

EnerGuide for Houses
Statplus Report April 1 2003 to March 31 2004

Analytical Report

By Victor Tremblay

STATPLUS

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1. Introduction

Natural Resources Canada (NRCan) is mandated to promote energy efficiency in order to limit the adverse impacts of energy use on the environment. In this context, it has initiated energy efficiency programs for all sectors of the economy, including the residential housing sector.

One of the programs it has established for the housing sector is the EnerGuide for Houses advisory service, the aim of which is to upgrade the energy efficiency of Canadian houses and limit the environmental impact of energy use. It uses a reliable software tool, a blower door test and the knowledge of dedicated experts to evaluate the energy performance of houses. The energy efficiency advisor takes into account homeowners' needs when giving recommendations on how to improve energy efficiency in the home.

An EnerGuide advisor visits a home, records its energy use characteristics and models its annual energy requirements and the potential improvements after energy efficiency upgrades. After the evaluation, the advisor produces a summary of the recommended improvements identified during the visit and includes the recommendations in an energy efficiency report, which is given to the homeowner along with a label showing the home's energy rating before upgrades.

Between April 1, 2003 and March 31, 2004, a total of 48,252 evaluations were conducted under the EnerGuide for Houses program – about 40% of them in Alberta and British Columbia and one-third in Ontario.

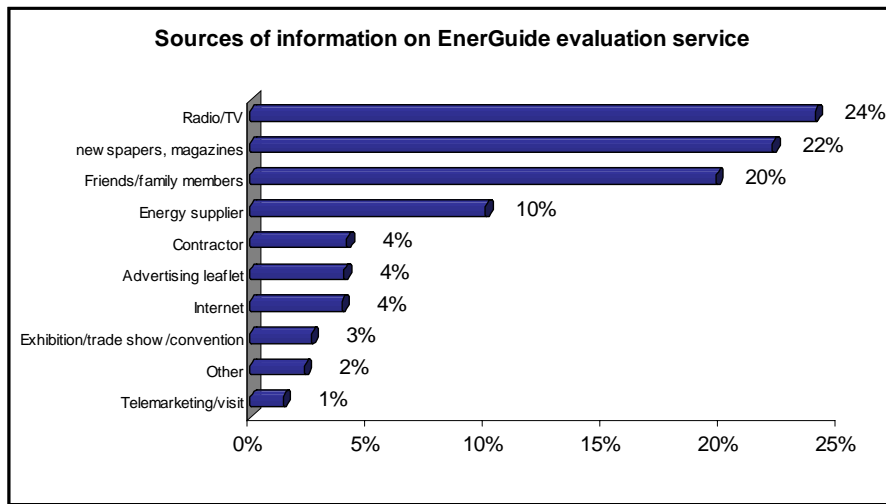
A survey of a random sample of participating homeowners was also conducted during the summer of 2004 to determine what action had been taken on the advisors' recommendations and participants' level of satisfaction.

A total of 2,427 homeowners were targeted for contacting. Of those, 1,354 completed the questionnaire. The others were not surveyed for one of the following reasons: homeowner refused to participate, homeowner moved, wrong telephone number, or unable to contact. Appendix 1 shows the breakdown, by province and territory, of EnerGuide evaluations conducted during the reference period and of owners participating in the survey. In the body of this report, national percentage estimates derived from the survey have been weighted to reflect the actual breakdown of the evaluations. The tables also give the actual number of respondents to each part of the specific questions; the percentages extrapolated from those numbers may differ from the weighted percentages.

2. Overall results

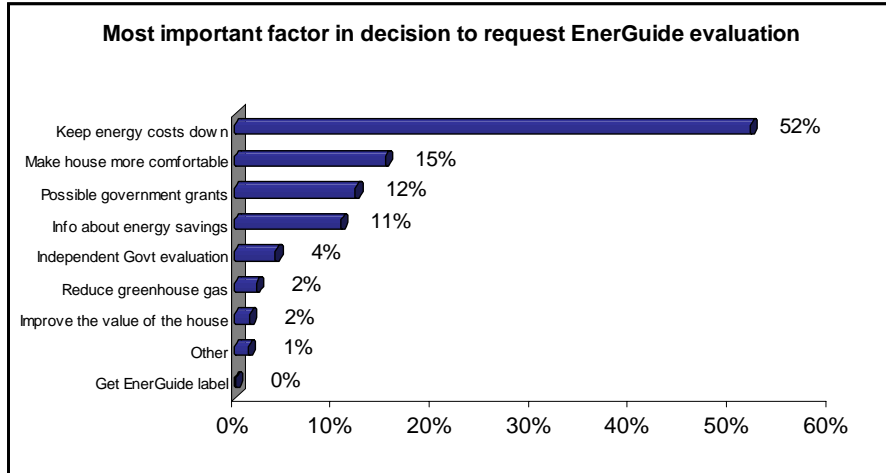
2.1 Program information sources

How did participants learn about the EnerGuide for Houses program? A variety of sources were mentioned, but the most frequent were the following: mass media (46%, including 22% for newspapers and magazines and 24% for radio and TV), friends/family members (20%) and the energy supplier (10%). Other homeowners learned about the program from advertising leaflets and brochures (4%), events like exhibitions, trade shows and conventions (3%), a contractor (4%) or via the Internet (4%).

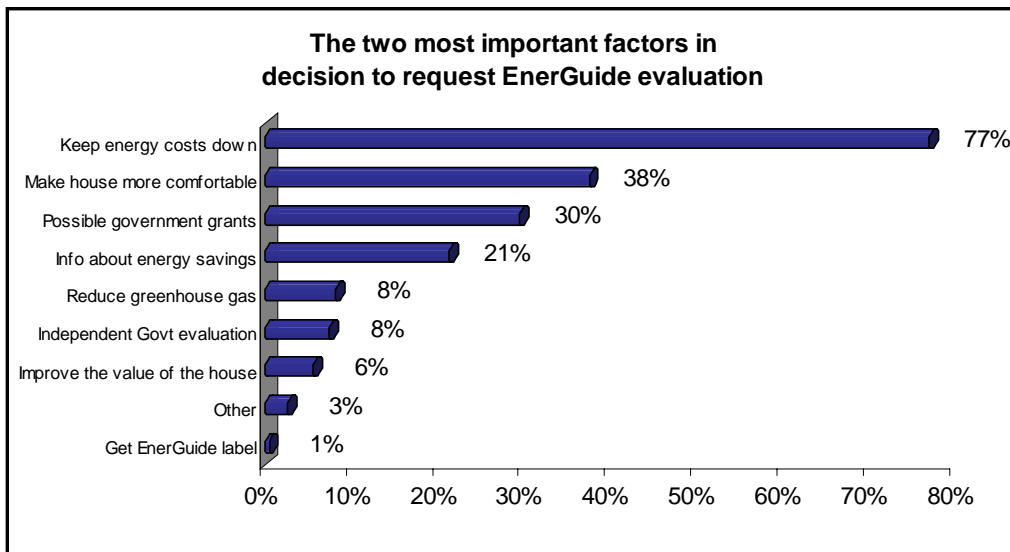


2.2 Factors in decision to request an EnerGuide evaluation

For more than half of the homeowners (52%), the most important factor in their decision to request an EnerGuide evaluation was the need to keep their energy costs down. One out of six (15%) said that making their house more comfortable was the priority, while one out of eight (12%) mentioned the possibility of taking advantage of government grants for energy renovations. Others (11%) cited the need to get information on energy savings for future renovations. A smaller proportion of homeowners (4%) were attracted by the idea of getting an evaluation done by an independent government organization. Other items were mentioned less frequently: doing one's share to reduce greenhouse gas (GHG) emissions (2%) or increasing the value of the house (2%). Only two of the participating homeowners said that the most important factor was getting the EnerGuide for Houses label.

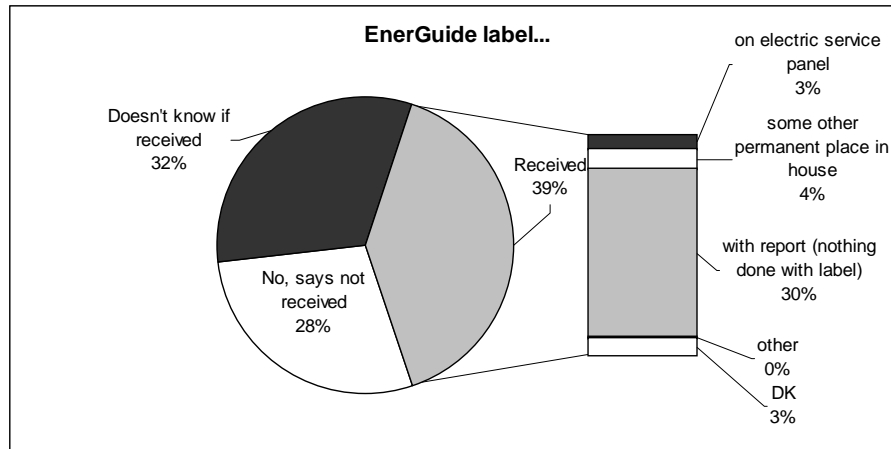


Respondents were also asked to give the second most important factor. The pattern of the answers in this survey remained the same. Nearly eight out of ten (77%) answered the need to keep energy costs down as their first or second choice among the listed factors. Two out of five homeowners (38%) mentioned comfort, while the possibility of taking advantage of government grants for energy renovations was identified by three homeowners out of ten (30%), a higher proportion than for the need to get information about energy savings for renovations (21%). If we include the second most important factor, we find that, getting an evaluation by an independent government organization (8%), doing one's share to reduce GHG emissions (8%) and increasing the value of one's house (6%) were less frequently cited by the respondents.



2.3 EnerGuide label

Only 39% of homeowners said they had received the EnerGuide label and most of them (30%) put it with the report (or did nothing with it). A small proportion affixed it to their electric service panel (3%) or elsewhere in a permanent place the house (4%) while others (3%) did not know what they did with it. Many claimed not to have received the label (28%) or just did not know whether or not they had received it (32%).



Moreover, five out of six homeowners (84%) knew that they could get a second evaluation after the energy efficiency upgrades and then receive a second label showing the new energy efficiency rating of the house. In a similar proportion (82%), they knew that once the upgrade was completed, they could be eligible for an EnerGuide for Houses retrofit grant. In fact, two out of three homeowners (67%) intend to apply for a grant and half of them (32%) know how to apply and are aware of the conditions.

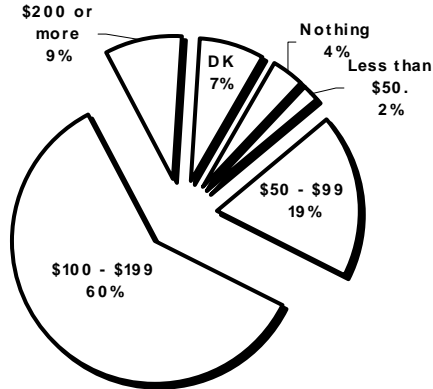
Awareness of second evaluation

| | Number of cases | % (weighted) |
|---|-----------------|--------------|
| Awareness of fact that it was possible to get a second evaluation and a new label | | |
| Yes | 1123 | 84% |
| No | 216 | 16% |
| With the second label, knows about eligibility for EnerGuide for Houses retrofit incentive? | | |
| Yes | 1090 | 82% |
| No | 262 | 18% |
| Plans to apply? | | |
| Yes | 880 | 67% |
| <i>(and knows how to apply)</i> | 404 | 32% |
| No | 243 | 18% |
| Does not know whether or not | 231 | 16% |
| Number of homeowners | 1354 | 100% |

2.4 Amount paid for EnerGuide evaluation by homeowner

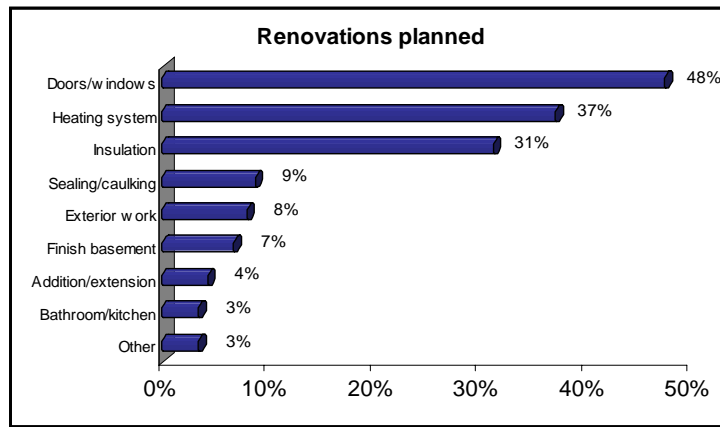
Few homeowners (4%) did not have to pay for the EnerGuide evaluation, and about one fifth (21%) paid an amount less than \$100. Most homeowners (69%) had to pay \$100 or more. In Alberta, almost all homeowners had to pay \$100 or more for their evaluation. More rarely the homeowners had to pay \$200 or more for the energy efficiency evaluation service (9%).

Amount paid for the evaluation



2.5 Renovations planned before EnerGuide evaluation

Nearly two thirds of participants (62%) had planned to do renovations before requesting the EnerGuide evaluation. In about half of those cases (48%), the renovations involved doors and windows, while they involved the heating system or the insulation in 37% and 31% of the cases respectively. Other planned renovations covered the basement (7%), various exterior work (8%), sealing and caulking (9%), room extensions or additions (4%) or the renovation of the kitchen or the bathroom (3%).



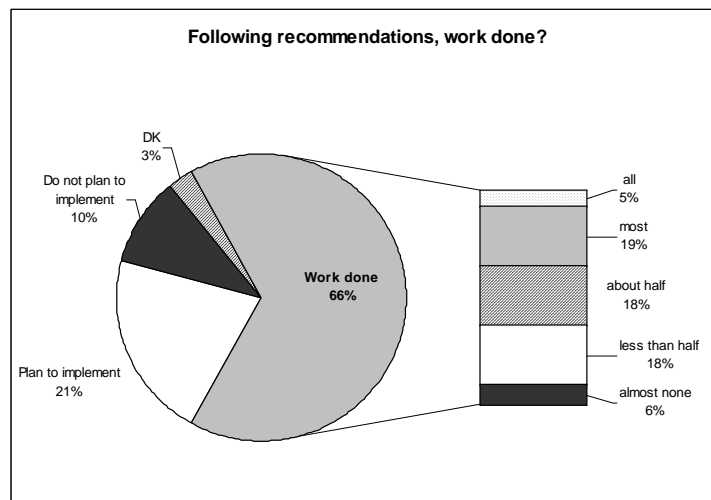
Renovations planned before EnerGuide evaluation

| <u>Renovations planned before evaluation</u> | <u>Number of cases</u> | <u>% (weighted)</u> |
|--|------------------------|---------------------|
| Yes | 825 | 62% |
| No | 506 | 38% |
| Number of homeowners | 1354 | 100% |

| <u>Renovations planned</u> | <u>Number of mentions</u> | <u>% (weighted)</u> |
|--------------------------------|---------------------------|---------------------|
| Bathroom/kitchen | 34 | 3% |
| Doors/windows | 390 | 48% |
| Insulation (anywhere in house) | 312 | 31% |
| Finish basement | 66 | 7% |
| Heating system | 242 | 37% |
| Exterior work | 88 | 8% |
| Addition/extension | 28 | 4% |
| Sealing/caulking | 86 | 9% |
| Interior renovations | 9 | 1% |
| Other | 35 | 3% |
| Number of homeowners | 825 | 100% |

2.6 Implementation of recommendations

On the basis of the recommendations presented in the report, two homeowners out of three (66%) implemented at least some of the energy efficiency recommendations from the EnerGuide evaluation. Most of the rest still intended to take action on some recommendations (21%). Among those who did not intend to take action (10%) or didn't know yet (3%), the main reasons stated include the high cost of work (24%) and the benefits not perceived to be that significant (28%) while others gave no specific reason for their inaction (27%).



Among those who implemented at least some of the energy efficiency recommendations one quarter of homeowners had carried out all (5%) or most (19%) of the recommendations, while another 18% had implemented about half of them.

Among the homeowners who carried out work following the evaluation, one third of them (33%) had not planned to do renovations before requesting an EnerGuide evaluation.

It is relevant also to find out that three quarters (72%) of those who had planned renovations did in fact carry out energy efficiency upgrades following the EnerGuide evaluator's visit.

Another question is whether there is any connection between the amount paid for the EnerGuide evaluation by the homeowner and whether renovations were done or not, which is answered in the table below.

**Renovations planned before
and implemented after evaluation
Comparisons by price paid for evaluation**

| | All homeowners | Free | \$1 - \$99 | \$100 - \$199 | \$200+ |
|--|-------------------|------|------------|---------------|--------|
| <u>Renovations planned before evaluation</u> | | | | | |
| Yes | 62% | 30% | 57% | 65% | 75% |
| No | 38% | 70% | 43% | 35% | 25% |
| <u>Recommendations implemented</u> | | | | | |
| Yes | 66% | 34% | 61% | 69% | 73% |
| all | 5% | 5% | 5% | 5% | 5% |
| most | 19% | 8% | 13% | 20% | 25% |
| about half | 18% | 9% | 20% | 18% | 19% |
| less than half | 18% | 6% | 16% | 20% | 16% |
| almost none | 6% | 7% | 5% | 6% | 9% |
| No, none | 34% | 66% | 39% | 31% | 27% |
| and plans to implement | 21% | 21% | 24% | 21% | 19% |
| and does not plan to implement | 10% | 35% | 11% | 8% | 4% |
| and doesn't know right now | 3% | 10% | 3% | 2% | 4% |
| Number of homeowners | 1354 | 55 | 249 | 810 | 165 |

The table shows that the propensity to implement recommendations increases proportionally with the amount paid for the evaluation. As a matter of fact, when they paid \$200 or more, three homeowners out of four (73%) implemented some of the recommendations, while only one third (34%) of those who had the evaluation done for free actually acted on the recommendations. We observe the same phenomenon regarding the proportion of those who had planned to do renovations before the EnerGuide evaluation: this proportion is larger among those who paid at least \$200 (75%) than for those who paid nothing (30%).

In terms of the value of work done, homeowners who paid nothing for their evaluation stand out too (The relatively small sample size should be noted). About two third of them (63%) spent \$5,000 or more on renovations; this figure is significantly higher than for other homeowners since, even among those who paid at least \$200 for the evaluation, it is only 39%. As well, around 40% of those who paid something for the evaluation spent less than \$2,500 for the work done, while among those who paid nothing, this percentage is only 30%. If we set aside the homeowners who paid nothing for their evaluation, given the small sample size of that group, we observe that the proportion of homeowners who involved a contractor in the energy efficiency work increases with the amount paid for the evaluation: from 58% for those who paid less than \$100 for the evaluation to 75% when this amount is at least \$200. In the latter case, 43% of the times, the contractor was the only one involved.

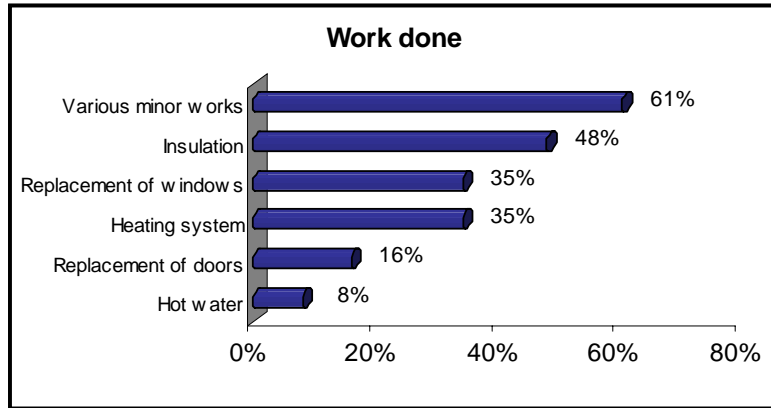
**All homeowners who carried out work
Information on work done
Comparisons by price paid for evaluation**

| | All homeowners | Free | \$1 - \$99 | \$100 - \$199 | \$200+ |
|-------------------------------|----------------|------|------------|---------------|--------|
| Who did work? | | | | | |
| Owners (incl friends/family m | 36% | 20% | 42% | 37% | 25% |
| Contractor only | 35% | 54% | 31% | 33% | 43% |
| Both | 29% | 27% | 27% | 30% | 32% |
| Cost of work | | | | | |
| Less than \$500 | 25% | 21% | 27% | 25% | 20% |
| \$500-\$2500 | 14% | 9% | 19% | 13% | 18% |
| \$2500-\$5000 | 24% | 7% | 26% | 26% | 19% |
| \$5000-\$20000 | 27% | 41% | 20% | 29% | 26% |
| \$20000+ | 6% | 22% | 3% | 4% | 14% |
| NR | 4% | 0% | 4% | 3% | 4% |
| Financing of work | | | | | |
| Yes | 17% | 22% | 24% | 14% | 21% |
| No | 81% | 78% | 76% | 84% | 77% |
| Number of homeowners | 1354 | 55 | 249 | 810 | 165 |

3. Homeowners who undertook work

3.1 Work done

Following the EnerGuide for Houses evaluation and recommendations, the most common upgrades carried out involved minor work such as caulking and weather stripping not done by a professional (61%) and insulation (48%, including 26% for the attic, 21% for the basement/crawlspace and 15% for main walls) and the replacement of windows (35%) or of the heating system (35%, 17% by installing a high-efficiency system). Less frequently, it involved the replacement of doors (16%). Finally, only 8% of work done involved the hot water system (including 6% where a more energy-efficient system was installed).



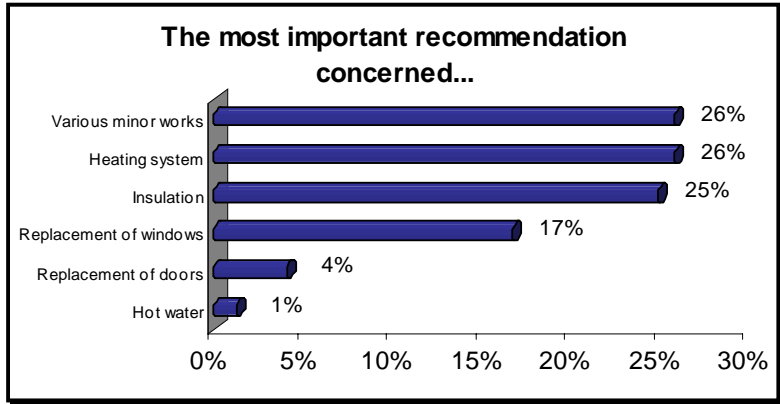
Recommendations implemented

| <u>Work done</u> | <u>Number of mentions</u> | <u>% (weighted)</u> |
|--|-------------------------------|-------------------------|
| Doors and windows | 390 | 40% |
| Replacement of windows | 320 | 35% |
| Replacement of doors | 171 | 16% |
| Insulation | 483 | 48% |
| Basement/crawl space | 213 | 21% |
| Attic | 259 | 26% |
| Main walls | 170 | 15% |
| Heating system | 258 | 35% |
| Replace equipment : mid-efficiency system | 107 | 17% |
| Switch energy source | 15 | 2% |
| Replace equipment : high-efficiency system | 143 | 17% |
| Hot water | 84 | 8% |
| Replace : more energy efficient system | 48 | 6% |
| Insulate electric tank | 9 | 0% |
| Insulate first metre of hot water pipes | 27 | 2% |
| Install water-saver shower heads | 18 | 1% |
| Other | 693 | 70% |
| Add mechanical ventilation | 54 | 4% |
| Professional air sealing | 72 | 6% |
| Replace exterior siding | 57 | 5% |
| Repl appliances with more effic models | 31 | 2% |
| Structural work | 36 | 2% |
| Various minor work (caulking/weather strip.) | 619 | 61% |
| Install electronic thermostat | 31 | 2% |
| Other | 30 | 4% |
| Number of homeowners | 938 | 100% |

Again, it is interesting to compare work done with work planned before the request for an EnerGuide evaluation. We find that only half of the homeowners who replaced their doors or windows (54%) or their heating system (55%) had planned to do so before the EnerGuide evaluation request. The corresponding percentages are even lower for the insulation (35%) and caulking by a professional (11%). This proves that the EnerGuide for Houses program has had an impact.

| Of homeowners who carried out the following types of work, | <i>percentage who had planned to do work of that kind</i> |
|---|---|
| ↓ Doors/windows | 54% |
| Insulation | 35% |
| Heating system | 55% |
| Caulking/sealing (by professional) | 11% |

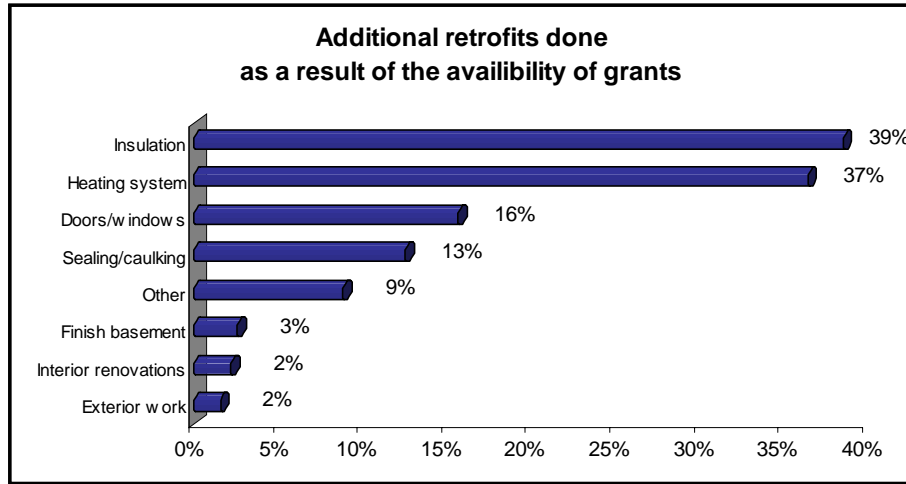
So which evaluation recommendations did homeowners consider the most important? The breakdown of answers gives the highest-priority work to the heating system (26%) and the insulation (25%), followed by minor work such as caulking and sealing upgrades (19%) and the replacement of windows (17%). Less frequently, homeowners mentioned the replacement of doors (4%) or of the hot water system (1%).



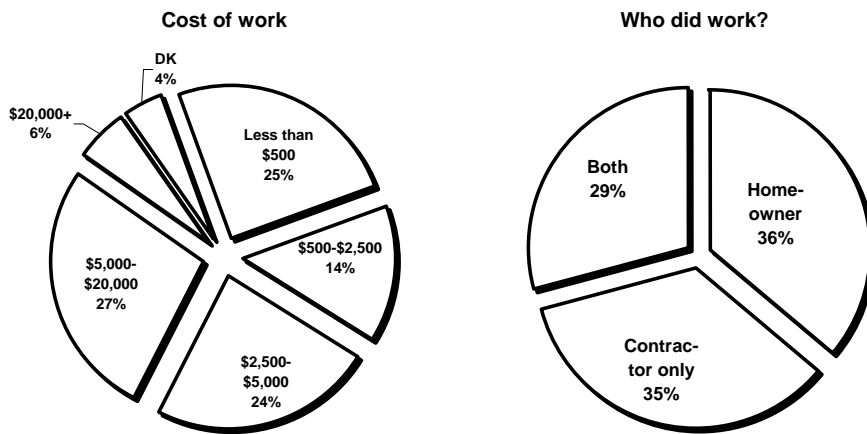
Most important recommendation implemented

| Work done | Number of mentions | % (weighted) |
|--|--------------------|--------------|
| Doors and windows | 182 | 21% |
| Replacement of windows | 144 | 17% |
| Replacement of doors | 38 | 4% |
| Insulation | 283 | 25% |
| Basement/crawl space | 96 | 9% |
| Attic | 122 | 11% |
| Main walls | 65 | 6% |
| Heating system | 182 | 26% |
| Replace equipment : mid-efficiency system | 77 | 12% |
| Switch energy source | 4 | 0% |
| Replace equipment : high-efficiency system | 101 | 13% |
| Hot water | 8 | 1% |
| Replace : more energy efficient system | 7 | 1% |
| Insulate electric tank | 0 | 0% |
| Insulate first metre of hot water pipes | 1 | 0% |
| Install water-saver shower heads | 0 | 0% |
| Other | 256 | 23% |
| Add mechanical ventilation | 13 | 2% |
| Professional air sealing | 19 | 1% |
| Replace exterior siding | 5 | 0% |
| Repl appliances with more effic models | 0 | 0% |
| Structural work | 6 | 0% |
| Various minor work (caulking/weather strip.) | 203 | 19% |
| Install electronic thermostat | 4 | 0% |
| Other | 6 | 0% |
| Number of homeowners | 938 | 100% |

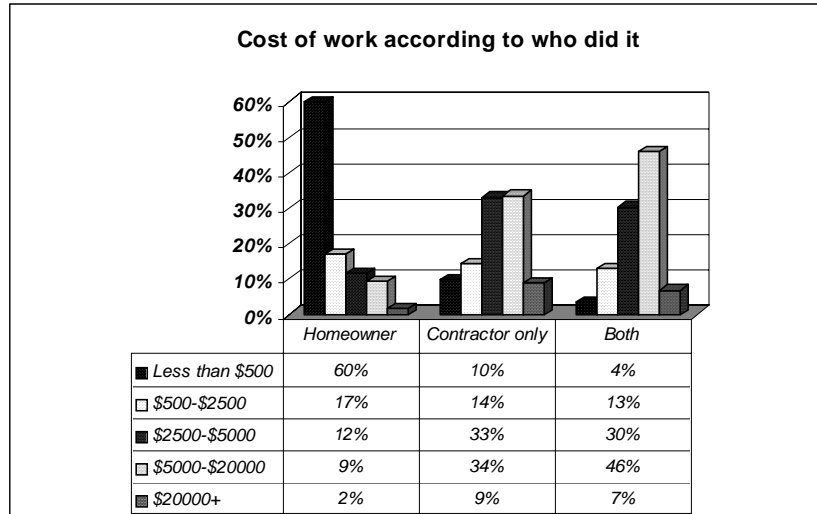
Furthermore, a third (31%) of those who were aware of the fact that EnerGuide for Houses renovation grants became available in August 2003 did more work than planned as a result of the availability of the grants. These works often involved the replacement of the heating system (37%) and also insulation works anywhere in the house (39%).



In one quarter of the cases (25%), the work done cost less than \$500, and in one case out of seven (14%), the cost was between \$500 and \$2,500. However, for most of homeowners, the amount involved was quite high such as between \$2,500 and \$5,000 (for 24% of the cases) or even between \$5,000 and \$20,000 (for 27% of the cases); in 6% of the cases, the homeowners spent more than \$20,000. A total of 4% of the homeowners did not answer the question. In spite of the large amount spent, only 17% of homeowners resorted to financing to pay for the work. In the third of the cases (36%), the work was done by the homeowners themselves, sometimes with the help of friends and family members. In about the same proportion (35%), all of the work was given to a contractor; three times out of ten (29%), the homeowner and a contractor shared the work.



Work involving a contractor cost more as shown in the next graph. In 60% of cases where no contractor was used, the total cost was less than \$500. On the other hand, in 76% of cases where a contractor was hired to do all the work, the cost was \$2,500 or more. When the homeowner and a contractor shared the work, there was even a higher frequency of situations where the cost was \$2,500 or more (83%) and in most cases (53%) it exceeded \$5,000.



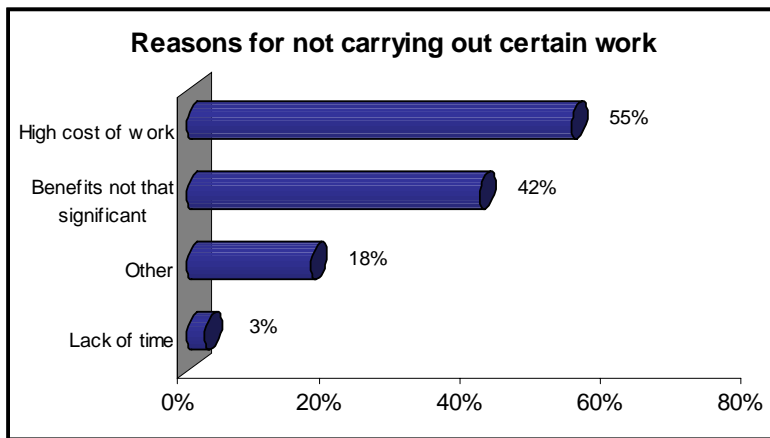
3.2 Recommendations that homeowners were not planning to implement

Two homeowners out of every five (40%) who implemented some of the evaluator's recommendations decided to ignore some of the recommendations. Expensive projects such as replacing windows (11%) or the heating system (8%) were frequently mentioned as major work not to be carried out. Some homeowners decided not to implement recommendations related to insulation (17%).

Recommendations that will not be implemented

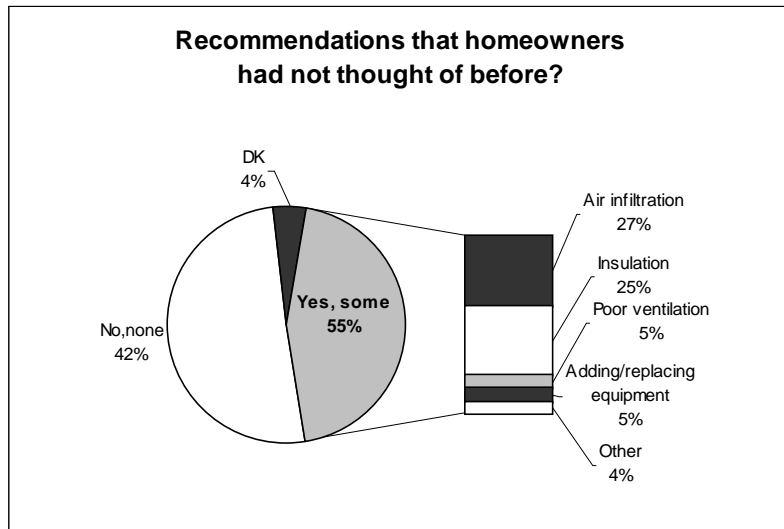
| Were there any recommendations that homeowner decided not to implement? | Number of mentions | % (weighted) |
|---|--------------------|--------------|
| No, none | 473 | 49% |
| DK/NR | 102 | 11% |
| <u>Yes, some</u> | 363 | 40% |
| ↓ | | |
| Doors and windows | 97 | 11% |
| Replacement of windows | 85 | 11% |
| Replacement of doors | 23 | 2% |
| Insulation | 168 | 17% |
| Basement/crawl space | 63 | 6% |
| Attic | 48 | 5% |
| Main walls | 72 | 8% |
| Heating system | 60 | 8% |
| Replace equipment : mid-efficiency system | 27 | 4% |
| Switch energy source | 4 | 0% |
| Replace equipment : high-efficiency system | 31 | 3% |
| Hot water | 21 | 2% |
| Replace : more energy efficient system | 16 | 2% |
| Insulate electric tank | 3 | 0% |
| Insulate first metre of hot water pipes | 0 | 0% |
| Install water-saver shower heads | 2 | 0% |
| Other | 95 | 9% |
| Add mechanical ventilation | 38 | 4% |
| Professional air sealing | 11 | 1% |
| Replace exterior siding | 10 | 1% |
| Repl appliances with more effic models | 2 | 0% |
| Structural work | 4 | 0% |
| Various minor work (caulking/weather strip.) | 22 | 3% |
| Install electronic thermostat | 3 | 0% |
| Other | 10 | 1% |
| Number of homeowners | 938 | 100% |

The main reason given for not implementing certain recommendations was the high cost of the work (55% of those cases). In two cases out of five (42%), homeowners considered that the expected benefit was not significant. In the residual category 'Other', 9% of the homeowners found that the work proposed was too complex.



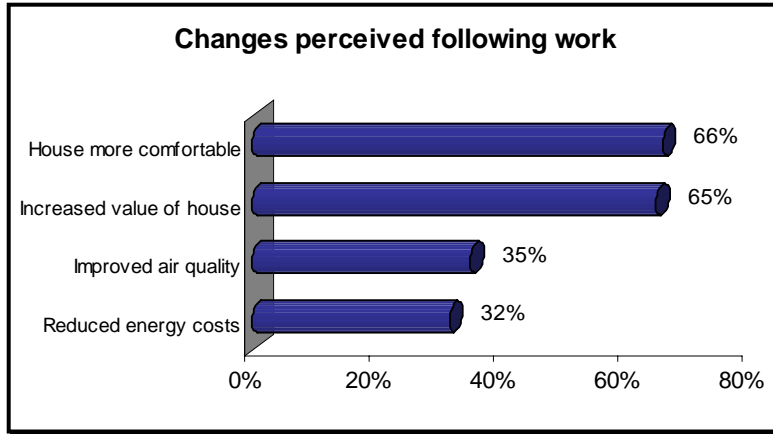
3.3 Recommendations that homeowners had not thought of before

More than one half (55%) of homeowners who had done some of the recommended work stated that the EnerGuide evaluation report contained some recommendations they had not thought of before. Those recommendations were mainly related to air infiltration (27%) and insulation (25%); less frequently, they also concerned poor ventilation (5%) or the addition or replacement of equipment (5%).

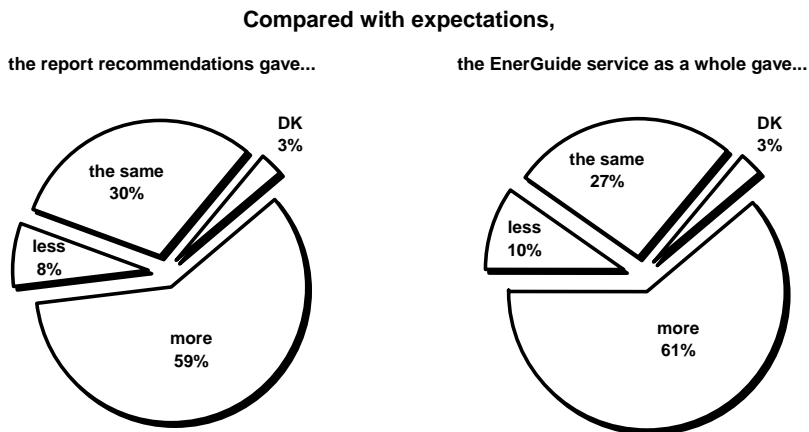


3.4 Perceived impact of work and level of satisfaction with the program

After doing the work, two homeowners out of three (66%) felt an improvement in the level of home comfort. Less often, homeowners noticed an improvement in air quality (35%) or a drop in their energy costs (32%). Two thirds of the homeowners (65%) felt that the value of their home had risen as a result of the work.



Most of the owners who did work on the basis of the EnerGuide evaluation report expressed a high level of satisfaction: three out of five (59%) said that the results of the work recommended in the evaluation report exceeded their expectations while three out of ten (30%) said that the report gave them the same results as they were expecting. However, 8% of the homeowners considered that the EnerGuide report gave them less than they actually expected. Overall, a large proportion of the homeowners (88%) said that the EnerGuide service as a whole, including the evaluator’s visit, gave them as much (27%) or more (61%) than they were expecting. So it comes as no surprise that 93% of the homeowners who did work following the evaluation report would recommend the EnerGuide service to other people; as a matter of fact, four homeowners out of every five (75%) had already recommended the service to someone else at the time of the survey.



A vast majority (88%) of the respondents were aware that they could get a second EnerGuide evaluation. Nearly two thirds of them (64%) planned to request one, while some (15%) had already done so. Those who did not want to ask for a second evaluation (15%) gave various explanations, the most frequent one being that they didn't

feel the need for it, being already satisfied with the service (10%). Also, most (85%) of the homeowners who had done energy-efficiency upgrades on the basis of the evaluation report knew that, with the second label, they could be eligible for an EnerGuide for Houses retrofit grant; in fact, three out of four (74%) intended to ask for it (40% knew how to proceed). Those who explicitly expressed their decision not to request it (14%) gave various reasons such as : it concerns only a small project (3%), homeowner felt not being eligible (3%), homeowner didn't feel the need for it, being already satisfied with the service (2%) or because the work was not completed (2%).

Awareness of and need for second evaluation

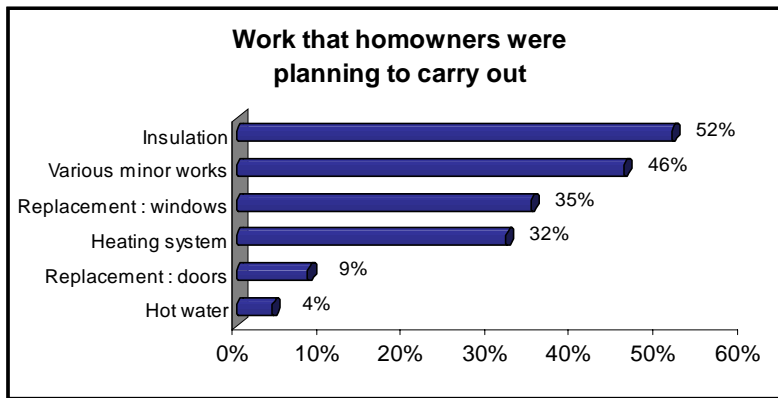
| Following EnerGuide evaluation, | Number of cases | % (weighted) |
|---|--------------------|-----------------|
| Aware that it is possible to get a second evaluation an a new label? | | |
| Yes | 804 | 88% |
| No | 119 | 12% |
| plans to get it? | | |
| Yes, already requested | 127 | 15% |
| Yes, plans to make request | 604 | 64% |
| Would like name to be sent to delivery agent? | | |
| Yes | 180 | 18% |
| No | 420 | 46% |
| No, doesn't want to | 147 | 15% |
| Why not? | | |
| Not right now | 8 | 1% |
| Satisfied | 101 | 10% |
| Money | 13 | 1% |
| Work underway | 2 | 0% |
| Other | 19 | 2% |
| Does not know whether or not | 60 | 7% |
| With the second label, knows about eligibility for EnerGuide for Houses retrofit incentive? | | |
| Yes | 770 | 85% |
| No | 166 | 15% |
| Plans to apply? | | |
| Yes | 660 | 74% |
| <i>(and knows how to apply)</i> | 324 | 40% |
| No | 143 | 14% |
| Does not know whether or not | 135 | 12% |
| Number of homeowners | 938 | 100% |

4. Homeowners planning to do work

At the time of the survey, one homeowner out of five (21%) had not done any of the work recommended in the evaluation report but planned to implement some of the recommendations.

4.1 Work that homeowners were planning to do

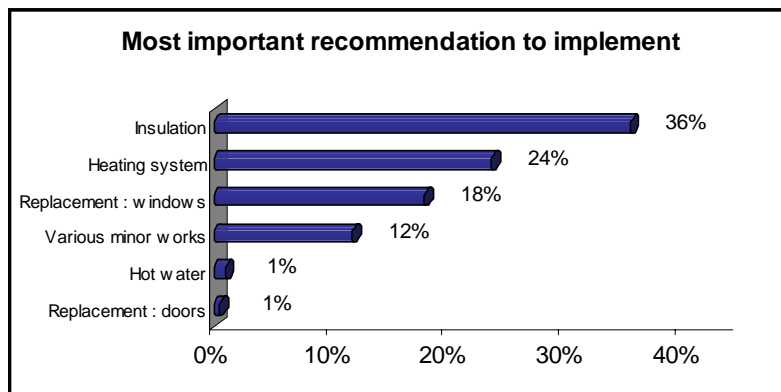
Work that homeowners were planning to do mainly involved insulation (52%, including 29% for the attic, 23% for the basement or crawl space, and 17% for main walls), and minor work such as caulking and weather stripping (46%). Also, about one third of those homeowners planned to replace their windows (35%) or their heating system (32%, including 16% by upgrading to a high-efficiency system). A smaller proportion of homeowners mentioned the replacement of doors (9%) or replacement of the hot water system with a more energy-efficient one (4%).



Recommendations that they planned to implement

| Work planned | Number of mentions | % (weighted) |
|--|--------------------|--------------|
| Doors and windows | 96 | 38% |
| Replacement of windows | 89 | 35% |
| Replacement of doors | 23 | 9% |
| Insulation | 163 | 52% |
| Basement/crawl space | 80 | 23% |
| Attic | 94 | 29% |
| Main walls | 57 | 17% |
| Heating system | 73 | 32% |
| Replace equipment : mid-efficiency system | 33 | 16% |
| Switch energy source | 4 | 1% |
| Replace equipment : high-efficiency system | 38 | 16% |
| Hot water | 11 | 4% |
| Replace : more energy efficient system | 9 | 4% |
| Insulate electric tank | 0 | 0% |
| Insulate first metre of hot water pipes | 2 | 1% |
| Install water-saver shower heads | 1 | 0% |
| Other | 155 | 57% |
| Add mechanical ventilation | 14 | 3% |
| Professional air sealing | 16 | 6% |
| Replace exterior siding | 22 | 8% |
| Repl appliances with more effic models | 0 | 0% |
| Structural work | 3 | 1% |
| Various minor work (caulking/weather strip.) | 124 | 46% |
| Install electronic thermostat | 5 | 2% |
| Other | 4 | 1% |
| Number of homeowners | 267 | 100% |

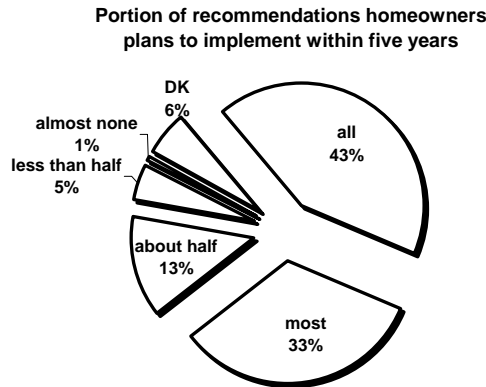
Evaluation report recommendations that homeowners were planning to do and felt were most important were insulation (36%, including 14% for the attic and 13% for the basement or crawl space), the replacement of the heating system (24% including 11% by upgrading to a high-efficiency system), the window replacement (18%) and minor work, including caulking and weather stripping, to be done by the homeowners themselves (12%).



Most important recommendation to implement

| Work done | Number of mentions | % (weighted) |
|--|--------------------|--------------|
| Doors and windows | 41 | 19% |
| Replacement of windows | 38 | 18% |
| Replacement of doors | 3 | 1% |
| Insulation | 119 | 36% |
| Basement/crawl space | 44 | 13% |
| Attic | 44 | 14% |
| Main walls | 31 | 9% |
| Heating system | 50 | 24% |
| Replace equipment : mid-efficiency system | 24 | 12% |
| Switch energy source | 1 | 0% |
| Replace equipment : high-efficiency system | 25 | 11% |
| Hot water | 2 | 1% |
| Replace : more energy efficient system | 2 | 1% |
| Insulate electric tank | 0 | 0% |
| Insulate first metre of hot water pipes | 0 | 0% |
| Install water-saver shower heads | 0 | 0% |
| Other | 41 | 15% |
| Add mechanical ventilation | 2 | 0% |
| Professional air sealing | 1 | 0% |
| Replace exterior siding | 2 | 1% |
| Repl appliances with more effic models | 0 | 0% |
| Structural work | 2 | 1% |
| Various minor work (caulking/weather strip.) | 32 | 12% |
| Install electronic thermostat | 1 | 1% |
| Other | 1 | 0% |
| Number of homeowners | 267 | 100% |

Two out of every five homeowners (43%) who planned to do energy efficiency improvements thought that within five years they would have implemented all of the recommendations in the report; another third (33%) of them would have implemented most of them while 13% would implement about half.



4.2 Work that homeowners were not planning to do

Only 22% of the homeowners planning to do work recommended in the evaluation report could identify some recommendations they would not be implementing. The type of work more frequently mentioned concerns insulation (7%) or the replacement of the heating system (9%, including 7% for a high-efficiency system).

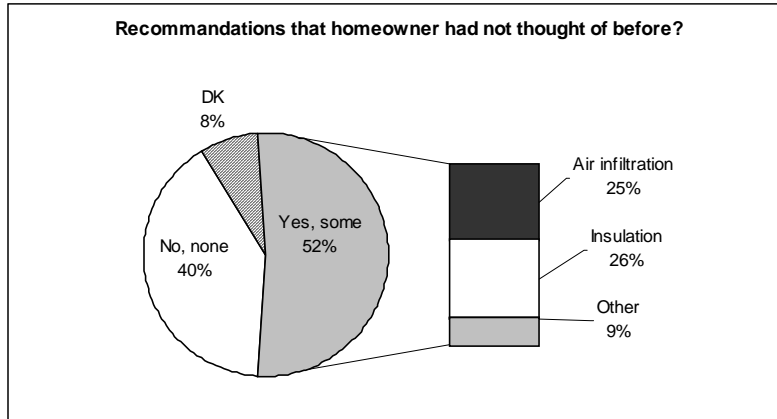
Recommendations that will not be implemented

| Were there any recommendations that homeowner decided not to implement? | Number of mentions | % (weighted) |
|---|--------------------|--------------|
| No, none | 145 | 54% |
| DK/NR | 72 | 24% |
| <u>Yes, some</u> | 50 | 22% |
| ↓ | | |
| Doors and windows | 9 | 2% |
| Replacement of windows | 9 | 2% |
| Replacement of doors | 0 | 0% |
| Insulation | 16 | 7% |
| Basement/crawl space | 6 | 2% |
| Attic | 5 | 3% |
| Main walls | 5 | 2% |
| Heating system | 16 | 9% |
| Replace equipment : mid-efficiency system | 5 | 2% |
| Switch energy source | 0 | 0% |
| Replace equipment : high-efficiency system | 11 | 7% |
| Hot water | 2 | 1% |
| Replace : more energy efficient system | 2 | 1% |
| Insulate electric tank | 0 | 0% |
| Insulate first metre of hot water pipes | 0 | 0% |
| Install water-saver shower heads | 0 | 0% |
| Other | 8 | 3% |
| Add mechanical ventilation | 3 | 1% |
| Professional air sealing | 0 | 0% |
| Replace exterior siding | 3 | 1% |
| Repl appliances with more effic models | 1 | 0% |
| Structural work | 0 | 0% |
| Various minor work (caulking/weather strip.) | 1 | 1% |
| Install electronic thermostat | 0 | 0% |
| Other | 0 | 0% |
| Number of homeowners | 267 | 100% |

The reasons most frequently given for setting aside certain recommendations were the cost of the work (43%) and the insignificant perceived benefit (48%).

4.3 Recommendations that homeowners had not thought of before

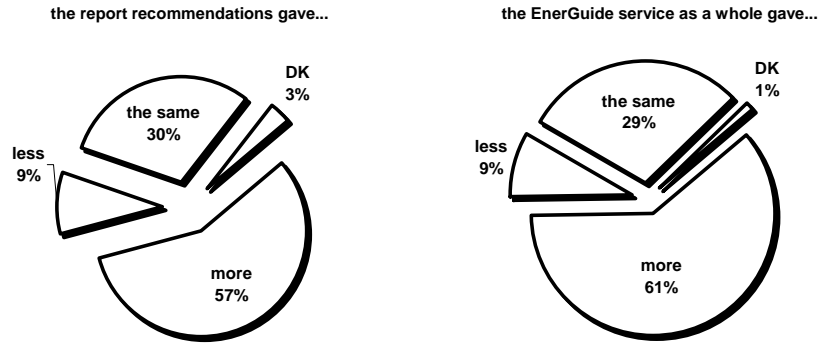
One half (52%) of the homeowners who had not done any of the recommended work at the time of the survey but planned to implement some of the work stated that there were recommendations in the report that they had not thought of before. Those recommendations most frequently mentioned involved insulation (26%) and air infiltration (25%).



4.4 Satisfaction with program

Homeowners planning to implement recommendations in the evaluation report expressed considerable satisfaction with the program: more than half (57%) said that the recommendations gave them more than they were expecting and 30% felt that the report gave them what they were expecting. Also, a very large proportion of the homeowners (90%) stated that the EnerGuide service as a whole, including the evaluator's visit to the home, gave them as much (29%) or more (61%) than they were expecting. Again, it comes as no surprise that 91% of these homeowners would recommend the EnerGuide service to other people; at the time of the survey, 66% had already recommended it to someone they knew.

Compared with expectations,



Furthermore, a large proportion of the homeowners planning to act on recommendations were aware of the fact that they could get a second evaluation after energy efficiency upgrades had been done (83%). A comparable proportion (78%) knew that, with the second label showing their home's new energy rating, they could be eligible for an EnerGuide for Houses retrofit grant. In fact, 70% of these homeowners intended to apply for the grant but only 25% knew how to proceed for the request. A total of 18% didn't know whether or not they would apply. Among the 13% of those homeowners who didn't intend to apply for the grant (26 homeowners), their most frequent reason stated were that it was not worth it (10 cases) or because the work was not completed (4 cases).

5. Homeowners who had not carried out any work and were not planning to

As mentioned earlier, 13% of the homeowners had not carried out any work to improve the house's energy efficiency and were not planning to implement any recommendations in the EnerGuide evaluation report (or did not know if they would). The table below provides information on what prompted this segment of homeowners to request the evaluation and what was the context.

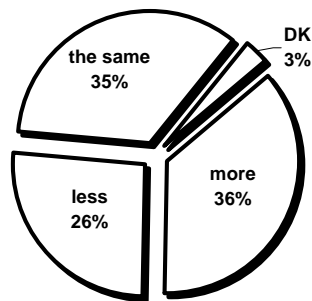
| | Number of cases | % (weighted) |
|---|--------------------|-----------------|
| <u>Source of information for the program</u> | | |
| Media: radio/TV | 32 | 22% |
| Friends/Family members | 30 | 23% |
| Building contractor | 6 | 5% |
| Energy supplier | 14 | 8% |
| Advertising leaflets/brochures | 10 | 7% |
| Newspapers, magazines | 29 | 20% |
| Exhibition/trade show | 3 | 2% |
| Telemarketing/visit | 4 | 3% |
| Internet | 3 | 2% |
| Other | 8 | 3% |
| DK/NA | 17 | 11% |
| <u>Most important factor to request an evaluation</u> | | |
| Making house more comfortable | 21 | 11% |
| Keeping energy costs down | 68 | 48% |
| Improve the value of the house | 4 | 4% |
| Getting information about energy savings | 19 | 13% |
| Evaluation by independent govt org | 14 | 10% |
| Government grants for energy renovations | 10 | 6% |
| Reducing greenhouse gas emissions | 2 | 2% |
| Other | 10 | 6% |
| <u>Renovations planned before requesting the evaluation?</u> | | |
| No | 94 | 64% |
| Yes | 52 | 36% |
| <u>Which ones?</u> | | |
| Bathroom/kitchen | 0 | 0% |
| Doors/windows | 32 | 64% |
| Insulation (anywhere in house) | 13 | 21% |
| Finish basement | 2 | 3% |
| Heating system | 16 | 35% |
| Exterior work | 5 | 7% |
| Addition/extension | 4 | 8% |
| Sealing/caulking | 2 | 1% |
| Other | 1 | 3% |
| <u>Amount paid for the evaluation</u> | | |
| nothing | 24 | 14% |
| less than \$50. | 2 | 2% |
| between \$50 and \$99 | 31 | 21% |
| between \$100 and \$199 | 68 | 46% |
| \$200 or more | 10 | 6% |
| DK/NR | 14 | 11% |
| Number of homeowners | 149 | 100% |

Surprisingly, a third of these homeowners (36%) had planned some renovations before requesting the EnerGuide evaluation. What is even more surprising is the fact that among those who had planned some renovations before requesting the EnerGuide evaluation and finally didn't carry out any work, 70% had paid \$100 or more for the evaluation. Let's recall that the main reasons stated by this segment for not implementing any recommendations were the high cost of the work (24%) and the small benefit perceived (28%). This segment of homeowners is not statistically different from others when analyzing the program information sources or the major factors prompting a request for an EnerGuide for Houses evaluation.

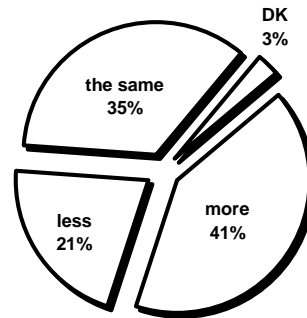
Overall, these homeowners are not homogeneous regarding their level of satisfaction with the recommendations in the evaluation report: 36% of them considered that the recommendations gave them more than they expected, and 35% felt that their expectations were met. However, one out of four (26%) stated that the recommendations in the report gave them less than they were expecting. The overall EnerGuide service got a more positive rating, with 41% of the homeowners feeling that it exceeded expectations and 35% stating that it met expectations. Of the homeowners who had not carried out any work and were not planning to implement any recommendations in the evaluation report, 21% felt that the overall EnerGuide service did not meet their expectations. Three out of four homeowners (75%) from this segment would not hesitate to recommend the service to other persons; at the time of the survey, 46% had already done so.

Compared with expectations,

the report recommendations gave...



the EnerGuide service as a whole gave...

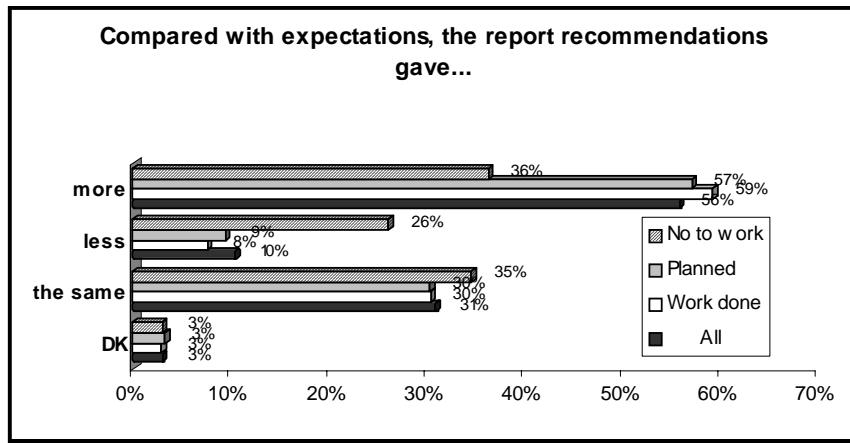


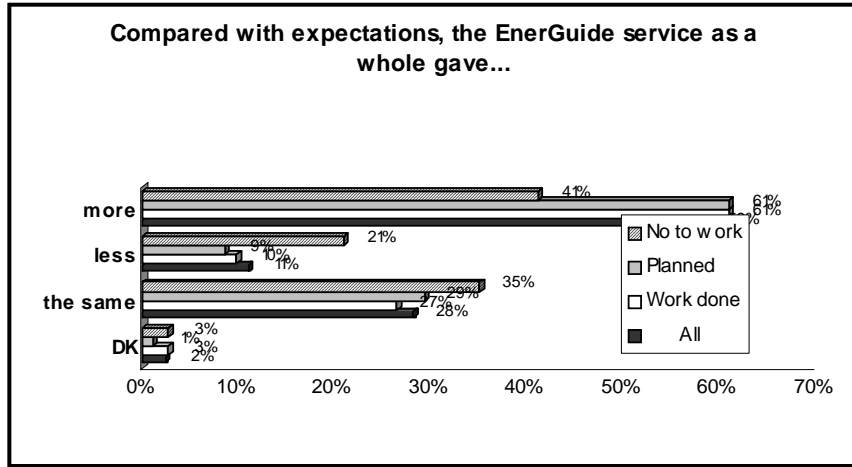
6. Comparison of EnerGuide homeowner client segments

In the preceding sections, the EnerGuide program's clientele was broken down into three distinct segments based on the action taken on the EnerGuide evaluation recommendations: (1) those who carried out work; (2) those who did not carry out work but planned to do so, and (3) those who did not carry out work and did not plan to.

The survey analysis compares, on the basis of this segmentation, answers to questions about respondents' level of satisfaction with the program as a whole. The results presented in earlier sections provide an overview on this matter, but the charts below give a more in-depth perspective on how the program is perceived by homeowners.

Overall, 56% of the homeowners whose houses were evaluated under the EnerGuide for Houses program during the survey period felt that the evaluation report's recommendations gave them more than they were expecting, and 59% of them felt that the EnerGuide service as a whole gave them more than they were expecting. These satisfaction levels are higher for homeowners who carried out work on the basis of the recommendations, or intend to do so, than for other homeowners: the differential between these two groups is about 20% regarding both the report's recommendations and the EnerGuide service as a whole.





When the expectations are not met, homeowners would often state that report recommendations were too general.

Also, 90% of all homeowners would recommend the EnerGuide service to other people; at the time of the telephone interviews, 69% had already done so.

Finally, from the data collected, there seems to be a link between the respondents' level of satisfaction and the amount paid for the EnerGuide evaluation. Nearly 70% of those who received a free evaluation felt that the report's recommendations and the overall EnerGuide for Houses service gave them more than they were expecting. This level of satisfaction decreases slowly as the amount paid for the evaluation increases, since the above figure is closer to 50% when the cost of the evaluation reached or exceeded \$200.

**Comparisons by price paid for evaluation
Satisfaction with EnerGuide Program**

| | All homeowners | Free | \$1 - \$99 | \$100 - \$199 | \$200+ |
|--|----------------|------|------------|---------------|--------|
| <u>Compared with expectations, the recommendations in the report gave...</u> | | | | | |
| more | 56% | 69% | 63% | 54% | 47% |
| less | 10% | 5% | 10% | 10% | 11% |
| the same | 31% | 26% | 25% | 32% | 39% |
| Don't know | 3% | 0% | 2% | 4% | 3% |
| <u>The EnerGuide service as a whole gave...</u> | | | | | |
| more | 59% | 69% | 65% | 58% | 56% |
| less | 11% | 8% | 9% | 11% | 10% |
| the same | 28% | 20% | 25% | 29% | 31% |
| Don't know | 2% | 4% | 1% | 2% | 4% |
| <u>Would you recommend the service to other people?</u> | | | | | |
| Yes | 90% | 95% | 92% | 90% | 89% |
| <i>(Actually recommended)</i> | 69% | 72% | 71% | 70% | 73% |
| No | 7% | 5% | 6% | 6% | 8% |
| Don't know | 3% | 0% | 2% | 3% | 3% |
| Number of homeowners | 1354 | 55 | 249 | 810 | 165 |

7. Suggestions for improving the program

At the end of the survey, two participants out of five made suggestions on how to improve the EnerGuide for Houses program. The most frequently mentioned point was the need to publicize the program more (8% of all participants).

Furthermore, some respondents (3%) considered that the report should be more complete: it should give more specific, more customized with more precise recommendations, including a work plan and a list of priorities or providing energy costs. Other homeowners deplored that they had to wait a long time for the evaluator's visit (6%). Some felt that the follow-up after the evaluation should be improved (5%): it took too long to get the evaluation report after the visit and sometimes deadlines were not met. While some homeowners noticed a lack of evaluators in their area (3%) others questioned the level of training and professionalism of the evaluators (2%), doubting their competence. Others (2%) would have appreciated receiving a report that was easier to read, i.e., written in language a regular consumer would understand. On the monetary side, some suggest that there should be more incentive offered (3%) or that a financing program should be made available (2%). Finally, 2% of the homeowners felt that the report should include a list of potential contractors.

Suggestions for improving EnerGuide evaluation service

| | Number of cases | % (weighted) |
|---|--------------------|-----------------|
| Suggestions | | |
| More information should be given | 95 | 7% |
| Evaluators should be more knowledgeable | 26 | 2% |
| Program should be more publicized | 125 | 8% |
| There should be more incentives | 33 | 3% |
| Follow-up should be improved | 53 | 5% |
| Too long to get an appointment | 82 | 6% |
| Cost is too high | 24 | 2% |
| Reports should be more complete | 46 | 3% |
| Financing programs should be available | 30 | 2% |
| Obtain a list of contractors | 21 | 2% |
| More evaluators in my area | 36 | 3% |
| Reports should be easier to understand | 24 | 2% |
| Other various comments | 96 | 7% |
| No comments | 780 | 58% |
| Number of homeowners | 1354 | 100% |

8. Regional trends

In spite of the relatively small size of the samples for each province or territory, it is possible to identify trends or patterns by looking at significant deviations from the national average. The analysis in this section focuses on questions directed at all homeowners and excludes sub-questions. Prince Edward Island and Newfoundland data have been combined in this section because the number of respondents was too small in each of them. Note that with a sample of about 50 respondents, the margin of sampling error for estimating percentages is about 14%; this margin drops to 10% with 100 respondents and to 7% with 200 respondents. Appendix 4 contains a detailed breakdown of data by province and territory for readers requiring additional information, but those data should be used with caution. As a rough rule, when comparing two provinces or territories, the observed difference should exceed 1.4 times the larger of the two margins of error in order to be statistically significant.

8.1 Awareness of program

Although the respondents' sources of information about the EnerGuide evaluation service fit the same general pattern across the country, some region-specific characteristics are worth mentioning. In Yukon, nearly two thirds of the clientele heard about the program from word of mouth from friends and family members (31%) or through their energy supplier (31%). This latter source was also important in Manitoba (24%). The only provinces where the Internet was a significant source are Quebec (15%) and New Brunswick (10%). In Prince Edward Island and Newfoundland (49%), Quebec (36%) and Alberta (37%) radio and TV played a more important role than elsewhere. In Nova Scotia (37%) and New Brunswick (30%), magazines and newspapers contributed to promote the program.

The proportion of homeowners confirming that they had received the EnerGuide label is quite stable ranging around 30% to 40% except in New Brunswick where it reaches 68%. In general, respondents left the label with the report.

Awareness of EnerGuide evaluation service

| | Newfound-land & PEI | Nova-Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saska-tchewan | Alberta | British Columbia | Yukon | N-O Territories |
|--|---------------------|-------------|---------------|--------|---------|----------|---------------|---------|------------------|-------|-----------------|
| <u>Source of information for the service</u> | | | | | | | | | | | |
| Media: radio/TV | 49% | 20% | 21% | 36% | 9% | 19% | 29% | 37% | 29% | 3% | 16% |
| Friends/Family members | 20% | 20% | 18% | 11% | 23% | 16% | 25% | 22% | 10% | 31% | 25% |
| Building contractor | 2% | 3% | 1% | 0% | 6% | 3% | 1% | 1% | 12% | 1% | 2% |
| Energy supplier | 4% | 2% | 4% | 17% | 8% | 24% | 10% | 7% | 10% | 31% | 4% |
| Advertising leaflets/brochures | 2% | 1% | 1% | 4% | 2% | 11% | 6% | 3% | 6% | 4% | 14% |
| Newspapers, magazines | 13% | 37% | 30% | 5% | 26% | 25% | 22% | 27% | 9% | 10% | 20% |
| Exhibition/trade show | 2% | 5% | 0% | 8% | 3% | 1% | 1% | 2% | 2% | 7% | 13% |
| Club/Association/Coop | 0% | 1% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 3% | 4% |
| Telemarketing/visit | 0% | 0% | 1% | 0% | 4% | 0% | 0% | 0% | 2% | 0% | 0% |
| Internet | 6% | 5% | 10% | 15% | 5% | 2% | 5% | 2% | 1% | 1% | 2% |
| Other | 0% | 2% | 1% | 1% | 2% | 0% | 3% | 1% | 8% | 7% | 5% |
| DK/NR | 6% | 8% | 13% | 4% | 14% | 9% | 9% | 7% | 15% | 3% | 7% |
| <u>EnerGuide label</u> | | | | | | | | | | | |
| Yes, received it and put it... | 37% | 40% | 68% | 46% | 39% | 48% | 39% | 40% | 30% | 28% | 41% |
| on the electric service panel | 4% | 2% | 11% | 7% | 2% | 2% | 4% | 1% | 4% | 6% | 9% |
| other permanent place in house | 2% | 0% | 4% | 0% | 2% | 1% | 8% | 5% | 6% | 6% | 0% |
| with report (nothing done with label) | 31% | 37% | 45% | 38% | 32% | 39% | 26% | 31% | 15% | 15% | 32% |
| other | 0% | 1% | 1% | 1% | 0% | 0% | 0% | 1% | 0% | 0% | 0% |
| DK/NR | 0% | 1% | 8% | 1% | 3% | 6% | 1% | 2% | 5% | 1% | 0% |
| No, says did not receive it | 33% | 30% | 8% | 40% | 30% | 24% | 30% | 20% | 41% | 26% | 20% |
| Doesn't know | 31% | 30% | 24% | 14% | 32% | 28% | 32% | 40% | 29% | 46% | 39% |
| Number of homeowners | 52 | 130 | 103 | 168 | 260 | 103 | 104 | 176 | 130 | 72 | 56 |

British Columbia (71%) and Yukon (59%) are the only places where the percentage of homeowners who were aware that they could get a second evaluation after energy efficiency upgrades have been completed do not exceed 80%. It is also in Yukon (35%) where homeowners are less aware of the fact that they could be eligible for EnerGuide for Houses grants after obtaining a new EnerGuide rating. It is only in Quebec, Yukon and the North West Territories where we don't find a clear majority of homeowners who intend to apply for the grant. Finally, few homeowners in Yukon (8%) and Prince Edward Island and Newfoundland (9%) know how to proceed to apply for the grants.

Awareness of second evaluation service and of the incentive program for energy efficiency

| | Newfound-land & PEI | Nova-Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saska-tchewan | Alberta | British Columbia | Yukon | N-O Territories |
|--|---------------------|-------------|---------------|--------|---------|----------|---------------|---------|------------------|-------|-----------------|
| <u>Awareness of possibility of second evaluation</u> | | | | | | | | | | | |
| Yes | 89% | 92% | 84% | 86% | 89% | 85% | 90% | 82% | 71% | 59% | 82% |
| No | 12% | 8% | 17% | 14% | 11% | 15% | 10% | 18% | 29% | 41% | 18% |
| <u>Awareness of the incentive program for completing energy efficiency renovation work</u> | | | | | | | | | | | |
| Yes | 88% | 92% | 87% | 70% | 90% | 82% | 91% | 77% | 74% | 35% | 87% |
| No | 12% | 9% | 13% | 30% | 10% | 18% | 9% | 23% | 26% | 65% | 13% |
| Plans to apply? | | | | | | | | | | | |
| Yes | 85% | 79% | 80% | 44% | 64% | 66% | 78% | 74% | 59% | 42% | 45% |
| <i>(and knows how to apply)</i> | 9% | 37% | 34% | 29% | 36% | 43% | 21% | 37% | 19% | 8% | 23% |
| No | 7% | 15% | 10% | 19% | 22% | 22% | 14% | 14% | 18% | 22% | 39% |
| Does not know whether or not | 8% | 6% | 11% | 38% | 15% | 12% | 8% | 12% | 23% | 36% | 16% |
| Number of homeowners | 52 | 130 | 103 | 168 | 260 | 103 | 104 | 176 | 130 | 72 | 56 |

Analysis of the amount paid for the evaluation shows significant regional variations. It is in Yukon, British Columbia and Manitoba where the amount paid for the evaluation is the lowest. For example, in the latter province, 90% of the homeowners paid less than \$100 for this task. This contrasts with what is found in many other places where in 90% of the cases, the cost was at least \$100: Prince Edward Island, Newfoundland, New Brunswick, Quebec, Alberta and North West Territories.

Amount paid for the evaluation

| | Newfound- land & PEI | Nova- Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saska- tchewan | Alberta | British Columbia | Yukon | N-O Territories |
|-------------------------|-------------------------|-----------------|------------------|--------|---------|----------|-------------------|---------|---------------------|-------|--------------------|
| nothing | 2% | 5% | 1% | 0% | 2% | 1% | 8% | 1% | 16% | 14% | 2% |
| between \$1 and \$49 | 0% | 0% | 0% | 0% | 4% | 3% | 2% | 1% | 1% | 1% | 0% |
| between \$50 and \$99 | 0% | 11% | 2% | 6% | 17% | 86% | 14% | 7% | 15% | 38% | 0% |
| between \$100 and \$199 | 71% | 75% | 34% | 89% | 47% | 6% | 64% | 85% | 55% | 40% | 84% |
| \$200 or more | 25% | 8% | 58% | 5% | 17% | 0% | 8% | 3% | 6% | 1% | 11% |
| DK/NR | 2% | 2% | 5% | 0% | 14% | 4% | 4% | 4% | 6% | 6% | 4% |
| Number of homeowners | 52 | 130 | 103 | 168 | 260 | 103 | 104 | 176 | 130 | 72 | 56 |

8.2 Factors in decision to request an EnerGuide evaluation

Systematically in all provinces and territories, the predominant factor in the decision to request an EnerGuide evaluation was the need to keep energy costs down. On the other hand, the need to make the house more comfortable was the most important factor everywhere except in New Brunswick, Manitoba, Alberta and in the North West Territories where this factor is slightly behind the need to get information about potential saving for renovations.

When the two most important factors are considered, the possibility of taking advantage of government grants for energy renovations rank third in most areas except in Yukon, North West Territories and Quebec where only about 10% of the homeowners mention this item. For a vast majority of homeowners, the concern to do one's share to reduce greenhouse emissions does not appear as a priority among the decision factors for requesting an EnerGuide evaluation for houses; even when adding first and second mentions, in only three provinces the percentage exceeds 10%: Prince Edward Island, Newfoundland and Alberta.

Factor in decision to request EnerGuide evaluation

| | Newfound- land & PEI | Nova- Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saska- tchewan | Alberta | British Columbia | Yukon | N-O Territories |
|--|-------------------------|-----------------|------------------|--------|---------|----------|-------------------|---------|---------------------|-------|--------------------|
| <u>Most important factor</u> | | | | | | | | | | | |
| Making house more comfortable | 21% | 19% | 22% | 39% | 17% | 14% | 14% | 8% | 14% | 22% | 11% |
| Keeping energy costs down | 63% | 55% | 37% | 43% | 52% | 53% | 52% | 54% | 52% | 49% | 50% |
| Improve the value of the house | 4% | 1% | 1% | 0% | 2% | 0% | 4% | 1% | 2% | 0% | 0% |
| Getting information about energy savings | 2% | 7% | 25% | 10% | 7% | 18% | 6% | 16% | 7% | 14% | 16% |
| Evaluation by independent govt org | 4% | 5% | 0% | 2% | 2% | 2% | 13% | 3% | 8% | 1% | 2% |
| Government grants for energy renovation | 6% | 11% | 12% | 4% | 13% | 8% | 12% | 15% | 14% | 3% | 11% |
| Getting EnerGuide for Houses label | 0% | 0% | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 2% |
| Accommodate the telemarketer | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Reducing greenhouse gas emissions | 0% | 2% | 0% | 2% | 3% | 2% | 1% | 1% | 4% | 1% | 2% |
| Other | 0% | 0% | 3% | 1% | 2% | 2% | 0% | 1% | 0% | 10% | 7% |
| <u>Second most important factor</u> | | | | | | | | | | | |
| Making house more comfortable | 15% | 31% | 16% | 30% | 21% | 21% | 14% | 28% | 18% | 26% | 32% |
| Keeping energy costs down | 27% | 21% | 28% | 39% | 25% | 27% | 30% | 19% | 33% | 38% | 23% |
| Improve the value of the house | 8% | 2% | 1% | 1% | 3% | 2% | 9% | 2% | 11% | 0% | 2% |
| Getting information about energy savings | 6% | 11% | 18% | 11% | 9% | 15% | 2% | 15% | 9% | 18% | 20% |
| Evaluation by independent govt org | 7% | 3% | 3% | 6% | 1% | 3% | 9% | 1% | 9% | 6% | 5% |
| Government grants for energy renovation | 26% | 19% | 23% | 10% | 22% | 21% | 27% | 11% | 16% | 8% | 4% |
| Getting EnerGuide for Houses label | 0% | 1% | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 2% |
| Accommodate the telemarketer | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 0% | 0% |
| Reducing greenhouse gas emissions | 12% | 8% | 7% | 2% | 5% | 6% | 5% | 10% | 5% | 1% | 0% |
| Other | 0% | 0% | 2% | 0% | 2% | 1% | 0% | 2% | 0% | 0% | 5% |
| <u>The two most important factors</u> | | | | | | | | | | | |
| Making house more comfortable | 36% | 49% | 38% | 69% | 38% | 35% | 27% | 36% | 32% | 49% | 43% |
| Keeping energy costs down | 90% | 75% | 65% | 82% | 75% | 81% | 82% | 73% | 85% | 76% | 73% |
| Improve the value of the house | 12% | 3% | 2% | 1% | 5% | 2% | 13% | 3% | 13% | 0% | 2% |
| Getting information about energy savings | 8% | 18% | 43% | 20% | 16% | 33% | 8% | 31% | 16% | 32% | 36% |
| Evaluation by independent govt org | 11% | 9% | 3% | 8% | 4% | 5% | 21% | 4% | 16% | 7% | 7% |
| Government grants for energy renovation | 32% | 29% | 35% | 13% | 34% | 29% | 39% | 27% | 30% | 11% | 14% |
| Getting EnerGuide for Houses label | 0% | 1% | 0% | 0% | 0% | 2% | 0% | 0% | 0% | 0% | 4% |
| Accommodate the telemarketer | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 0% | 0% |
| Reducing greenhouse gas emissions | 12% | 9% | 7% | 4% | 8% | 8% | 6% | 11% | 9% | 3% | 2% |
| Other | 0% | 0% | 5% | 1% | 5% | 3% | 0% | 3% | 0% | 10% | 13% |
| Number of homeowners | 52 | 130 | 103 | 168 | 260 | 103 | 104 | 176 | 130 | 72 | 56 |

8.3 Renovations planned before the EnerGuide evaluation and action taken

In almost all provinces, between half and two thirds of the homeowners had planned to carry out renovations before requesting an EnerGuide evaluation. The exceptions are Nova Scotia (83%), Manitoba (74%) and Yukon (37%).

In most provinces, the proportion of homeowners who had implemented some of the evaluation report's recommendations when the survey was held varied from one half to three quarters. However, this proportion was higher in the North West Territories (84%), Quebec (81%), Nova Scotia (81%) and in the provinces of Prince Edward Island and Newfoundland (78%). When adding to those the homeowners who were planning to implement some of the recommendations but had not yet done so, in almost all provinces and territories the percentage of positive answers exceeds 90%. The incidence is lower in Manitoba (84%), Saskatchewan (83%) and British Columbia (72%).

Renovations planned before and implemented after evaluation

| | Newfound-land & PEI | Nova-Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saska-tchewan | Alberta | British Columbia | Yukon | N-O Territories |
|--|---------------------|-------------|---------------|--------|---------|----------|---------------|---------|------------------|-------|-----------------|
| Renovations planned before evaluation | | | | | | | | | | | |
| Yes | 64% | 60% | 83% | 56% | 63% | 74% | 66% | 64% | 51% | 37% | 63% |
| No | 36% | 40% | 17% | 44% | 37% | 26% | 34% | 36% | 49% | 63% | 37% |
| Recommendations implemented | | | | | | | | | | | |
| Yes | 78% | 81% | 67% | 81% | 73% | 53% | 56% | 65% | 57% | 69% | 84% |
| all | 0% | 5% | 4% | 6% | 8% | 3% | 1% | 5% | 2% | 10% | 4% |
| most | 23% | 28% | 17% | 17% | 22% | 12% | 12% | 20% | 16% | 28% | 21% |
| about half | 15% | 15% | 14% | 19% | 20% | 17% | 12% | 18% | 18% | 12% | 20% |
| less than half | 32% | 28% | 16% | 29% | 14% | 14% | 24% | 18% | 18% | 15% | 21% |
| almost none | 8% | 3% | 16% | 10% | 8% | 7% | 8% | 4% | 2% | 4% | 18% |
| No, none | 22% | 19% | 33% | 19% | 27% | 47% | 44% | 35% | 43% | 31% | 16% |
| but plans to implement | 18% | 15% | 29% | 13% | 17% | 31% | 27% | 26% | 15% | 18% | 7% |
| and does not plan to implement | 2% | 3% | 2% | 6% | 8% | 15% | 15% | 7% | 17% | 11% | 7% |
| and doesn't know right now | 2% | 1% | 2% | 1% | 1% | 2% | 2% | 2% | 12% | 2% | 2% |
| Number of homeowners | 52 | 130 | 103 | 168 | 260 | 103 | 104 | 176 | 130 | 72 | 56 |

The results also show that the difference between the proportion of homeowners who had planned to do renovations before the EnerGuide evaluation and the proportion of those who implemented at least some of the evaluation recommendations is not stable across the provinces. For six provinces and territories this difference varies between 10% and 25%: Prince Edward Island, Newfoundland, Nova Scotia, Quebec, Ontario and the North West Territories. The largest difference is in Yukon where it reaches 32%, with 37% of homeowners who had planned to do renovations before their EnerGuide evaluation and 69% who acted on the report's recommendations. In some provinces, the inverse phenomenon is observed: this particularly the case in Manitoba where 74% of homeowners had planned to do renovations before their EnerGuide evaluation while only 53% actually carried out some of the works recommended. To a lesser extent, this is also the case in New Brunswick and Saskatchewan. Thus, the impact of the program is more pronounced in some areas than in others.

The table below gives an idea of the frequency of the various types of work, by province and territory, carried out by respondents to the survey.

Recommendations implemented (number of cases)

| | Newfound-land & PEI | Nova-Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saska-tchewan | Alberta | British Columbia | Yukon | N-O Territories |
|-----------------------------|---------------------|-------------|---------------|--------|---------|----------|---------------|---------|------------------|-------|-----------------|
| Doors/windows (replacement) | 19 | 52 | 34 | 46 | 70 | 19 | 22 | 44 | 45 | 23 | 16 |
| Insulation | 28 | 69 | 42 | 70 | 100 | 28 | 23 | 52 | 27 | 28 | 16 |
| Heating system | 3 | 20 | 6 | 18 | 58 | 16 | 33 | 44 | 35 | 17 | 8 |
| Hot water | 2 | 5 | 7 | 10 | 15 | 2 | 6 | 10 | 5 | 14 | 8 |
| Number of homeowners | 52 | 130 | 103 | 168 | 260 | 103 | 104 | 176 | 130 | 72 | 56 |

8.4 Satisfaction with the EnerGuide program

Where a majority of respondents considered that the EnerGuide for Houses service gave them more than they were expecting, the proportion is around two thirds in Yukon, North West Territories, Prince Edward Island, Newfoundland and Nova Scotia. Similarly, everywhere except in New Brunswick (48%) and British Columbia (49%), a majority of

homeowners considered that the evaluation report's recommendations exceeded their expectations.

Therefore the data clearly supports the fact that most respondents said they would not hesitate to recommend the service to other people. In all provinces this proportion was at least 9 homeowners out of 10. In fact, everywhere except in New Brunswick and British Columbia, over two thirds of the homeowners had already recommended the service to someone else.

Satisfaction with EnerGuide Program

| | Newfound- land & PEI | Nova- Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saska- tchewan | Alberta | British Columbia | Yukon | N-O Territories |
|------------------------------------|-------------------------|-----------------|------------------|--------|---------|----------|-------------------|---------|---------------------|-------|--------------------|
| <u>Compared with expectations,</u> | | | | | | | | | | | |
| <u>the report recommendations</u> | | | | | | | | | | | |
| <u>gave...</u> | | | | | | | | | | | |
| more | 66% | 64% | 48% | 61% | 56% | 56% | 50% | 59% | 49% | 65% | 57% |
| less | 0% | 8% | 12% | 11% | 10% | 14% | 13% | 8% | 13% | 4% | 4% |
| the same | 34% | 28% | 37% | 27% | 32% | 25% | 37% | 28% | 34% | 28% | 34% |
| DK | 0% | 1% | 4% | 1% | 2% | 5% | 1% | 5% | 4% | 3% | 5% |
| <u>the EnerGuide</u> | | | | | | | | | | | |
| <u>service as a whole</u> | | | | | | | | | | | |
| <u>gave...</u> | | | | | | | | | | | |
| more | 67% | 69% | 52% | 62% | 59% | 61% | 51% | 61% | 51% | 68% | 64% |
| less | 6% | 6% | 5% | 12% | 11% | 12% | 13% | 10% | 15% | 4% | 9% |
| the same | 27% | 23% | 42% | 26% | 28% | 26% | 34% | 26% | 32% | 25% | 27% |
| DK | 0% | 2% | 2% | 1% | 3% | 1% | 3% | 3% | 2% | 3% | 0% |
| <u>Would homeowner recommend</u> | | | | | | | | | | | |
| <u>service to other people?</u> | | | | | | | | | | | |
| Yes | 96% | 90% | 85% | 94% | 89% | 91% | 89% | 92% | 86% | 99% | 95% |
| (Actually recommended) | 75% | 76% | 63% | 73% | 69% | 74% | 74% | 69% | 58% | 79% | 86% |
| No | 2% | 5% | 7% | 4% | 8% | 6% | 10% | 5% | 11% | 0% | 2% |
| DK | 2% | 5% | 8% | 3% | 4% | 3% | 2% | 3% | 3% | 1% | 4% |
| Number of homeowners | 52 | 130 | 103 | 168 | 260 | 103 | 104 | 176 | 130 | 72 | 56 |

9. Impact of the program on reduction of greenhouse gas emissions

Using known data, the results of this survey and some reasonable hypotheses, it is possible to estimate the total cumulative reduction in greenhouse gas (GHG) emissions resulting from the EnerGuide for Houses program.

Based on EnerGuide data from B evaluations collected from April 1 2003 to March 31 2004, we can assume that the recommended upgrades carried out by homeowners have led to an average drop in GHG emissions of about 3.1 tonnes per house per year. For the previous five years, i.e., from 1998–99, the average drop is as follows:

| 1998-99 | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003 |
|---------|-----------|-----------|-----------|-----------|
| 3.0 | 2.4 | 3.0 | 3.4 | 2.8 |

- Based on the 2720 B evaluations undertaken during the target period of 2003-2004, the annual drop in GHG emissions is 8444 tonnes.

This survey shows that, following an EnerGuide for Houses A evaluation of their homes between April 2003 and March 2004, about two out of three homeowners (66%) implemented at least some of the evaluation report's recommendations.

- Assuming that 66% of the 48,252 houses that underwent an A evaluation (without a B evaluation) have reduced their GHG emissions by an average of 3.1 tonnes per house per year, the result is an overall reduction of 98,724 tonnes.

This survey also revealed that 21% of respondents had not yet implemented any of the recommendations but planned to do so. Assuming that one half of those respondents actually carry out some of that work in 2005, then the resulting GHG emissions reductions could be included in the 2005 estimates. In the 2002–2003 time period, 18% of the 13,142 homeowners (A evaluations) planned to do energy-efficiency renovations. If one assumes that one half of the 18% actually did some of the work in 2004, then a reduction of 3312 tonnes of GHG emissions would probably have occurred in 2004. Adding up the three components, we get a total estimated reduction of 110,480 tonnes of GHG emissions for this report period of 2003–04.

Using the same assumptions and calculations, we get the following total estimated reductions in GHG emissions for the five years period preceding 2003-2004:

| 1998-99 | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003 |
|---------|-----------|-----------|-----------|-----------|
| 10,270 | 15,653 | 26,126 | 28,971 | 30,362 |

Consequently, the cumulative GHG reduction over the last six-year period, which can be attributed to the EnerGuide for Houses program, is 505,575 tonnes.

10. Comparisons of results of the last three follow-up surveys

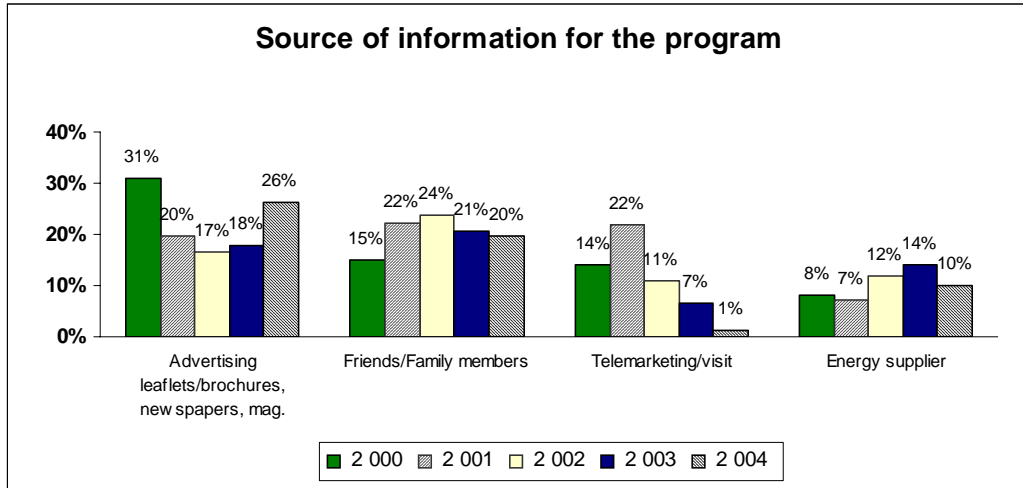
The first compilation of the results of a follow-up survey of a sample of homeowners who participated in the EnerGuide evaluation program was done in 1999. In light of the information collected then, some additions and improvements were made for the 2000 survey questionnaire. This questionnaire has been used since 2001 with virtually no changes being made to it, except for the addition of some precision in the wording or the introduction of new questions. In order to present current data, this section mainly compares the results from the last three surveys, i.e. from 2002 on. Some graphs however present data as far back as 2000, when available. Note that survey sample sizes between 2000 and 2003 have ranged between 496 and 635 homeowners; in 2004, it reached 1,354 homeowners.

Given these sample sizes, differences between 2002 and 2003 are statistically significant if they exceed 6% for estimates generated for all homeowners or exceed 8% for homeowners who carried out work. When comparisons involve data from 2004, these thresholds are equal respectively to 5% and 6%.

In order to take advantage of a larger sample size, it is useful to combine estimates from the last three surveys. Such data has to be interpreted as simple three-year averages of a potentially variable phenomenon; the cumulative sample size has the advantage of reducing random error. The three-year percentage estimates based on all homeowners interviewed in those three surveys have a margin of error of less than 2.0% (with a 95% confidence level). For subsets – e.g., the homeowners who implemented some of the recommendations and those who planned to do so – the margin of error is 2.4% and 4.4% respectively. In order to avoid confusion in the text, all references to averages based on the cumulative three-year sample appear in *italics*.

10.1 All homeowners

For the three-year survey data beginning in 2002, the two main sources of information on the EnerGuide for Houses program were friends/family members (*21% on average*) and written information (advertising leaflets/brochures, newspapers, magazines: *20% on average*). Beginning with the 2001 survey, these percentages have been quite stable, but we observe an increase for the written information at 26% in 2004. Telemarketing was more often cited as an information source in 2001 (22%) has gradually lost its relevance and is rarely identified as a source in 2004 (1%). Since 2002, the energy supplier has been cited by one homeowner out of eight (*12% on average*). It is worth noticing that radio and TV, which merely 10% of the respondents mentioned in the past, are now cited by one homeowner out of four in 2004 (24%).



Regarding the EnerGuide label, the proportion of homeowners reporting not having received it had substantially increased in 2003 (39%); this figure has somewhat dropped in 2004 (28%). However, in 2003 (36%) as in 2004 (32%), one homeowner out of three couldn't recall having received the label. Since 2002, the proportion of homeowners who placed it on their electric service panel gradually decreased from 12% to 3%.

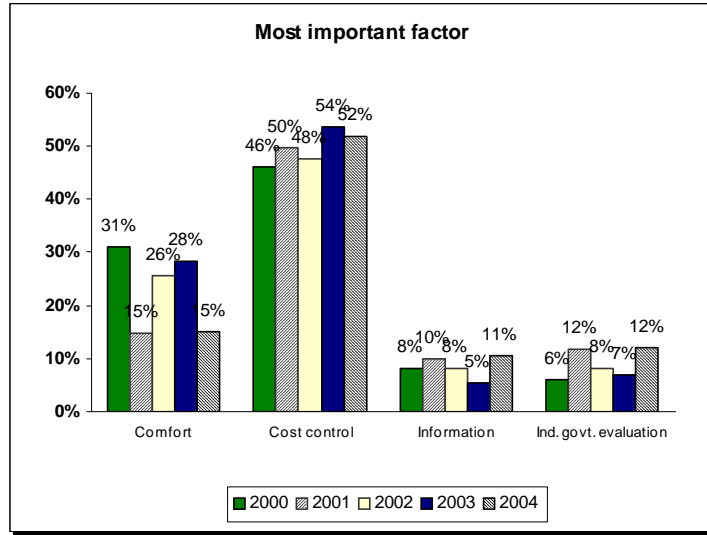
Since the 2002 survey, the percentage of homeowners who were aware that they could get a second evaluation and a second label increased from 55% to 84% in 2004. Similarly, the proportion of those who are aware of their possible eligibility for EnerGuide for House grant has dramatically increased between 2003 (44%) and 2004 (82%).

Awereness of the EnerGuide program and use of EnerGuide label

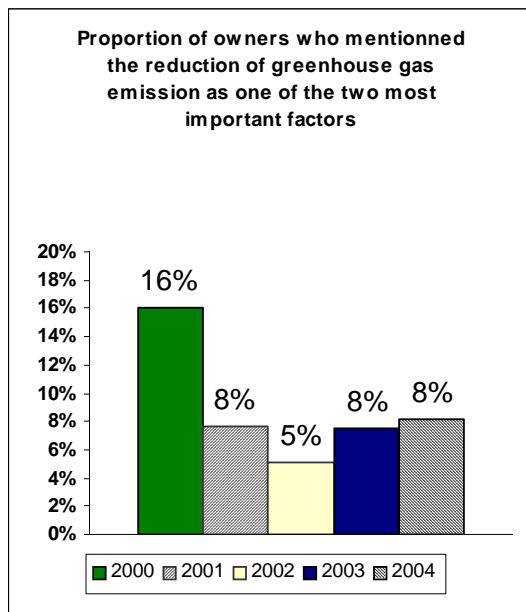
| | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--|----------------|----------------|----------------|-----------------|
| <u>Source of information for the program</u> | | | | |
| Media: radio/TV | 9% | 10% | 24% | 14% |
| Friends/Family members | 24% | 21% | 20% | 21% |
| Building contractor | 3% | 4% | 4% | 4% |
| Energy supplier | 12% | 14% | 10% | 12% |
| Advert. leaflets/brochures, newspapers... | 17% | 18% | 26% | 20% |
| Exhibition/trade show | 7% | 7% | 3% | 6% |
| Club/Association/Coop | 1% | 1% | 0% | 1% |
| Telemarketing/visit | 11% | 7% | 1% | 6% |
| Internet | 1% | 2% | 4% | 3% |
| Other | 1% | 5% | 2% | 3% |
| DK/NR | 15% | 14% | 10% | 13% |
| <u>EnerGuide label :</u> | | | | |
| Yes, received it and put it... | 58% | 26% | 39% | 41% |
| on the electric service panel | 12% | 8% | 3% | 8% |
| other permanent place in house | 5% | 1% | 4% | 3% |
| with report (nothing done with label) | 29% | 11% | 30% | 23% |
| other | 0% | 1% | 0% | 0% |
| DK/NR | 13% | 5% | 3% | 7% |
| No, says did not receive it | 19% | 39% | 28% | 29% |
| Doesn't know | 22% | 36% | 32% | 30% |
| Aware that it was possible to get second evaluation and new label | | | | |
| Yes | 55% | 58% | 84% | 66% |
| No | 46% | 42% | 16% | 34% |
| With the second label, knows about eligibility for EnerGuide for Houses retrofit incentive? ¹ | | | | |
| Yes | | 44% | 82% | 63% |
| No | | 56% | 18% | 37% |
| Number of homeowners | 635 | 571 | 1354 | 2 560 |

¹ Question added in 2003.

The homeowner surveys confirmed the fact that keeping the cost of energy down is the dominant factor in the decision to request EnerGuide evaluations; one half of the homeowners (51% on average) spontaneously identified this particular item as the most important. Making the house more comfortable, which has always ranked second, is now cited only by 15% of the homeowners in 2004. It should be mentioned however that in 2004, a new response choice was introduced, that is "take advantage of government grants for energy renovation"; the fact that 12% of the homeowners identified this new element certainly had an impact on the other choices. Over the three years, the need to get information about energy savings for renovations has been ranked first by one homeowner out of twelve (8% on average) which is just slightly more than obtaining an evaluation from an independent government organization (6% on average).



At the same time, since 2001, only a small minority of the homeowners (7% on average) give the need to do one's share to reduce GHG emissions as one of the two most important factors; the figure was higher in the 2000 survey (16%).



Factor in decision to request EnerGuide evaluation

| Factors ¹ | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|---|----------------|----------------|----------------|-----------------|
| <u>Most important factor</u> | | | | |
| Making house more comfortable | 26% | 28% | 15% | 23% |
| Keeping energy costs down | 48% | 54% | 52% | 51% |
| <i>Government grants for energy renovations</i> | | | 12% | 12% |
| Getting information about energy savings | 8% | 5% | 11% | 8% |
| Evaluation by independent govt org | 8% | 7% | 4% | 6% |
| <i>Improve the value of the house</i> | | 1% | 2% | 1% |
| Getting EnerGuide for Houses label | 1% | 0% | 0% | 0% |
| Reducing greenhouse gas emissions | 1% | 2% | 2% | 2% |
| <i>Accommodate the telemarketer</i> | 0% | 1% | 0% | 0% |
| Other | 8% | 2% | 1% | 4% |
| <u>Second most important factor</u> | | | | |
| Making house more comfortable | 27% | 30% | 23% | 26% |
| Keeping energy costs down | 34% | 34% | 26% | 31% |
| <i>Government grants for energy renovations</i> | | | 18% | 18% |
| Getting information about energy savings | 8% | 7% | 11% | 9% |
| Evaluation by independent govt org | 10% | 5% | 3% | 6% |
| <i>Improve the value of the house</i> | | 4% | 4% | 4% |
| Getting EnerGuide for Houses label | 2% | 1% | 0% | 1% |
| Reducing greenhouse gas emissions | 4% | 6% | 6% | 5% |
| <i>Accommodate the telemarketer</i> | 0% | 0% | 1% | 0% |
| Other | 6% | 2% | 1% | 3% |
| <u>The two most important factors</u> | | | | |
| Making house more comfortable | 53% | 58% | 38% | 50% |
| Keeping energy costs down | 82% | 87% | 77% | 82% |
| <i>Government grants for energy renovations</i> | | | 30% | 30% |
| Getting information about energy savings | 16% | 12% | 21% | 17% |
| Evaluation by independent govt org | 19% | 12% | 8% | 13% |
| <i>Improve the value of the house</i> | | 5% | 6% | 5% |
| Getting EnerGuide for Houses label | 3% | 1% | 0% | 1% |
| Reducing greenhouse gas emissions | 5% | 8% | 8% | 7% |
| <i>Accommodate the telemarketer</i> | 0% | 1% | 1% | 1% |
| Other | 14% | 3% | 3% | 7% |
| Number of homeowners | 635 | 571 | 1354 | 2 560 |

¹ Items in italic are additions or precisions in 2003 or in 2004.

Consistently in the last three surveys, three homeowners out of five (62% on average) had, at the time of the survey, carried out work on the basis of the EnerGuide evaluation report's recommendations; this proportion has slightly increased to 66% in 2004. The proportion of those who did not plan to implement any of the recommendations has remained at nearly one in seven (15% on average) since 2002, with a drop to 10% in 2004. This proportion is smaller than that of homeowners who, at the time of the survey, had not implemented any recommendations following the EnerGuide evaluation but planned to do so (21% on average). Finally, the proportion of recommendations implemented is very stable over the three surveys: on average, two homeowners out of five had implemented at least half of the recommendations.

Action taken on recommendations

| Recommendations implemented? | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--------------------------------|-------------|-------------|-------------|--------------|
| Yes | 58% | 61% | 66% | 62% |
| all | 9% | 9% | 5% | 8% |
| most | 15% | 14% | 19% | 16% |
| about half | 14% | 19% | 18% | 17% |
| less than half | 16% | 17% | 18% | 17% |
| almost none | 4% | 3% | 6% | 4% |
| Non, aucune | 42% | 39% | 34% | 38% |
| but plans to implement | 23% | 18% | 21% | 21% |
| and does not plan to implement | 16% | 18% | 10% | 15% |
| and doesn't know right now | 3% | 2% | 3% | 3% |
| Number of homeowners | 635 | 571 | 1354 | 2560 |

In the 2002 and 2003 surveys, about three homeowners out of ten had planned to carry out renovations before the EnerGuide evaluator's visit; this figure doubled in 2004 (62%). Of those, on average over the last three surveys, two out of five (43% on average) had planned to do work on doors and windows, and three out of ten (30% on average) on insulation. In 2004, renovations regarding the heating system (37%) are much more frequent than in the previous years.

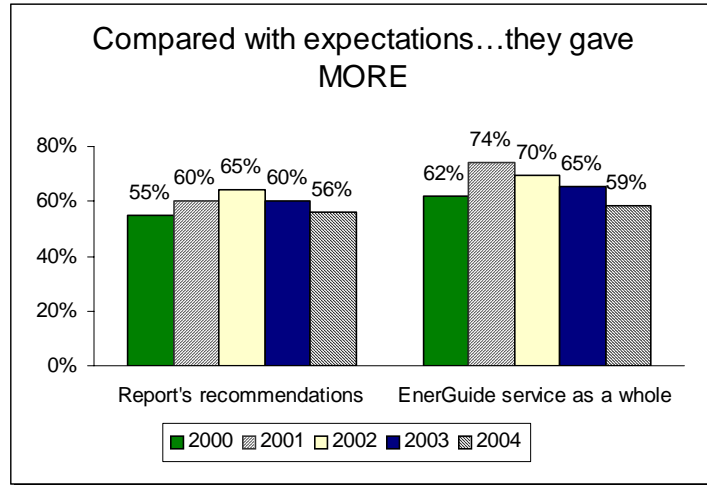
Renovations planned before EnerGuide evaluation

| Had planned to do renovations before requesting evaluation | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--|-------------|-------------|-------------|--------------|
| Yes | 31% | 28% | 62% | 40% |
| No | 69% | 72% | 38% | 60% |
| Number of homeowners | 635 | 571 | 1354 | 2560 |

| Renovations planned | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--------------------------------|-------------|-------------|-------------|--------------|
| Bathroom/kitchen | 15% | 5% | 3% | 8% |
| Doors/windows | 44% | 36% | 48% | 43% |
| Insulation (anywhere in house) | 31% | 28% | 31% | 30% |
| Basement | 11% | 11% | 7% | 9% |
| Heating system | 18% | 16% | 37% | 24% |
| Exterior work | 11% | 10% | 8% | 10% |
| Extension/addition | 5% | 6% | 4% | 5% |
| Sealing/caulking | 11% | 10% | 9% | 10% |
| Interior renovations | 3% | 0% | 1% | 1% |
| Other | 4% | 5% | 3% | 4% |
| Number of homeowners | 232 | 164 | 825 | 1221 |

The high level of satisfaction with the program observed in 2000 was maintained. The percentage of homeowners stating that the report's recommendations gave them more

than they expected averages 60% over the three years while the corresponding percentage regarding the EnerGuide service as a whole is slightly higher at 64% for the same period. On those two elements, however, the 2004 figure tends to be lower (56% for the report and 59% for the service as a whole) than for the previous years. Nonetheless, an average of 19 homeowners out of 20 in the three surveys would recommend the service to other people.

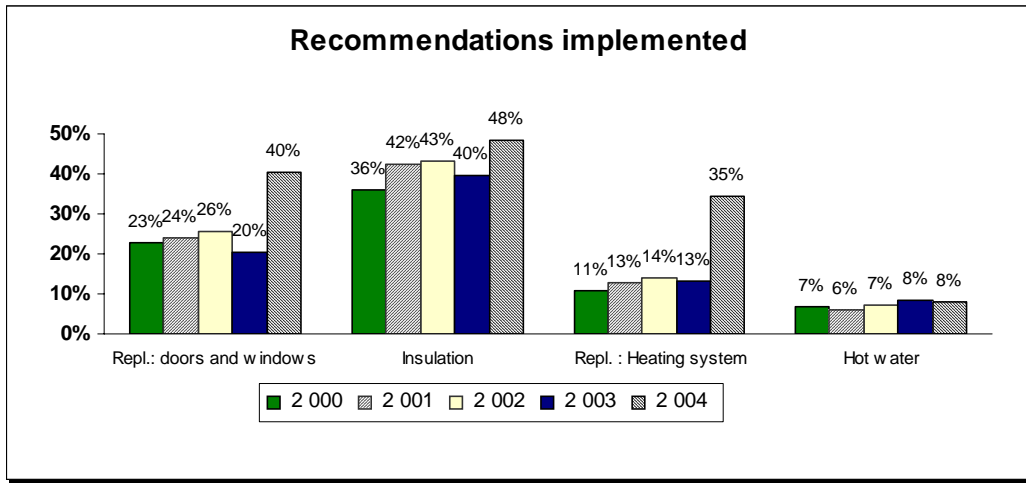


Satisfaction with EnerGuide Program

| | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--|----------------|----------------|----------------|-----------------|
| <u>Compared with expectations,</u> | | | | |
| <u>the report recommendations</u> | | | | |
| <u>gave...</u> | | | | |
| more | 65% | 60% | 56% | 60% |
| less | 3% | 12% | 10% | 9% |
| the same | 31% | 25% | 31% | 29% |
| DK | 2% | 3% | 3% | 2% |
| <hr/> | | | | |
| <u>the EnerGuide service as a whole</u> | | | | |
| <u>gave...</u> | | | | |
| more | 70% | 65% | 59% | 64% |
| less | 2% | 7% | 11% | 7% |
| the same | 27% | 25% | 28% | 27% |
| DK | 2% | 3% | 2% | 2% |
| <hr/> | | | | |
| <u>Would homeowner recommend service</u> | | | | |
| <u>to other people?</u> | | | | |
| Yes | 95% | 92% | 90% | 92% |
| No | 3% | 5% | 7% | 5% |
| DK | 2% | 3% | 3% | 3% |
| Number of homeowners | 635 | 571 | 1354 | 2 560 |

10.2 Homeowners who undertook work

The percentages of homeowners who implemented recommendations of the EnerGuide evaluation report are fairly consistent from survey to survey as far as insulation (44% on average over the three years) and water heating systems (8% on average) are concerned; but in 2004, we observe an increase for the door and window replacement (40%) and the space heating system replacement (35%). Finally, as far as caulking and sealing are concerned, the comparison is feasible only between the last two surveys since the question asked in 2003 specified that this type of work had to be performed by a professional.



Opinions on the most important recommendation to implement varies little over the three surveys regarding insulation (27% on average) but we observe an increase in 2004 for the replacement of doors or windows (21%) or of the space heating system (26%).

Recommendations implemented

| <u>Work done</u> ¹ | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|---|----------------|----------------|----------------|-----------------|
| Doors and windows | 43% | | | |
| Replacement | 26% | 20% | 40% | 29% |
| <i>Windows</i> | | 13% | 35% | |
| <i>Doors</i> | | 11% | 16% | |
| Upgrade (other than replacement) | 15% | | | |
| Insulation | 43% | 40% | 48% | 44% |
| Basement/crawl space | 20% | 16% | 21% | 19% |
| Attic | 22% | 17% | 26% | 21% |
| Main walls | 12% | 13% | 15% | 13% |
| Heating system | 14% | 13% | 35% | 21% |
| <i>Replace equipment : mid-efficiency system</i> | 13% | 6% | 17% | 12% |
| Switch energy source | 1% | 1% | 2% | 1% |
| <i>Replace equipment : high-efficiency system</i> | | 8% | 17% | |
| Hot water | 7% | 8% | 8% | 8% |
| Replace : more energy efficient system | 3% | 4% | 6% | 4% |
| Insulate <i>electric</i> tank | 2% | 0% | 0% | 1% |
| <i>Insulate first metre of hot water pipes</i> | 3% | 4% | 2% | 3% |
| Install water-saver shower heads | 1% | 1% | 1% | 1% |
| Other | 63% | 78% | 70% | 70% |
| <i>Add mechanical ventilation</i> | 11% | 7% | 4% | 7% |
| <i>Professional air sealing</i> | 42% | 3% | 6% | 17% |
| Replace exterior siding | 3% | 2% | 5% | 3% |
| Repl appliances with more effic models | 3% | 2% | 2% | 2% |
| Structural work | 2% | 1% | 2% | 2% |
| Various minor work (<i>caulking/weather strip.</i>) | 12% | 69% | 61% | 47% |
| Replace switches/outlets | 2% | | | |
| <i>Install electronic thermostat</i> | | 2% | 2% | |
| Other | 3% | 10% | 4% | 6% |
| Work homeowners had not thought of before ² | 51% | 56% | 55% | 54% |
| Homeowners | 397 | 370 | 938 | 1 705 |

¹ Items in italic are additions or precisions in 2003.

² Out of all report's recommendations.

Most important recommendation implemented

| <u>Work done</u> ¹ | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|---|----------------|----------------|----------------|-----------------|
| Doors and windows | 27% | | | |
| Replacement | 16% | 12% | 21% | 17% |
| <i>Windows</i> | | 8% | 17% | |
| <i>Doors</i> | | 5% | 4% | |
| Upgrade (other than replacement) | 10% | | | |
| Insulation | 27% | 29% | 25% | 27% |
| Basement/crawl space | 10% | 11% | 9% | 10% |
| Attic | 11% | 9% | 11% | 10% |
| Main walls | 6% | 8% | 6% | 7% |
| Heating system | 9% | 11% | 26% | 15% |
| <i>Replace equipment : mid-efficiency system</i> | 9% | 4% | 12% | 8% |
| Switch energy source | 0% | 0% | 0% | 0% |
| <i>Replace equipment : high-efficiency system</i> | | 7% | 13% | |
| Hot water | 2% | 3% | 1% | 2% |
| Replace : more energy efficient system | 1% | 2% | 1% | 1% |
| Insulate <i>electric</i> tank | 1% | 0% | 0% | 0% |
| <i>Insulate first metre of hot water pipes</i> | 0% | 1% | 0% | 0% |
| Install water-saver shower heads | 0% | 0% | 0% | 0% |
| Other | 31% | 39% | 23% | 31% |
| Add mechanical ventilation | 6% | 2% | 2% | 3% |
| Professional air sealing | 20% | 1% | 1% | 8% |
| Replace exterior siding | 1% | 0% | 0% | 1% |
| Repl appliances with more effic models | 1% | 0% | 0% | 0% |
| Structural work | 0% | 0% | 0% | 0% |
| Various minor work (<i>caulking/weather strip.</i>) | 1% | 29% | 19% | 16% |
| Replace switches/outlets | 1% | | | 1% |
| Install <i>electronic thermostat</i> | | 0% | 0% | |
| Other | 0% | 5% | 0% | 2% |
| Number of homeowners | 397 | 370 | 938 | 1 705 |

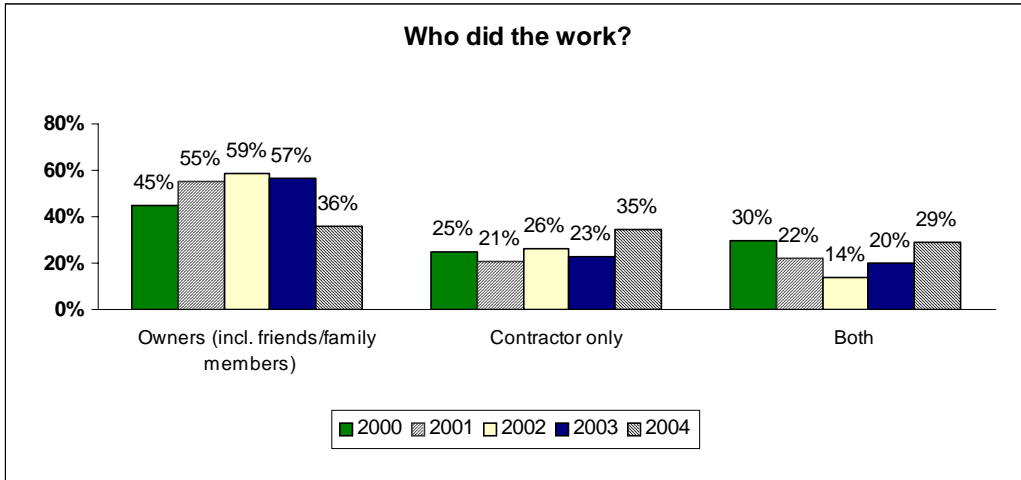
¹ Items in italic are additions or precisions in 2003.

In each of the three years, about one half of the homeowners who carried out work had received recommendations that they had not thought of before (*54% on average*); air infiltration and insulation were most frequently mentioned.

Recommendations they had not thought of before

| Were there any recommendations that homeowner had not thought of before? | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--|----------------|----------------|----------------|-----------------|
| No, none | 43% | 39% | 42% | 41% |
| DK/NR | 7% | 5% | 4% | 5% |
| <u>Yes, some</u> | 51% | 56% | 55% | 54% |
| ↓ | | | | |
| Air infiltration | 20% | 24% | 27% | 24% |
| Insulation | 22% | 19% | 25% | 22% |
| <i>Poor ventilation</i> | 6% | 3% | 5% | 4% |
| Add/replace equipment | 6% | 3% | 5% | 5% |
| Other | 4% | 7% | 4% | 5% |
| Number of homeowners | 397 | 370 | 938 | 1 705 |

In 2002 and 2003 surveys, three homeowners out of five have done the energy efficiency upgrades themselves, without the assistance of a contractor. In 2004, this proportion dropped at 36%. A similar break is observed regarding the cost of the work and to a lesser extent, the need for financing. For example, in 2002 and 2003, half of the time the cost of the work was less than \$500 whereas in 2004, this proportion was reduced by half.



Information on work done

| | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--------------------------------------|-------------|-------------|-------------|--------------|
| Who did work? | | | | |
| Owners (incl friends/family members) | 59% | 57% | 36% | 50% |
| Contractor only | 26% | 23% | 35% | 28% |
| Both | 14% | 20% | 29% | 21% |
| Cost of work | | | | |
| Less than \$500 | 51% | 50% | 25% | 42% |
| \$500-\$2500 | 21% | 19% | 14% | 18% |
| \$2500-\$5000 | 14% | 14% | 24% | 17% |
| \$5000-\$20000 | 10% | 12% | 27% | 16% |
| \$20000+ | 2% | 1% | 6% | 3% |
| NR | 3% | 4% | 4% | 4% |
| Financing of work | | | | |
| Yes | 9% | 7% | 17% | 11% |
| No | 89% | 91% | 81% | 87% |
| NR | 3% | 0% | 0% | 1% |
| Number of homeowners | 397 | 370 | 938 | 1 705 |

Among those homeowners who had implemented recommendations at the time of the three follow-up surveys, two out of five (41% on average) had decided not to act on some recommendations. Among the recommendations that would not be implemented, the items most frequently mentioned were the replacement of doors and windows, the replacement of heating equipment, and insulation work. The high cost of the work was

often cited (62% on average) as a major reason for not doing the work recommended. But in 2004, a higher proportion of homeowners stated that the perceived benefit was not significant (42%).

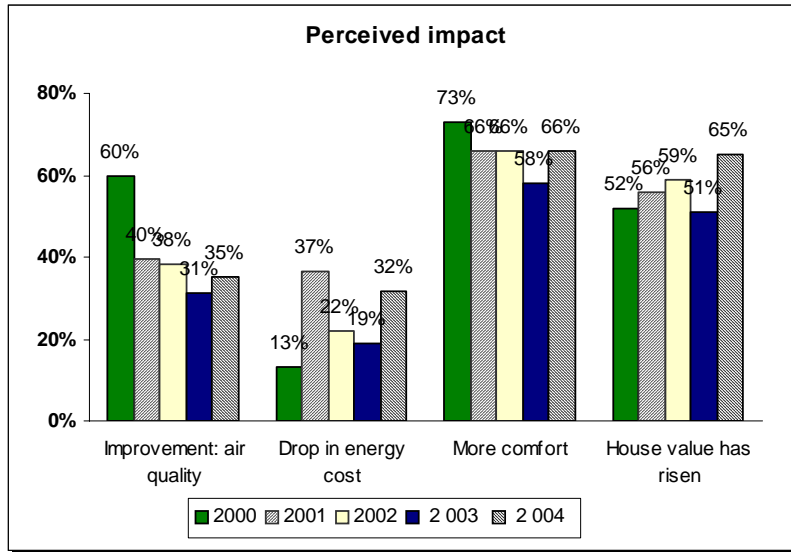
Recommendations that will not be implemented

| Were there any recommendations that homeowner decided not to implement? ¹ | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--|-------------|-------------|-------------|--------------|
| No, none | 52% | 49% | 49% | 50% |
| DK/NR | 8% | 10% | 11% | 10% |
| Yes, some | 40% | 42% | 40% | 41% |
| ↓ | | | | |
| Doors and windows | 14% | | | |
| Replacement | 11% | 16% | 11% | 13% |
| <i>Windows</i> | | 15% | 11% | |
| <i>Doors</i> | | 2% | 2% | |
| Upgrade (other than replacement) | 2% | | | |
| Insulation | 13% | 16% | 17% | 15% |
| Basement/crawl space | 5% | 5% | 6% | 6% |
| Attic | 5% | 5% | 5% | 5% |
| Main walls | 5% | 6% | 8% | 6% |
| Heating system | 10% | 7% | 8% | 8% |
| <i>Replace equipment : mid-efficiency system</i> | 9% | 3% | 4% | 5% |
| Switch energy source | 0% | 0% | 0% | 0% |
| <i>Replace equipment : high-efficiency system</i> | | 4% | 3% | |
| Hot water | 1% | 0% | 2% | 1% |
| Replace : more energy efficient system | 1% | 0% | 2% | 1% |
| Insulate <i>electric tank</i> | 0% | 0% | 0% | 0% |
| <i>Insulate first metre of hot water pipes</i> | 0% | 0% | 0% | 0% |
| Install water-saver shower heads | 0% | 0% | 0% | 0% |
| Other | 7% | 5% | 9% | 7% |
| <i>Add mechanical ventilation</i> | 4% | 1% | 4% | 3% |
| <i>Professional air sealing</i> | 1% | 1% | 1% | 1% |
| Replace exterior siding | 2% | 0% | 1% | 1% |
| Repl appliances with more effic models | 0% | 0% | 0% | 0% |
| Structural work | 0% | 1% | 0% | 0% |
| Various minor work (<i>caulking/weather strip.</i>) | 0% | 2% | 3% | 2% |
| Replace switches/outlets | 0% | | | |
| <i>Install electronic thermostat</i> | | 0% | 0% | |
| Other | 0% | 1% | 1% | 0% |
| Reasons for not implementing | | | | |
| Lack of time | 8% | 13% | 3% | 8% |
| High cost of work | 70% | 61% | 55% | 62% |
| Benefits not that significant | 18% | 21% | 42% | 27% |
| Other | 16% | 7% | 18% | 14% |
| Number of homeowners | 397 | 370 | 938 | 1 705 |

¹ Items in italic are additions or precisions in 2003.

Since the 2002 survey (and in 2001), two homeowners out of every three noticed an improvement in home comfort following the implementation of recommendations in the EnerGuide report. As another stable phenomenon: one third of the homeowners perceived an improvement in the air quality in the house (35% on average). In 2004, 32% of the homeowners said that they had reduced energy costs compared with about

20% in the two preceding years. Similarly, more people in 2004 thought that the value of their house had risen since the implementation of recommendations (65%).



Perceived impact of work done

| Following work, | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|---|-------------|-------------|-------------|--------------|
| <u>did homeowner notice...</u> | | | | |
| an improvement in air quality? | | | | |
| Yes | 38% | 31% | 35% | 35% |
| No | 40% | 49% | 48% | 45% |
| DK | 22% | 20% | 18% | 20% |
| a drop in energy costs? | | | | |
| Yes | 22% | 19% | 32% | 24% |
| No | 41% | 42% | 34% | 39% |
| DK | 37% | 39% | 34% | 37% |
| more comfort? | | | | |
| Yes | 66% | 58% | 66% | 63% |
| No | 21% | 25% | 20% | 22% |
| DK | 13% | 17% | 14% | 15% |
| Does homeowner think house value has risen? | | | | |
| Yes | 59% | 51% | 65% | 58% |
| No | 33% | 38% | 28% | 33% |
| DK | 9% | 11% | 7% | 9% |
| Number of homeowners | 397 | 370 | 938 | 1 705 |

10.3 Homeowners planning to carry out work

In spite of the small sample sizes, some comparisons among the last three surveys are possible in the case of homeowners that had not carried out work but planned to do so. However, variations between 2002 and 2003 surveys must exceed 15% in order to be statistically significant. For comparisons with survey year 2004, this threshold is at 12%. Nevertheless, by combining the samples and basing calculations on over 500 responses, we can confirm some of our estimates, as shown in the tables below. The average percentages have a margin of sampling error below 5%.

A comparison of the type of work planned by homeowners shows that the most common upgrades identified were insulation (*47% on average*, [since 2003, this percentage is at 52%]), the replacement of doors and windows (*33% on average*) and the replacement of the heating system (*23% on average* [an increase to 32% in 2004]). Of course, minor work such as caulking and weather stripping by a non-professional are often mentioned (*43% on average* since 2003, year from which the comparison stands). As the most important recommendation, insulation was frequently mentioned (*34% on average*, rising since 2003), as were more costly renovations such as the replacement of doors and windows (*20% on average*) or of the space heating system (*15% on average* [24% in 2004]). Only one out of five homeowners (*19% on average*) who had not carried out work but planned to do so identified recommendations that they had decided not to implement. The replacement of the space heating system (*6% on average*) and insulation (*5% on average*) were most frequently mentioned. Half of the homeowners in this segment (*47% on average*) found in their evaluation report some recommendations that they had not thought of before. These concern mostly air infiltration (*22% on average*) and insulation (*20% on average*).

Homeowners planning to carry out work
Recommendations that they planned to implement

| <u>Work planned</u> ¹ | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|---|----------------|----------------|----------------|-----------------|
| Doors and windows | 45% | | | |
| Replacement | 34% | 27% | 38% | 33% |
| <i>Windows</i> | | 24% | 35% | 29% |
| <i>Doors</i> | | 12% | 9% | 10% |
| Upgrade (other than replacement) | 16% | | | |
| Insulation | 36% | 52% | 52% | 47% |
| Basement/crawl space | 17% | 24% | 23% | 21% |
| Attic | 18% | 20% | 29% | 23% |
| Main walls | 10% | 18% | 17% | 15% |
| Heating system | 18% | 19% | 32% | 23% |
| <i>Replace equipment : mid-efficiency syst.</i> | 17% | 4% | 16% | 12% |
| Switch energy source | 1% | 0% | 1% | 1% |
| <i>Replace equipment : high-efficiency syst.</i> | | 15% | 16% | 15% |
| Hot water | 2% | 6% | 4% | 4% |
| Replace : more energy efficient system | 1% | 6% | 4% | 4% |
| Insulate <i>electric</i> tank | 0% | 0% | 0% | 0% |
| <i>Insulate first metre of hot water pipes</i> | 1% | 0% | 1% | 1% |
| Install water-saver shower heads | 0% | 0% | 0% | 0% |
| Other | 35% | 44% | 57% | 45% |
| <i>Add mechanical ventilation</i> | 10% | 2% | 3% | 5% |
| <i>Professional air sealing</i> | 21% | 4% | 6% | 10% |
| Replace exterior siding | 1% | 0% | 8% | 3% |
| Repl appliances with more effic models | 0% | 1% | 0% | 0% |
| Structural work | 0% | 0% | 1% | 0% |
| Various minor work (<i>caulking,...</i>) | 6% | 39% | 46% | 30% |
| Replace switches/outlets | 2% | | | |
| <i>Install electronic thermostat</i> | | 2% | 2% | 2% |
| Other | 2% | 4% | 1% | 2% |
| Portion of recommendations planned to be implemented | | | | |
| All | 37% | 39% | 43% | 40% |
| Most | 23% | 39% | 33% | 31% |
| About half | 23% | 10% | 13% | 15% |
| Less than half | 8% | 1% | 5% | 5% |
| Almost none | 0% | 6% | 1% | 2% |
| DK | 10% | 5% | 6% | 7% |
| Number of homeowners | 137 | 107 | 267 | 511 |

¹ Items in italic are additions or precisions in 2003.

Most important recommendation to implement

| <u>Work planned</u> ¹ | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--|----------------|----------------|----------------|-----------------|
| Doors and windows | 28% | | | |
| Replacement | 22% | 18% | 19% | 20% |
| <i>Windows</i> | | 17% | 18% | 18% |
| <i>Doors</i> | | 1% | 1% | 1% |
| Upgrade (other than replacement) | 6% | | | |
| Insulation | 26% | 41% | 36% | 34% |
| Basement/crawl space | 10% | 19% | 13% | 14% |
| Attic | 12% | 12% | 14% | 13% |
| Main walls | 4% | 10% | 9% | 8% |
| Heating system | 13% | 8% | 24% | 15% |
| <i>Replace equipment : mid-efficiency syst.</i> | 13% | 0% | 12% | 8% |
| Switch energy source | 0% | 0% | 0% | 0% |
| <i>Replace equipment : high-efficiency syst.</i> | | 8% | 11% | 10% |
| Hot water | 1% | 3% | 1% | 2% |
| Replace : more energy efficient system | 0% | 3% | 1% | 1% |
| Insulate <i>electric</i> tank | 0% | 0% | 0% | 0% |
| <i>Insulate first metre of hot water pipes</i> | 1% | 0% | 0% | 0% |
| Install water-saver shower heads | 0% | 0% | 0% | 0% |
| Other | 19% | 20% | 15% | 18% |
| <i>Add mechanical ventilation</i> | 6% | 1% | 0% | 2% |
| <i>Professional air sealing</i> | 10% | 1% | 0% | 4% |
| Replace exterior siding | 1% | 0% | 1% | 1% |
| Repl appliances with more effic models | 1% | 0% | 0% | 0% |
| Structural work | 0% | 0% | 1% | 0% |
| Various minor work (<i>caulking,...</i>) | 2% | 14% | 12% | 9% |
| Replace switches/outlets | 0% | | | |
| <i>Install electronic thermostat</i> | | 1% | 1% | 1% |
| Other | 1% | 3% | 0% | 1% |
| Number of homeowners | 137 | 107 | 267 | 511 |

¹ Items in italic are additions or precisions in 2003.

Recommendations that will not be implemented

| Were there any recommendations that homeowner decided not to implement? ¹ | 2002 survey | 2003 survey | 2004 survey | 3 years mean |
|--|-------------|-------------|-------------|--------------|
| No, none | 65% | 70% | 54% | 63% |
| DK/NR | 20% | 10% | 24% | 18% |
| <u>Yes, some</u> | 15% | 20% | 22% | 19% |
| ↓ | | | | |
| Doors and windows | 3% | | | |
| Replacement | 2% | 6% | 2% | 3% |
| <i>Windows</i> | | 6% | 2% | 4% |
| <i>Doors</i> | | 1% | 0% | 0% |
| Upgrade (other than replacement) | 0% | | | |
| Insulation | 3% | 5% | 7% | 5% |
| Basement/crawl space | 1% | 0% | 2% | 1% |
| Attic | 1% | 3% | 3% | 2% |
| Main walls | 2% | 3% | 2% | 2% |
| Heating system | 3% | 5% | 9% | 6% |
| <i>Replace equipment : mid-efficiency syst.</i> | 3% | 2% | 2% | 2% |
| Switch energy source | 0% | 0% | 0% | 0% |
| <i>Replace equipment : high-efficiency syst.</i> | | 3% | 7% | 5% |
| Hot water | 0% | 1% | 1% | 1% |
| Replace : more energy efficient system | 0% | 0% | 1% | 0% |
| Insulate <i>electric</i> tank | 0% | 0% | 0% | 0% |
| <i>Insulate first metre of hot water pipes</i> | 0% | 1% | 0% | 0% |
| Install water-saver shower heads | 0% | 0% | 0% | 0% |
| Other | 2% | 3% | 3% | 3% |
| <i>Add mechanical ventilation</i> | 1% | 0% | 1% | 1% |
| <i>Professional air sealing</i> | 0% | 2% | 0% | 1% |
| Replace exterior siding | 1% | 0% | 1% | 1% |
| Repl appliances with more effic models | 0% | 0% | 0% | 0% |
| Structural work | 1% | 0% | 0% | 0% |
| Various minor work (<i>caulking,...</i>) | 0% | 1% | 1% | 1% |
| Replace switches/outlets | 0% | | | |
| <i>Install electronic thermostat</i> | | 0% | 0% | 0% |
| Other | 1% | 0% | 0% | 0% |
| Reasons for not implementing | | | | |
| Lack of time | 11% | 0% | 5% | 6% |
| High cost of work | 69% | 60% | 43% | 57% |
| Benefits not that significant | 25% | 23% | 48% | 32% |
| Other | 8% | 0% | 14% | 7% |
| Number of homeowners | 137 | 107 | 267 | 511 |

¹ Items in italic are additions or precisions in 2003.

Recommendations they had not thought of before

| Were there any recommendations that homeowner had not thought of before? | 2002 survey | 2003 survey | 2004 survey | 3 years <i>mean</i> |
|---|----------------|----------------|----------------|------------------------|
| No, none | 55% | 44% | 40% | 46% |
| DK/NR | 6% | 8% | 8% | 7% |
| <u>Yes, some</u> | 39% | 49% | 52% | 47% |
| ▼ | | | | |
| Air infiltration | 21% | 20% | 25% | 22% |
| Insulation | 10% | 25% | 26% | 20% |
| <i>Poor ventilation</i> | 7% | 0% | 4% | 3% |
| Add/replace equipment | 5% | 5% | 3% | 4% |
| Other | 1% | 0% | 3% | 1% |
| Number of homeowners | 137 | 107 | 267 | 511 |

11. Conclusion

On the basis of the 2004 follow-up survey of the EnerGuide for Houses evaluation program, we can make the following observations:

- As was the case in the two previous surveys, for half of the homeowners (52%), the dominant factor in the decision to request an EnerGuide for Houses evaluation was the need to keep energy costs down.
- In all provinces and territories, homeowners said keeping energy costs down was the most important factor in requesting an EnerGuide for Houses evaluation. Also, making the house more comfortable was the second factor everywhere except in New Brunswick, Manitoba, Alberta and in the North West Territory where this choice is slightly less frequently mentioned than the need to get information about potential savings for renovations.
- Two thirds (62%) of respondents had planned to do renovations before requesting an EnerGuide evaluation. Half of the time, the projected work involved doors/windows (48%) the heating system (37%) or the insulation (31%).
- At the time of the survey for evaluations performed from April 1, 2003 to March 31, 2003, two out of three homeowners (66%) had implemented at least some of the recommendations contained in the evaluation report, while 21% had not undertaken any work but planned to take action on the recommendations.
- 33% of homeowners who had in fact carried out work had not planned to do renovations prior to requesting the EnerGuide evaluation; this confirms the impact of the program for a significant portion of homeowners.
- Few homeowners (4%) did not pay for the EnerGuide evaluation. Most of them (69%) had paid at least \$100 for the service.
- In 2004, the propensity to implement the recommendations in the evaluation report increases with the amount paid for the evaluation. Indeed, among those who paid \$200 or more for the evaluation, three out of four (73%) had carried out work at the time of the survey while only one third (34%) of those who received a free evaluation implemented some of the recommendations.
- Overall, it is estimated that the EnerGuide for Houses program and homeowners' implementation of its recommendations resulted in a greenhouse gas (GHG) emissions reduction amounting to 110,480 tonnes of CO₂ last year (A and B evaluations combined). Over the last five years, the cumulative GHG reduction, which can be attributed to the program is an estimated 505,575 tonnes.
- Work done following the evaluation was often minor work such as caulking and weather stripping by a non-professional (61%), insulation (48%), but also the replacement of windows (35%) or of the space heating system (35%, 17% for a high-efficiency system).

- The types of work cited most often as being the most important by homeowners were the replacement of the space heating system (26%), the insulation (25%), the replacement of windows (17%) and minor work such as caulking and weather stripping (19%).
- One quarter of the homeowners spent less than \$500 on the work. But, for most of the homeowners, the cost was much higher, between \$2,500 and \$5,000 (24%) or \$5,000 and \$20,000 (27%). Some (6%) spent more than \$20,000.
- In one third of the cases (36%), the work was done by the homeowners themselves, with the help of friends and members of their family. The same proportion (35%), all of the work was given to a contractor; three times out of ten (29%), the homeowner and a contractor shared the work.
- The main reasons for not implementing some of the recommendations was the high cost of the work (55%) and the expected benefit being not significant (42%).
- More than one half of the homeowners who carried out work (55%) stated that the evaluation report contained recommendations that they had not thought of before, particularly relating to air infiltration (27%) and insulation (25%).
- Homeowners who planned to implement some recommendations focused on insulation (52%), minor work such as caulking and weather stripping (46%), the replacement of windows (35%) or replacement of the space heating system (32%). Three out of four of those homeowners intended to implement most of the recommendations within the next five years.
- Whether or not they had carried out work following the EnerGuide evaluator's visit, a clear majority of homeowners (59%) felt that the overall EnerGuide for Houses service gave them more than they were expecting and nearly all of them (90%) would recommend it to other people. Although the level of satisfaction is high for all homeowners, regardless of how much they paid for the evaluation or whether or not they implemented any evaluation recommendations, the level of satisfaction tends to decline as the amount paid for the evaluation increases and is lower among those who didn't carry out any of the recommended upgrades and didn't intend to do so.
- Only 39% of the homeowners could confirm having received the EnerGuide label. The other homeowners break down equally between those who say they did not receive it (28%) and those who do not know if they did (32%).
- A large majority of homeowners (84%) knew that they could get a second evaluation after the energy efficiency upgrades. In a similar proportion (82%), they knew that once the upgrade was completed and after having received a second label, they could be eligible for an EnerGuide for Houses retrofit grant. In fact, two out of three homeowners (67%) intend to apply for a grant and half of them (32%) know how to apply and are aware of the conditions.
- In general, the results of the 2004 survey confirm those from the previous two surveys; however, some variations should be highlighted:

- The two most important sources of information on the EnerGuide for Houses program mentioned by respondents are still the written information (advertising leaflets/brochures, newspapers, magazines) and friends/family members. However, in 2004, radio and TV has become as important sources of information as those, but telemarketing is practically no longer mentioned.
- The proportion of homeowners who were aware of the fact that they could get a second evaluation and, consequently, a second label, increased from 55% in 2002 to 84% in 2004.
- Keeping the cost of energy down and making the house more comfortable are always the two dominant factors in the decision to request EnerGuide evaluations. However in 2004, a new response choice has been offered, that is “take advantage of government grants for energy renovation” and this new factor rank third with 30% of homeowners identifying it as their first or second choice.
- In 2004, a smaller proportion of homeowners (28%) reported not having received the EnerGuide label than in the 2003 survey (39%).
- The proportion of homeowners who had planned to carry out renovations before requesting the EnerGuide evaluation almost doubled in 2004 (62%) compared with the two preceding surveys.
- The proportion of those who did not plan to implement any of the recommendations has dropped to 10% in 2004 from the average of 17% for the two preceding years.
- Among the recommendations implemented, the replacement of doors, windows and space heating system is more often mentioned in 2004 than in the preceding years.
- The proportion of homeowners who did the work themselves without the assistance of a contractor has dropped to 36% in 2004; in the preceding years, it was close to three out of five homeowners.
- Similarly in 2004, in three out of five cases (57%) the cost of the work carried out reached or exceeded \$2,500; in the two preceding years, this proportion was one out of four (26%).
- The percentage of homeowners stating that the overall EnerGuide for Houses service gave them more than they expected dropped slightly in 2004 (59%) compared to 2002 (70%) and 2003 (65%).
- Finally, compared to 2003, after implementing some of the recommendations, a higher proportion of homeowners in 2004 noticed an improvement in air quality, an increase in home comfort or a reduction in energy costs. As a consequence, more homeowners feel that the value of their house has increased.

Appendices

Appendix 1:

Number of Evaluations Conducted in 2000–04 and Size of Survey Sample in Each Year

**Breakdown of A evaluations¹ conducted between 2000 and 2003
and sample size in each of these four years**

| | Number of participants | | | | Number of A evaluations | | | |
|----------------------|------------------------|------|------|------|-------------------------|--------|--------|--------|
| | 2000 | 2001 | 2002 | 2003 | 2000 | 2001 | 2002 | 2003 |
| Newfoundland | 9 | 69 | 54 | 64 | 18 | 373 | 437 | 361 |
| PEI | | 3 | 2 | 13 | | 3 | 6 | 30 |
| Nova Scotia | 66 | 55 | 40 | 69 | 376 | 321 | 433 | 334 |
| New-Brunswick | | 5 | 17 | 39 | | 13 | 34 | 81 |
| Quebec | 80 | 75 | 56 | 53 | 226 | 593 | 821 | 829 |
| Ontario | 75 | 73 | 85 | 105 | 3 145 | 3 121 | 3 626 | 4 479 |
| Manitoba | 49 | 78 | 64 | 27 | 689 | 845 | 465 | 775 |
| Saskatchewan | 61 | 72 | 71 | 67 | 696 | 1 054 | 1 379 | 1 280 |
| Alberta | 46 | 51 | 80 | 63 | 1 608 | 944 | 1 318 | 2 057 |
| British Columbia | 72 | 71 | 139 | 51 | 3 716 | 3 440 | 3 678 | 2 535 |
| Yukon | 39 | 58 | 27 | 10 | 186 | 98 | 99 | 339 |
| NO Territory/Nunavut | | | | 10 | | | | 39 |
| Canada | 497 | 610 | 635 | 571 | 10 660 | 10 805 | 12 296 | 13 139 |

¹Figures are for first evaluations. In 2003, a total of 1,102 homeowners also had a second evaluation. In 2000, 2001 and 2002, the corresponding figures are respectively 329, 307 and 269 for the second evaluation.

**Breakdown of A and B evaluations conducted in 2004
and corresponding sample sizes**

| | Sample sizes | | Total number of evaluations | |
|----------------------|---------------|---------------|-----------------------------|---------------|
| | Evaluations A | Evaluations B | Evaluations A | Evaluations B |
| Newfoundland | 28 | | 105 | 0 |
| PEI | 24 | | 75 | 0 |
| Nova Scotia | 130 | 7 | 1 213 | 57 |
| New-Brunswick | 103 | 3 | 488 | 17 |
| Quebec | 168 | 10 | 2 981 | 66 |
| Ontario | 260 | 104 | 14 916 | 1 193 |
| Manitoba | 103 | 8 | 3 886 | 98 |
| Saskatchewan | 104 | 30 | 4 631 | 403 |
| Alberta | 176 | 13 | 12 819 | 230 |
| British Columbia | 130 | 40 | 6 258 | 651 |
| Yukon | 72 | | 713 | 4 |
| NO Territory/Nunavut | 56 | | 167 | 1 |
| Canada | 1 354 | 215 | 48 252 | 2 720 |

Appendix 2:

Summary Report for Homeowners who had A and B evaluations

Appendix 3:

Tables of Detailed Weighted Results at the National Level

Appendix 4:

Tables of Detailed Results at the Provincial/Territorial Level