shall be informed of the activity by e-mail or telephone as soon as the activity is concluded.
- 3.9.8e Obtaining, prior to production, NRCan approval of any marketing and promotional materials prepared by the service organization or his or her sub-contracted organizations for public distribution that refer to marks covered under their Licence Agreement.
- 3.9.8f Promoting energy efficiency practices by distributing relevant documents provided by NRCan and other stakeholders at their local and regional promotional events and to energy advisors for distribution to clients during the delivery of the service.
- 3.9.8g Promoting the service by disseminating information about EGNH to influencer groups (including new home builders, hardware stores, energy supply companies and consumer or professional associations related to housing) and developing ongoing sponsorship relationships with them.
- 3.9.8h Actively soliciting funding and in-kind partnerships from sources beyond NRCan or other federal government institutions.
- All such partnerships pursued by service organizations shall be pursued with the knowledge and consent of the Program Manager;
 - The NRCan Program Manager shall be updated by service organizations on the content of partnership consultations throughout their progress; and
 - Where possible and appropriate, NRCan personnel shall be invited to participate in partnership discussions.
- 3.9.9 Monitoring the application of EGNH by seeking feedback from energy advisors and new home builders about their experience and satisfaction with the service and through that feedback, recommending program design improvements to NRCan whenever possible, but at a minimum through their quarterly reports.

- 3.9.10 Service organizations are required to comply with the federal *Personal Information Protection and Electronic Documents Act* (see Appendix C), or in the province of Quebec, the *Act Respecting the Protection of Personal Information in the Private Sector*.
- 3.10 Recruiting and training new home builders to develop and offer energy efficiency upgrades in new houses:
- 3.10.1 Requesting an EGNH builder number from NRCan for each new builder that begins to offer EGNH upgrades to their customers by providing the EGNH Account Manager with a completed and signed copy of Appendix E or a written request that contains the following builder information:
- Service organization name
 - Legal company name
 - Contact person for correspondence (name and title)
 - Full contact information (address, postal code, telephone number, fax number)
 - R-2000 builder number (if applicable)
- 3.10.2 in cases where the service organization allows builders to choose to perform their own in-house plan evaluations, training the builder's in-house personnel to access and use the energy simulation software and abide by the applicable administrative and technical procedures as described in section 5.7 and quality assuring the resulting "P" files;
- 3.10.3 ensuring that any builder promoting the EGNH service has a Licence Agreement in place with NRCan before the service organization performs any EGNH "N" evaluations for the builder; and
- 3.10.4 managing approvals (in consultation with NRCan where they deem it necessary) of any new home builder products that use the EGH Trademarks or EGNH name, as stated in Chapter 4 of this document.
- 3.11 Ensuring that the EGNH report and label produced by the required energy simulation software are clear and technically accurate and are properly delivered



Energy advisors perform energy evaluations and recommend improvements to clients.

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- 3.11.1 to the builder within two weeks of the completion of the “N” evaluation.
- 3.11.2 by the builder to the homeowner(s) within a month of their moving into the home.

Roles and Responsibilities of Energy Advisors

- 3.12 The role of energy advisors is to perform the plan and as-built EGNH evaluations and recommend energy efficiency upgrades to the client. Energy advisors may be members of the home inspection or design industry, environmental- and/or energy-related agencies, renovators, general contractors or any other qualified individual.
 - 3.12.1 An energy advisor accredited by a service organization to perform the EGNH service is not automatically accredited to perform the EGH service for existing houses, and vice versa.
- 3.13 Energy advisors shall have in place a service agreement with an EGNH service organization authorized by NRCAN to deliver the service, before they begin to offer the service to the public. Energy advisors are responsible for the following:
 - 3.13.1 Acquiring the necessary knowledge to conduct an EGNH energy efficiency evaluation.
 - 3.13.2 Conducting themselves in a professional and courteous manner in representing EGNH to clients by
 - 3.13.2a keeping up to date on, and using in the delivery of the EGNH service, the most recent versions of HOT2000 and/or HOT2 XP;
 - 3.13.2b scheduling evaluations within a reasonable time after the request for the service (specifically, within 21 days of the request). In case of scheduling difficulties, the as-built evaluation may be performed up to 30 days following the sale of the house. The energy advisor must work with the builder to schedule the plan and as-built evaluations in a timely manner;
 - 3.13.2c carrying and presenting their EGNH energy advisor ID card when they arrive for a home visit;
 - 3.13.2d informing clients when they can expect to receive a report or label that is being sent at a later date and ensuring that the deadlines are met;

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- 3.13.2e bringing with them, on service calls, all tools necessary to perform an EGNH evaluation. These include, at a minimum but not limited to, flashlights, tape measures, thermometer, compass, household tool kit, blower door and ladder; and
- 3.13.2f maintaining good client relations.
- 3.13.3 Possessing (or be provided access to by their service organization) a computer (Pentium or equivalent) with, at a minimum, 64 MB of RAM, a CD-ROM drive, a modem and an installed Windows 98/ME/NT/2000/XP operating system, for input of data and data modelling in HOT2 XP or HOT2000.
- 3.13.4 Collecting energy performance data, conducting the blower door test for every house, and conducting energy efficiency evaluations in accordance with the EGNH documentation supplied in the *EnerGuide for New Houses: Energy Advisor Workshop Kit* and in the advisors' updates with service organizations.
- 3.13.5 Explaining to the client what they can expect to find in the final EGNH report.
- 3.13.6 Where appropriate, encouraging the display of the label by requesting that the client permit them to apply it to the electrical box or some appropriate place in the home.
- 3.13.7 Reporting the discovery of a serious condition in a home immediately to their service organization, by
 - 3.13.7a consulting with the service organizations on an appropriate response to the client, if necessary; and
 - 3.13.7b informing the client either that the label will be withheld until the problem is remedied or that the label will be issued, but with a warning noted.
- 3.13.8 Submitting to their service organization sufficient data in printed/written hard copy and/or electronic soft copy to ensure that the quality of all evaluations (P and N) can be verified through the service organization and NRCan's quality assurance procedures. These include, but are not limited to, the following:
 - 3.13.8a soft-copy files of HOT2 XP or HOT2000 (P and N)
 - 3.13.8b hard copies of all site-visit data-collection forms, sketches and/or photographs taken in the course of the evaluation and a list of any energy efficiency upgrades included in the home.

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- 3.13.8c printouts from the blower door test
 - 3.13.8d notes concerning any assumptions made
 - 3.13.8e either hard or soft copies of the EGNH report, including all of the results and recommendations that were supplied to the client.
- 3.14 Upon completion of a pre-construction evaluation (P file) on a builder's house plan, the energy advisor will, for each model requested,
- 3.14.1 explain the evaluation recommendations and observations to the builder;
 - 3.14.2 assist the builder to create appropriate builder upgrade packages to promote to their customers; and
 - 3.14.3 provide upgrade recommendations that would achieve, wherever possible, an upgrade rating of 80 or more.
 - 3.14.4 ensure that the P file represents the builder's standard construction not necessarily the minimum level required by the applicable building code(s).
 - 3.14.5 submit the P file to the service organization as described in 3.13.8.
- 3.15 Upon completion of an as-built (N) evaluation of a builder's completed house, the energy advisor will, for each house, create the corresponding N file and submit it to the service organization as described in 3.13.8.
- 3.15.1 where the energy advisor was not responsible for also performing the "P" evaluation, the energy advisor may obtain the "P" file from the service organization or the first certified energy advisor. The "P" file may also be available from the builder if that builder has been authorized by the regional service organization to perform their company's in-house plan evaluations.
 - 3.15.2 where no P file exists at the time of the as-built evaluation the energy advisor is responsible for creating the matching P file. In this case the P and the N files will be identical as this signifies an instance where no energy efficiency upgrades were made as a result of the EGNH evaluation. The energy advisor must transfer both the P and N files to the service organization.

Roles and Responsibilities of Influencers

- 3.16 Influencers are defined as organizations that, while not directly involved in the delivery of the service, can influence the acceptance and understanding of the program among the various target audiences. They include, for example, new home builders, members of the real estate community, banks and other financial institutions, related retail organizations, energy suppliers, and consumer and/or industry advocacy groups.
- 3.17 The roles of all influencers are to
- 3.17.1 Promote and encourage the use of the EGNH service by homeowners and homebuilders as a tool to understand how to make their homes more energy efficient.
 - 3.17.2 Facilitate the dissemination of EGNH information to homeowners and home buyers by promoting the program within their own marketing efforts.
 - 3.17.3 Promote messages that recognize energy-efficient homes as being more comfortable and less expensive to operate in terms of their energy costs and having a higher resale value than homes built to minimum codes.
 - 3.17.4 Have in place an active Licence Agreement with NRCan before they begin to promote the EGNH service.

Roles and Responsibilities of New Home Builders

- 3.18 New home builders have a strategic role in EGNH as an influencer. In addition to sections 3.16 and 3.17 above, they have the following responsibilities:
- 3.18.1 to offer new home buyers an EGNH evaluation for some or all of their company's new homes before beginning construction and encouraging their customers to purchase energy efficiency upgrades
 - 3.18.2 to train their sales personnel in the marketing and sales of energy efficiency upgrade packages, by promoting the inclusion of these in houses at the sales stage

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3.18.3 to work with EGNH service organizations by

- 3.18.3a developing “P” files (by either using in-house personnel or hiring an energy advisor) for their house plans and making them available to energy advisors when they perform the final “N” evaluation;
- 3.18.3b developing one or more energy upgrade packages for some or all of their house plans;
- 3.18.3c requesting an as-built evaluation from a third-party energy advisor (this cannot be performed by in-house personnel) of the completed home in time so that the evaluation can be performed preferably prior to, but no more than 30 days following the date the homeowner takes possession of the home, to assess the final rating of the home;
- 3.18.3d upon receiving the report and label from the energy advisor or service organization, mailing or delivering the report to the homeowner within two weeks, along with the service organization’s contact information and some indication of their availability to receive calls to further explain any details of the report;
- 3.18.3e ensuring that the house’s EGNH report and label, as outlined in Chapter 8 of this document, are provided to all home buyers who have elected to have an EGNH evaluation; and
- 3.18.3f providing feedback to their local service organization on their experience and satisfaction with the EGNH service including copies of all marketing products that use the EnerGuide for Houses trademark and information such as a description of the EGNH upgrade package(s) offered to their customers, the total number of houses built in the past 12 months, the total number of houses for which an upgrade was offered, the total number of houses for which an upgrade was accepted and the total number of each upgrade package that had been purchased over the year.

3.18.4 To abide by the principles outlined in the EGNH Code of Ethics in Chapter 9 of this document.

3.18.5 To maintain their arm’s-length relationship with the home buyer by not acting as energy advisors in the “as-built” evaluation of homes they have built.

4 Marketing Licence

Messaging

- 4.1 Service organizations' marketing activities to homeowners, homebuilders, potential homeowners and regional influencers will form a critical part of the successful delivery of the EGNH service. As well, home builders' marketing activities towards their new home-buying clients will form a critical part of the successful delivery of the EGNH service.
- 4.2 All licensees shall be consistent with NRCan in their marketing messages.
- 4.3 NRCan does not prescribe marketing activities at the regional or local level. Although licensees' messages are likely to be directed primarily toward the same key audiences that NRCan targets, NRCan recognizes that regional or local factors may necessitate approaching different audiences in different ways.
- 4.4 NRCan requires that the following messages be conveyed in marketing materials regarding EGNH, space permitting, and in energy advisors' interactions with customers:
 - 4.4.1 that EGNH is a service developed by NRCan and/or the Government of Canada
 - 4.4.2 that reducing the amount of energy that Canadians use in their homes is part of Canada's climate-change solution to reduce the amount of greenhouse gas (GHG) emissions we produce and help improve our environment
 - 4.4.3 that the EGNH service is partially subsidized by NRCan and/or the Government of Canada

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- 4.5 Messaging shall also integrate some or all of the following themes. The themes resonate with differing degrees of importance, depending on the customer, region or circumstances of the request; therefore, their application is at the discretion of the licensee. They are as follows:
- 4.5.1 The EGNH service has benefits.
 - 4.5.2 The EGNH service provides independent third-party energy efficiency advice for new houses.
 - 4.5.3 The EGNH service can help to prevent home comfort problems.
 - 4.5.4 The EGNH service can help to reduce home energy bills.
 - 4.5.5 The EGNH service can increase a home's resale potential by providing evidence of "invisible" energy improvements in existing houses or energy features in new houses.
 - 4.5.6 The EGNH report identifies the home's rating, the criteria on which the rating was based and its estimated energy consumption under standard operating conditions.
 - 4.5.7 The EGNH rating shows how a house rates for energy efficiency on a scale of 0–100 (the higher the number, the better the efficiency). Most new houses rate between 65 and 85.
 - 4.5.8 Where a reference is made to the existence of quality assurance, it shall be clear that NRCan and/or the Government of Canada ensures quality assurance of the EGNH service and its personnel is performed.
- 4.6 In addition, the following terms shall be avoided.
- 4.6.1 The EGNH service is not an "inspection." The purpose of EnerGuide for Houses is to assess the energy efficiency of a home. It does not replace a home inspection. The service should be referred to as an "energy evaluation" or similar term that avoids confusion with the home inspection industry.
 - 4.6.1a The EGNH service does not quality assure the construction of a home. It confirms the energy efficiency of a home, not the workmanship involved.

- 4.6.2 The EGNH labels are not a "stamp of approval." Their presence does not "certify" a house as being energy efficient, only that it has been rated.
 - 4.6.3 The EGNH service does not directly address issues of "air quality." The service does estimate the ventilation of the home, and recommendations are based on the maintenance of healthy ventilation levels.
 - 4.6.4 The EGNH service may not be presented as a "survey" of the state of Canadian housing; it is a service for homebuilders and new home buyers.
 - 4.6.5 The EGNH service was not created to collect "data" on houses or for a "database," though the transfer of data files and creation of a database of aggregate data are an outcome of the service delivery process.
- 4.7 When communicating with the public about NRCan's intentions in creating the EGNH initiative, it should be made clear that it was created for three principal reasons:
- 4.7.1 to provide expert, third-party, unbiased advice to homeowners, homebuilders, and home buyers about how to improve the energy efficiency of their home or the home they plan to purchase;
 - 4.7.2 to support the housing sector in achieving the goals set for reducing GHG emissions under Canada's climate-change commitment; and
 - 4.7.3 to support the development of a body of energy experts capable of providing advice on energy efficiency in the home to the general public and to building professionals.

Licence Agreements

- 4.8 Licence Agreements permit organizations to use the EGNH name, EGNH official marks and images of the label in their own marketing materials with NRCan's approval.
- 4.9 All organizations that deliver the EGNH service shall be in possession of a signed, up-to-date Licence Agreement for the promotion of the EnerGuide name and trademarks. A service organization's licence covers trademark use by the organization itself, any employees of the organization and contracted personnel who have signed Schedule "E" of the Licence Agreement.

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- 4.10 New home builders who work with EGNH to offer energy upgrade packages to their clients are required to have a Licence Agreement in place with NRCan to promote the EGNH service.
- 4.11 Organizations may apply for a licence to promote the service only, typically as an adjunct to their own business service. In this document, such organizations are referred to as “influencers.”
 - 4.11.1 Influencer organizations would include, for example, realtors, not for profit organizations involved in housing, climate change or energy issues, financial organizations, energy supply companies and consumer or professional associations related to housing.
- 4.12 All licensees shall observe NRCan’s requirements as stated in the processes and messaging outlined in each of the Schedules provided by NRCan and included as a schedule to the Licence Agreement.
- 4.13 Licensees that fail to observe the Code of Ethics, detailed in Chapter 9 of this document will have their licence revoked.
- 4.14 Licenses are generally issued as follows: NRCan produces the licence agreements and sends two copies directly to the licensee for signature. The licensee must then sign both copies and return them to NRCan for the required approval and signatures. Once executed, a copy of the completed Licence Agreement will be returned to the licensee for his or her files.
 - 4.14.a To apply for a Licence Agreement for the promotion of the service, please contact the program using the information in Chapter 1 of this document.

5 Energy Advisor Certification and Job-Readiness Requirements

Pre-selection of Energy Advisor Trainees

- 5.1 EGNH requires energy advisor candidates to have, as a minimum, knowledge and skills in the following areas:
 - 5.1.1 building-construction practices (specific to the candidate's region);
 - 5.1.2 energy-efficient building practices;
 - 5.1.3 building materials (insulation types, sealants, etc.);
 - 5.1.4 building science, including the principles of the "house as a system";
 - 5.1.5 the use of computers, modems, the Internet and e-mail;
 - 5.1.6 basic arithmetic and geometry;
 - 5.1.7 client relations (writing and oral skills); and
 - 5.1.8 blueprint reading.
- 5.2 Pre-assessment questions may be used as a starting point to determine whether candidates have the necessary skills and knowledge to complete the EGNH workshop successfully. A bank of typical questions is available from NRCan's training manager.
- 5.3 If an energy advisor candidate is unable to complete the pre-test successfully, the service organization may, at his or her discretion, consider providing personalized supplementary training or suggest that the candidate attend appropriate courses prior to attending the EGNH workshop, without the latter being construed as an offer of employment.

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Energy Advisor Workshops

5.4 Service organizations are responsible for the recruitment, training and certification of energy advisors. To do this, they shall provide workshops for their new recruits.

5.4.1 Instructor's for these workshops shall have the following mandatory skills and knowledge:

- education, training and/or work experience in residential energy-efficient construction;
- experience as an instructor or a presenter;
- knowledge of the following topics:
 - current and past residential construction practices;
 - energy-efficient home building practices (insulation, air/vapour detailing, etc.);
 - residential building materials (insulation types, windows, sealants, etc.);
 - residential heating, cooling and ventilation systems;
 - building science, including the principles of the "house as a system";
 - indoor air quality concepts (spillage-susceptible equipment, depressurization issues, etc.);
 - advanced level knowledge of use of computers, modems, the Internet and e-mail;
 - arithmetic and geometry;
 - client relations (writing and oral skills); and
 - blueprint reading.
- a satisfactory passing grade in the final exam of NRCan's train-the-trainer workshop

5.5 The workshop material shall comprise information that builds upon the existing knowledge of the trainees and be based on the information in the *EnerGuide for New Houses: Energy Advisor Workshop Kit*. By the close of the workshop, successful candidates will have a functional knowledge of and/or experience with

5.5.1 the EGNH service;

5.5.2 standard energy efficiency evaluation procedures as they relate to EGNH;

■ **NRCan will maintain a national list of certified EGNH energy advisors in its database.**

- 5.5.3 the basic principles of heat transfer and the “house as a system” approach;
- 5.5.4 building energy efficiency features (windows; heating, cooling and domestic water-heating systems; insulating materials and their characteristics; and ventilation systems);
- 5.5.5 construction types and their associated energy efficiency ramifications;
- 5.5.6 the determination of site-specific information;
- 5.5.7 two on-site EGNH evaluations of completed houses and one plan evaluation;
- 5.5.8 the calculation of the area of rectangles, triangles, circles, ovals and the combinations thereof;
- 5.5.9 the calculation of volumes (such as those of boxes, cylinders and polygons) and applying these computations to odd geometric shapes;
- 5.5.10 utility rate structures;
- 5.5.11 the communication of the benefits of energy-saving measures and practices to owners and builders;
- 5.5.12 EGNH quality assurance requirements;
- 5.5.13 the use of the HOT2 XP and/or HOT2000 energy simulation software;
- 5.5.14 the use of, and proper naming protocols for, the application of NRCan’s file-naming procedures;
- 5.5.15 issues relating to indoor air quality;
- 5.5.16 the use of the *EnerGuide for Houses: House Observation Checklist* (or a derivative thereof) as a reminder of conditions that should be reported to the homeowner/builder and/or remedied prior to commencing the recommended energy upgrades, the use of this checklist is optional in EGNH evaluations;

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- 5.5.17 the use of the blower door and other tools necessary to perform the evaluation to NRCan's standards; and
 - 5.5.18 this document, *EnerGuide for New Houses: Administrative and Technical Procedures*.
- 5.6 Energy advisors shall after the completion of classroom workshops, be subject to a probationary field training period before performing unsupervised home energy evaluations.
- 5.6.1 Field training will require the candidate performing a minimum of two on-site energy efficiency evaluations and energy efficiency ratings in the presence of a locally approved service organization representative, and the close monitoring of the candidate's next five evaluations as described in section 5.6.2 of this document.
 - 5.6.2 Energy advisor trainees will be supervised during a probationary period in which they will perform a minimum of five energy efficiency evaluations that will be evaluated by the workshop leader or locally approved service organization representative. On-the-job update workshops will be conducted as necessary. The five evaluations must include both "P" and "N" evaluations.
 - 5.6.3 Energy advisors are required to attend update workshops conducted by the service organization.
- 5.7 New home builders who wish to perform their company's in-house plan evaluations and create "P" files must make arrangements for an individual employed by the builder to attend the EGNH Builder In-House Plan Evaluation Workshop and comply with the certification requirements established by the applicable service organization(s) for their region(s) of operation.

Note: The EGNH Builder In-House Plan Evaluation Workshop can be offered by service organizations to tract builders on an individual basis when the builder wishes to perform plan evaluations by in-house staff. The material covered will get them up to speed on the most recent version of HOT2XP and/or HOT2000, enable them to create accurate "P" files and perform plan evaluations, and explain the relevant EGNH processes that apply. For example, each builder's as-built evaluations must be performed by a 3rd party Energy Advisor.

6 NRCan's EnerGuide for Houses Database

- 6.1 Information files on each house that has been evaluated will be collected and maintained in a database by NRCan.
- 6.2 The database will be used by NRCan for the statistical analysis of energy use in Canada's housing stock. It will be used specifically for the purposes of program tracking, carbon dioxide (CO₂) reduction evaluation, policy development and quality assurance.
- 6.3 The NRCan database will automatically reply to the sender to confirm receipt and indicate the status of submitted files as "accepted," "rejected" or "X" file.
 - 6.3.1 Where the status of the file is accepted, no further action is required.
 - 6.3.2 Where the status of the file is "rejected", it is the responsibility of the service organization to ensure that the file is corrected and resubmitted or to provide the technical authority with justification for the acceptance of the file.
 - 6.3.3 Where the status of the file is "X" file, it is the responsibility of the service organization to provide a written response to NRCan's Technical Authority to justify the manual acceptance of the "X" file.
 - 6.3.4 An automated data-verification robot that verifies files prior to acceptance or rejection (called a "mailbot") will be maintained in the EGH database to minimize manual interventions while ensuring the quality of data.
- 6.4 Files transmitted to NRCan shall be submitted electronically by the service organization or his or her authorized representative and shall be named as per the information under "House File Numbers" in section 6.6 of this document.
 - 6.4.1 Service organizations must retain in their files the signed copy of the homeowner and/or builder release forms of every file forwarded to NRCan.

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- 6.5 Files submitted to NRCan shall have been prepared in one of the approved software tools capable of producing output files containing the following:
- 6.5.1 house characteristics
 - 6.5.2 administrative data (NOTE: to ensure the database's acceptance of the "tsv" file, the first three digits of the postal code are mandatory for the submission of a "P" or "N" file.
 - 6.5.3 energy simulation results, including energy consumption costs
 - 6.5.4 the list of mandatory fields for inclusion in the "*.tsv" export file – refer to "Service Organization User Guide: Electronic File Transfer for EnerGuide for Houses"
 - SI (metric) units shall be used in all "*.tsv" files submitted to NRCan
 - use "pipe delimiter" as a separator for "*.tsv" files
 - 6.5.5 House file(s) referred to as "hse" or "hdf" and "tsv", necessary for NRCan to regenerate a house evaluation, shall also be submitted.

House File Numbers

■ **The "*.tsv" file contains such information as estimated energy consumption and cost by source, heat loss through windows and doors, walls, ceiling and foundation and the air change per hour (ACH) when a differential of 50 Pa is simulated.**

- 6.6 All EGNH house file numbers will use the same basic configuration – 0000N0000I – where
- 6.6.1 the first two digits identify the service organization (this number will be assigned by NRCan);
 - 6.6.2 the second two digits are assigned by NRCan at the service organization's request to identify energy advisors;
 - 6.6.3 the letter indicates whether this is the evaluation of plans prior to construction ("P") or the as-built evaluation of the same house ("N"); and
 - 6.6.4 the final five-digit number is the number assigned by the service organization (or the energy advisor at the service organization's discretion) for the specific house. Each service organization and/or energy advisor will start his or her house-numbering system with the five-digit number "0000I" and continue in sequence thereafter.

7 Quality Assurance Protocol

- 7.1 In delivering EGNH, NRCan has two quality assurance goals. The first is to ensure that accurate and consistent energy efficiency evaluations are performed by knowledgeable energy advisors. The second is to promote adherence to the methodology and objectives of EGNH as outlined in documents noted in Chapter 1 of this document.

Quality Assurance by Service Organizations

- 7.2 EGNH service organizations are required to ensure that a quality assurance program that complies with, or exceeds, the requirements described in this document is in place for their organization throughout their contracted period.
- 7.3 The service organization's quality assurance program shall be documented and shall include four main sections:
- 7.3.1 the certification method(s) to be used to certify energy advisors, to ensure that house evaluations are performed by knowledgeable energy advisors;
 - 7.3.2 the procedure(s) in place to ensure the quality of the evaluation itself, i.e. that appropriate service organization administration is in place to assure data collection, and assure the correct performance of the airtightness ("blower door") test, the provision of appropriate upgrade recommendations and the maintenance of consistent and appropriate on-site evaluation procedures. This section should also include checks to ensure that the .tsv files are accurate. NRCan can provide a macro that will import information from the .tsv files into Excel to facilitate this step so that the service organization can spot trends, anomalies, and outliers that need to be corrected. Files which show anomalies should be subject to in-depth verification to ensure accuracy;
 - 7.3.3 a process to ensure that clients are satisfied with the service and that the evaluation process complies with the objectives and administrative procedures; and

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- 7.3.4 a procedure for the de-certification of energy advisors.
- 7.4 Service organizations shall collect and maintain sufficient data from their energy advisors to ensure that the quality of all ratings can be verified through the following:
 - 7.4.1 a formal evaluation process, typically involving 20 percent of the first 20 houses rated by an energy advisor and five percent of units rated thereafter;
 - 7.4.2 field assessments of the energy advisors' work;
 - 7.4.3 a periodic peer review of the energy advisors' work;
 - 7.4.4 a survey of client satisfaction with the rating service and personnel; and
 - 7.4.5 a review of data and file management as noted in the following section.
- 7.5 Service organizations are responsible for ensuring that data and file management review processes include determining that
 - 7.5.1 The first seven evaluations (two supervised on-site and 5 independently reviewed) performed by energy advisors in training are comprehensively quality assured, to verify that client interaction, data collection and modelling, upgrade recommendations and report and label delivery as performed by the energy advisor meet the criteria as specified in the *EnerGuide for New Houses: Energy Advisor Workshop Kit*.
 - 7.5.2 Data collection procedures and practices of certified energy advisors meet the criteria as specified in the *EnerGuide for New Houses: Energy Advisor Workshop Kit*.
 - 7.5.3 Blower door test procedure results of certified energy advisors comply with the EGH procedure cited in the *EnerGuide for New Houses: Energy Advisor Workshop Kit* or the current version of CGSB standard CAN/CGSB 149, "Determination of the Airtightness of Building Envelopes by the Fan Depressurization Method."
 - 7.5.4 Upgrade recommendations of certified energy advisors reflect the results collected and are based on the energy analysis, builder concerns and upgrade plans without compromising the building envelope or the health of the occupants.

- 7.5.5 Data input in software by certified energy advisors is consistent with the data collected in the field.
 - 7.5.6 The EGNH energy efficiency reports for the homeowner of certified energy advisors are reviewed to ensure that the information is technically accurate and presented in a professional manner.
 - 7.5.7 Files requiring corrections are corrected and resubmitted to the database and that written justification is provided to NRCan for every file that the database has identified as an “X” file, to ensure that rejected files and “X” files can be manually approved.
 - 7.5.8 Unusual cases are confirmed to be correct and explanations are noted in the Info 5 field of the software to explain where unusual cases exist.
- 7.6 Service organizations are required to submit written reports to NRCan on their organization’s quality assurance every three months or in a more frequent interval at NRCan’s request. Reports shall include
- 7.6.1 a description of the quality assurance performed during the specified period;
 - 7.6.2 a description of the quality assurance performed upon each energy advisor who is new to the program and therefore undergoing more rigorous quality assurance;
 - 7.6.3 the number of quality assurance reviews completed during the specified period;
 - 7.6.4 the percentage of evaluations that met quality assurance standards;
 - 7.6.5 an explanation of any problems encountered;
 - 7.6.6 an account of remedial actions taken;
 - 7.6.7 the results of remedial actions;
 - 7.6.8 a summary of feedback collected from clients as per section 3.18.3f of this document;

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7.6.9 the number of files (indicating how many P and N files) submitted for the period; and

7.6.10 an updated list of certified energy advisors.

Quality Assurance by NRCan

7.7 NRCan will contract quality assurance auditors (QAAs) to perform quality assurance on all EGNH service organizations and their trained energy advisors (i.e. NRCan quality assurance for energy advisors will begin only with the sixth evaluation they independently perform), by undertaking quality assurance activities to assess client satisfaction and the accuracy of files to ensure consistency in the delivery of the EGNH service across Canada.

7.7.1 Quality assurance will be performed on a random selection of both “P” and “N” electronic data files.

- Where quality assurance is being undertaken for an “N” file, service organizations must submit the “P” file before or at the same time as its corresponding “N” file to the party making the request.

7.8 QAAs contracted to implement NRCan’s quality assurance program will be independent of service organizations. At NRCan’s choice, employees of NRCan may also perform quality assurance inspections.

7.9 The NRCan quality assurance program is detailed in the document *EnerGuide for New Houses: Quality Assurance Guidelines*. The key components of NRCan’s quality assurance procedure are two levels of quality assurance, each comprising a more detailed and comprehensive analysis than the previous.

7.9.1 Level one: File Assessment. The QAA verifies that the documentation required by NRCan is available in the service organization’s house file and assesses the consistency of the data collected (including the waivers, dates, blower door report, information on the upgrades purchased, orientation, and type and efficiency of the HVAC system). The QAA re-inputs the data noted by energy advisors on the hard copy forms and models the house in the software, to duplicate as closely as possible the results produced in the initial “N” evaluation.

- 7.9.2 Level two: on-site evaluation. The QAA determines whether the energy advisor is performing accurate on-site evaluations by performing an EGNH on-site evaluation parallel to that of the energy advisor. This includes collecting independent data readings and performing independent modelling runs for the house file under review. The QAA will require the assistance of the service organization in obtaining the required information and where possible a set of houseplans.
- 7.10 When performing either of the two levels of quality assurance detailed above, NRCan's QAAs may also undertake random quality assurance audits of the service organization's work in managing and administering the service.
- 7.11 NRCan will provide quality assurance feedback summaries to service organizations. Full quality assurance reports, as compiled by the QAA, may also be made available to the service organization upon request. Service organizations who wish to see full quality assurance reports should request them directly from their account manager at NRCan.
- 7.12 If errors are detected in the management and administration of the EGNH service through the QAA's quality assurance of the energy advisor's work and/or service organization's files, NRCan will instruct the service organization, in writing, within one month of the identification of the problem, to take immediate remedial action.
- 7.13 All remedial action taken by service organizations shall be reported to NRCan. Additional file review may also be undertaken at NRCan's discretion.
- 7.14 Where, through the work of QAAs or by other means, NRCan identifies a problem with an individual energy advisor, they reserve the right, after discussion with the service organization, to require the de-certification of the advisor. Such problems could include, but would not be not limited to, the following:
- 7.14.1 fraudulent, negligent or deliberate performance failure (e.g. performing an evaluation from the exterior of the house only);
 - 7.14.2 failure to remedy problems identified by quality assurance;
 - 7.14.3 continued error after retraining;

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- 7.14.4 homeowner or homebuilders complaints concerning the evaluation even after quality assurance procedures have been followed to rectify a problem;
 - 7.14.5 inappropriate or deficient recommendations; and
 - 7.14.6 other unprofessional conduct.
- 7.15 NRCan may also periodically contract the performance of a national telephone survey to determine the satisfaction of customers and to document the impact of the EGNH service.
- 7.16 If a homeowner's report and/or label are found to be inaccurate as a result of either service organization or NRCan quality assurance procedures, the service organization will be required to reissue them.
- 7.16.1 for an "N" evaluation, when the energy rating has changed by two points or more; or
 - 7.16.2 through QAA or other means, when it becomes apparent that a house has been incorrectly modelled, resulting in an inaccurate report.
- 7.17 NRCan reserves the right to assess and to require modifications to be incorporated into the internal quality assurance program implemented by each service organization.
- 7.18 NRCan reserves the right to audit the effectiveness of EnerGuide for New Houses using the services of the department's Audit and Evaluation Branch. Should such an audit be undertaken, service organizations, their staff and subcontractors shall provide all feedback requested in a timely fashion. Licensees and EGNH clients may also be contacted to provide or verify information regarding the delivery of the service.

8 Energy Efficiency Report and Rating Label

The EGH Rating

- 8.1 The energy efficiency goals and ratings cited throughout this document are Canada-wide goals and ratings. The EGH energy efficiency rating indicates the house's energy performance and is measured on a scale of 0–100, with the whole scale appearing on the existing house label and the range from 65–100 appearing on the new house label. The higher the number, the more energy efficient the house.
- 8.2 A zero on the scale represents a house that has major air leakage, no insulation, poor comfort conditions and extremely high energy consumption. At the other end of the scale, 100 represents a house that is very well insulated, is airtight but sufficiently ventilated and requires no purchased energy – a solar-powered house, for example. Houses with moderate air leakage and insulation in all exterior wall cavities will typically have a rating of over 50, while houses built to the R-2000 Standard will generally have a rating of 80 or above.
- 8.3 Typical ratings are listed below:

New house built to building code standards	65-69
Typical new house with some energy-efficiency improvements	70-74
Significantly upgraded energy-efficient new house	75-79
Highly energy-efficient new house	80-90
House requiring little or no purchased energy	91-100

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Energy Efficiency Report: For the builder

- 8.4 In the planning stage, prior to the start of construction, a builder upgrade plan is developed and a “P” file is created.
 - 8.4.1 The builder upgrade plan is developed in one of two ways. Either a third-party energy advisor works in cooperation with the home builder, or a member of the builder’s own staff who has received the EGNH energy advisor training can develop the upgrade plan.
 - 8.4.2 The energy advisor may use the EGNH upgrade report in the HOT2000 and HOT2 XP software as a basis for his or her builder upgrade plan.
 - 8.4.3 The purposes of the builder upgrade plan are to assist the builders in the development of their builder upgrade packages and to determine the baseline energy level for the house design or “P” file, for comparison with the as-built or “N” file.

Energy Efficiency Report: For the homeowner

■ **All reports that differ from the standard EGNH report shall be submitted to NRCan for review and approval prior to use.**

- 8.5 Upon completion of the house, at the builder’s request a third-party energy advisor performs a blower door test, reviews the “P” file and prepares an “N” file, and a corresponding EGNH report is produced. The report is provided to the builder who provides it to the homeowner. Alternatively, if the home has been sold, the report may be provided directly to the homeowner, at the discretion of the service organization or his or her energy advisor.
 - 8.5.1 A standard EGNH report is generated automatically by the HOT2 XP or HOT2000 software and must be used by all service organizations, as is.
- 8.6 In completing the EGNH report, the service organization or the energy advisor shall
 - 8.6.1 obtain the builder’s signature in the “Notice to Homebuilder” page;
 - 8.6.2 provide the information required in the “Notice to Homeowners” page of the report;
 - 8.6.3 provide the EGNH label and EGNH Report to the builder; and

- 8.6.4 provide to the builder, whenever possible and appropriate, supplemental information from NRCan and CMHC as a reference package for homeowners in the maintenance of equipment in the home and of the home itself.

Label

- 8.7 To ensure uniformity across Canada, NRCan provides adhesive-backed template labels to be used by EGNH service organizations in the delivery of “N” evaluations. EGNH labels are not issued following a “P” evaluation.

template label for new homes

- 8.8 The EGNH label template provides space for the following information to be over printed on the label by the service organization:
- 8.8.1 the energy efficiency rating of the house;
 - 8.8.2 the date of the energy efficiency evaluation;
 - 8.8.3 the year the house was built;
 - 8.8.4 the name of the builder;
 - 8.8.5 the house address;

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- 8.8.6 the house file number assigned to the house;
- 8.8.7 the estimated annual energy consumption under standard operating conditions;
- 8.8.8 the name, telephone number and/or address of the service organization or energy advisor, which can be printed in the empty box at the bottom of the label; and
- 8.8.9 if a serious problem has been identified during the evaluation, a warning indicating the problem shall be noted in the box at the bottom of the label.

9 EnerGuide for New Houses Code of Ethics

- 9.1 All individuals and organizations associated with EGNH shall follow NRCan's EGNH Code of Ethics by
 - 9.1.1 Exercising their duties with integrity, fairness and impartiality.
 - 9.1.2 Upholding, maintaining and, wherever possible, improving the professional integrity reputation and practice of the EGNH service. Marketing approaches shall not use the EGNH service to imply any endorsement of an organization's particular product or service.
 - 9.1.3 Avoiding any apparent conflict of interest and avoiding association with any enterprise of questionable character, for example
 - 9.1.3a service organizations, energy advisors and influencers are required to immediately disclose any and all activities that may be considered to be in real or perceived conflict with the mandate and objectives of EGNH;
 - 9.1.3b in the event that NRCan decides that remedial action is necessary to remove such conflict, the service organization, energy advisor or influencer will be required to take such action (which may include divestiture of certain assets or ceasing to perform certain activities) prior to entering into, or continuing, any relationship with NRCan as it relates to EGNH; and
 - 9.1.3c neither accepting nor offering commissions or allowances directly from or to other parties dealing with a client in connection with an energy efficiency evaluation without the written approval of the client or his or her representative.
 - 9.1.4 Basing all statements made in the context of the EGNH service on facts supported by the energy efficiency evaluation or by research performed by a recognized professional source.
 - 9.1.5 Not collecting any personal information other than that required for the EGNH service. Not disclosing information from any EGNH evaluation except as required for quality assurance.
 - 9.1.6 Disclosure to a third party for another purpose related to EGNH is permitted where such disclosure is advantageous to the customer, provided that the customer's informed and written consent is obtained prior to the disclosure.

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- 9.1.7 Influencer Builder's shall maintain their arm's length relationship with the home buyer by not acting as energy advisors in the "as built" evaluation of homes they have built.

Appendix A. Energy Efficiency Rating Calculation Procedure

1. Energy Efficiency Rating

The EnerGuide for Houses (EGH) energy efficiency rating for both new and existing houses is determined from the following equation:

$$\text{Energy efficiency rating} = 100 - \left(\frac{\text{Estimated Total Energy Consumption}}{\text{Benchmark Total Energy Consumption}} \right) \times 20$$

Note:

- i. A negative energy efficiency rating shall be reported to the homeowner as zero; and
- ii. A rating for a house cannot exceed 100 and remain within the scope of this procedure.

2. Estimated Total Energy Consumption

- 2.1 The EGH Estimated Total Energy Consumption is calculated using the following equation:

$$\text{Estimated Total Energy Consumption} = S + O$$

where

- S = Space heating consumption
- O = Occupancy consumption

- 2.1.1 The Space Heating Consumption (S) is calculated using the following equation:

$$S = (S_E \times B_{SE} + S_F \times B_{SF})$$

where

- S_E = estimated space-heating electrical energy consumption, including fans (in MJ)
- B_{SE} = base efficiency for electric space heating = 100 percent
- S_F = estimated fossil-fuel energy consumption for space (in MJ)
- B_{SF} = base efficiency for fossil-fuel space heating = 80 percent Annual Fuel Utilization Efficiency (AFUE)

Note:

Credit is given when higher-efficiency equipment is used, and penalties are applied when lower-efficiency equipment is used.

2.1.2 The Occupancy Consumption (O) is calculated using the following equation:

$$O = D + L$$

where

- D = Estimated Domestic Hot Water Consumption
 L = Appliance energy consumption = 31 536 MJ per year
 $D = 1.136 \times (D_E \times B_{DE} + D_F \times B_{DF})$

where

- D_E = estimated domestic hot water electrical energy consumption (in MJ)
 B_{DE} = base efficiency for electric domestic hot water, energy factor (EF) = 0.88
 D_F = estimated domestic hot water fossil-fuel energy consumption (in MJ)
 B_{DF} = base efficiency for fossil-fuel domestic hot water, EF = 0.57
 1.136 = factor needed to adjust the domestic hot water load to represent its share of total consumption, including standby losses

Note:

The base efficiencies are intended to give houses that have the same insulation levels and thermal envelope characteristics equal energy efficiency ratings, assuming the most commonly available replacement equipment of each type. Credit is given if higher-efficiency equipment is used, and penalties are applied for lower-efficiency equipment. By applying the base efficiency factor to the estimated portion used for each purpose, mixed-fuel use can be accommodated. The furnace fan's energy contribution to space heating is handled this way.

3. Benchmark Total Energy Consumption

3.1 The benchmark total energy consumption is calculated using the following equation:

$$\text{Benchmark Total Energy Consumption} = \text{Space Heating Benchmark} + \text{Domestic Hot Water Benchmark} + \text{Base Load Benchmark, in which}$$

3.1.1 Space Heating Benchmark is calculated using the following equation:

$$\text{Space Heating Benchmark} = S \times \left(\frac{49 \times DD}{6000} \right) \times \left(40 + \frac{V}{2.5} \right)$$

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where

- S = 4.5 MJ for fuel-fired space heating systems; or
 S = 1.0 kWh, or 3.6 MJ, for electric space heating systems.
 DD = the number of long-term average degree-days relative to a base of 18°C
 V = the heated volume (in m³). The heated volume is the volume surrounded by the heat transfer areas used to calculate the Space Heating Consumption.

- 3.1.2 The Domestic Hot Water Benchmark is calculated using the following equation:

$$\text{Domestic Hot Water Benchmark} = 4745 \times W \times \left(\frac{55 - TW}{55 - 9.5} \right)$$

where

- W = 1.72 kWh, or 6.19 MJ, for fuel-fired DHW systems; or
 W = 1.075 kWh, or 3.87 MJ, for electric DHW systems.
 TW = local water mains or deep-soil temperature in degrees Celsius

- 3.1.3 The Base Load Benchmark is set at 31 536 MJ per year (based on 24 kWh per day).



Credit is given if higher efficiency equipment is used, and penalties are applied for lower-efficiency equipment.

Appendix B. Calculation of the Required Amount of Ventilation to be Added During an EnerGuide Run

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The EnerGuide run determines the amount of ventilation required, as follows:

- 1 The monthly average ventilation rate (air leakage and mechanical ventilation) for the house is determined for each heating month by the software.
- 2 The ventilation air-change (VAC) rate is calculated for the house using the following equation:

$$\text{VAC (L/s)} = 0.30 \text{ ac/h} \times \frac{1000}{3600} \times \text{Volume of house (m}^3\text{)}$$

- 3 The required monthly ventilation to meet the above conditions is calculated using the following process:

If VAC < 25 L/s then VAC = 25 L/s

If VAC > 100 L/s then VAC = 100 L/s

Difference (L/s) = VAC (L/s) – monthly average ventilation rate (L/s)

If the difference is less than 10 L/s (monthly average ventilation rate is close to VAC) then no additional ventilation is required.

If the difference is greater than 10 L/s then the additional ventilation requirement equals the difference and is added to the EGH calculation.

Appendix C. Personal Information Protection and Electronic Documents Act

On January 1st, 2004 Canada's *Personal Information and Electronic Documents Act* extended to the collection, use or disclosure of personal information in the course of any commercial activity within a province.

In the Province of Quebec, the relevant act is the *Act Respecting the Protection of Personal Information in the Private Sector*. For further information about the Quebec legislation see the Web site at

http://www.privcom.gc.ca/legislation/leg-qc_031211_e.asp

The requirements of the *Personal Information and Electronic Documents Act* impose responsibilities upon service organizations, their regional offices, franchisees, staff and subcontracted personnel working with EnerGuide for Houses.

A document prepared by the Office of the Privacy Commissioner as a guide for businesses and organizations, that is entitled *Your Privacy Responsibilities: Canada's Personal Information Protection and Electronic Documents Act*, is available to help you understand and take action on these responsibilities. This document is available at http://www.privcom.gc.ca/information/guide_e.asp - 001

Outline of responsibilities

The text below is extracted from the document entitled *Your Privacy Responsibilities: Canada's Personal Information protection and Electronic Documents Act*. It was developed primarily for its application to the EGH service for the existing housing market in response to the personal information that was being collected through the EnerGuide for Houses Retrofit Incentive program. Please note that the references to various EGH program documents do not apply to this document. This section is currently under revision for its application to the delivery and administration of the EGNH service. It is provided for general information purposes only. Please refer to the document cited above and the Act itself. The Act can be downloaded from the Web at http://www.privcom.gc.ca/legislation/02_06_01_e.asp

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The policy states that there are ten principles that businesses must follow in order to comply with the Act. These principles must be read in conjunction with key sections of the Act. They are noted below. Key responsibilities relating to those principles are added in point form below each of the principles.

Some of the responsibilities under the Act are already in place as a result of EGH administrative procedures while some must be determined by the service organization. This information is noted in italic in each point.

1. Accountability

- Comply with all 10 of the principles of Schedule 1. *Addressed in "EnerGuide for Houses: Administrative and Technical Procedures," item 3.9.10.*
- Appoint an individual (or individuals) to be responsible for your organization's compliance. *Process to be determined by service organization.*
- Protect all personal information held by your organization or transferred to a third party for processing. *Process to be determined by service organization.*
- Develop and implement personal information policies and practices. *Documentation and process to be determined by service organization.*

2. Identifying purposes

- Before or when any personal information is collected, identify why it is needed and how it will be used. *Addressed in the form "Natural Resources Canada Grant under the EnerGuide for Houses Retrofit Incentive Application Form".*
- Document why the information is collected. *Addressed in the form "Natural Resources Canada Grant under the EnerGuide for Houses Retrofit Incentive Application Form".*
- Inform the individual from whom the information is collected why it is needed. *Addressed in the form "Natural Resources Canada Grant under the EnerGuide for Houses Retrofit Incentive Application Form".*
- Identify any new purpose for the information and obtain the individual's consent before using it. *Addressed in "EnerGuide for Houses: Administrative and Technical Procedures," item 10.1.5.*

3. Consent

- Inform the individual in a meaningful way of the purposes for the collection, use or disclosure of personal data. Addressed in the form "Natural Resources Canada Grant under the EnerGuide for Houses Retrofit Incentive Application Form".
- Obtain the individual's consent before or at the time of collection, as well as when a new use is identified. Addressed in the form "Natural Resources Canada Grant under the EnerGuide for Houses Retrofit Incentive Application Form" and *EnerGuide for Houses: Administrative and Technical Procedures*, item 10.1.5.

4. Limiting collection

- Do not collect personal information indiscriminately. Addressed in "EnerGuide for Houses: Administrative and Technical Procedures," item 10.1.5.
- Do not deceive or mislead individuals about the reasons for collecting personal information. Addressed in the form "Natural Resources Canada Grant under the EnerGuide for Houses Retrofit Incentive Application Form".

5. Limiting use, disclosure, and retention

- Use or disclose personal information only for the purpose for which it was collected, unless the individual consents, or the use or disclosure is authorized by the Act. Addressed in "EnerGuide for Houses: Administrative and Technical Procedures," item 10.1.5.
- Keep personal information only as long as necessary to satisfy the purposes. Addressed in "EnerGuide for Houses: Administrative and Technical Procedures," item 3.9.4c.
- Put guidelines and procedures in place for retaining and destroying personal information. *Documentation and process to be determined by service organization.*
- Keep personal information used to make a decision about a person for a reasonable time period. This should allow the person to obtain the information after the decision and pursue redress. Addressed in "EnerGuide for Houses: Administrative and Technical Procedures," item 3.9.4c.

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- Destroy, erase or render anonymous information that is no longer required for an identified purpose or a legal requirement. *Process to be determined by service organization.*

6. Accuracy

- Minimize the possibility of using incorrect information when making a decision about the individual or when disclosing information to third parties. *Addressed in the service organization and NRCan's quality assurance processes.*

7. Safeguards

- Protect personal information against loss or theft. *Process to be determined by service organization.*
- Safeguard the information from unauthorized access, disclosure, copying, use or modification. *Process to be determined by service organization.*
- Protect personal information regardless of the format in which it is held. *Process to be determined by service organization.*

8. Openness

- Inform customers, clients and employees that you have policies and practices for the management of personal information. *Documentation and process to be determined by service organization.*
- Make these policies and practices understandable and easily available. *Documentation and process to be determined by service organization.*

9. Individual access

- When requested, inform individuals if you have any personal information about them. *Process to be determined by service organization.*
- Explain how it is or has been used and provide a list of any organizations to which it has been disclosed. *Process to be determined by service organization.*

- Give individuals access to their information within thirty days of a request. *Process to be determined by service organization.*
- Correct or amend any personal information if its accuracy and completeness is challenged and found to be deficient. *Process to be determined by service organization.*
- Provide a copy of the information requested, or reasons for not providing access, subject to exceptions set out in Section 9 of the Act. *Process to be determined by service organization.*
- An organization should note any disagreement on the file and advise third parties where appropriate. *Process to be determined by service organization.*

10. Challenging compliance

- Develop simple and easily accessible complaint procedures. *Process to be determined by service organization.*
- Inform complainants of avenues of recourse. These include your organization's own complaint procedures, those of industry associations, regulatory bodies and the Privacy Commissioner of Canada. *Process to be determined by service organization.*
- Investigate all complaints received. *Process to be determined by service organization.*
- Take appropriate measures to correct information handling practices and policies. *Process to be determined by service organization.*

For more information about the Act, contact:

The Privacy Commissioner of Canada

112 Kent Street

Ottawa ON K1A 1H3

Telephone: 1-613-995-8210

Toll-free: 1-800-282-1376

Fax: 1 613 947-6850

Web site: www.privcom.gc.ca

E-mail: info@privcom.gc.ca

Appendix D. EGNH Energy Advisor Registration Information

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Name of service organization: _____ Date of request for registration: _____

Energy advisor's number: _____

Date(s) of service organization's training of the advisor: _____

Name of service organization trainer: _____

Name of advisor: _____

Address: Street: _____ City: _____

Province: _____ Postal Code: _____

Business phone number: _____ Home phone number: _____

Mobile phone number: _____ Fax number: _____

Email address: _____

Privacy Information

The personal information requested above is required by NRCan to activate you as a trained and certified EnerGuide for New Houses energy advisor. Any personal information provided in this form is protected under the federal *Privacy Act* <<http://laws.justice.gc.ca/en/P-21/index.html>>. For more information about the *Privacy Act* and Natural Resources Canada's information holdings please visit <www.privcom.gc.ca/>.

Authorization

By signing below you acknowledge that you have read this page and that the information supplied is true, and that you authorize this information to be supplied by the service organization named above to Natural Resources Canada for the purpose of activating you as an EnerGuide for New Houses energy advisor.

Energy Advisor Signature: _____ Date: _____

Service Organization Signature: _____ Date: _____

Appendix E. EGNH Builder Registration Information

To be issued by NRCan: Builder # _____

Name of service organization: _____ Date of request for registration: _____

Name of Builder: _____

Name of Contact Person: _____

Address: Street: _____ City: _____

Province: _____ Postal Code: _____

Business phone number: _____ Home phone number: _____

Mobile phone number: _____ Fax number: _____

Email address: _____

Privacy Information

The personal information requested above is required by NRCan to activate you as a builder participating in EGNH. Any personal information provided in this form is protected under the federal *Privacy Act* <<http://laws.justice.gc.ca/en/P-21/index.html>>. For more information about the *Privacy Act* and Natural Resources Canada's information holdings please visit <www.privcom.gc.ca/>.

Authorization

By signing below you acknowledge that you have read this page and that the information supplied is true, and that you authorize this information to be supplied by the service organization named above to Natural Resources Canada for the purpose of activating you as an EnerGuide for New Houses builder.

A License Agreement to enable you to promote the EGNH service and Trademarks will follow as a separate agreement.

Builder Signature: _____ Date: _____

Service Organization Signature: _____ Date: _____

Natural Resources Canada's Office of Energy Efficiency
Leading Canadians to Energy Efficiency at Home, at Work and on the Road

Canada 