

HR2420/3

Home Smart Renovation Project

Best Practice Policy Approaches to Encourage Sustainable Residential Building and Retrofitting: Evaluation and shortlist of initiatives

A report prepared for Beacon Pathway Limited November 2008

The work reported here was funded by Beacon Pathway Limited and the Foundation for Research, Science and Technology



About This Report

Title

Best Practice Policy Approaches to Encourage Sustainable Residential Building and Retrofitting: Evaluation and shortlist of initiatives

Authors

Megan Howell, Tollemache Consultants; Damon Birchfield

Reviewer

Lois Easton, Beacon Pathway Existing Homes Research Team Leader

Abstract

This working paper presents research to develop and apply a set of evaluation criteria for reducing the long list of initiatives identified in phase 1 of the *Best Practice Policy Approaches* project to a short list of five initiatives for further development. The report introduces the evaluation criteria and then briefly assesses each of the initiatives.

It recommends that the next stage of the project focus on the following priority areas: district plans, in particular development controls; bylaws; economic tools, in particular consent fee rebates and waivers, and development contribution reductions; process initiatives, in particular sustainability checklists; and public education.

Reference

Howell, M. and Birchfield, D. November 2008. Best Practice Policy Approaches to Encourage Sustainable Residential Building and Retrofitting: Evaluation and shortlist of initiatives.Report HR2420/3 for Beacon Pathway Limited.

Rights

Beacon Pathway Limited reserves all rights in the Report. The Report is entitled to the full protection given by the New Zealand Copyright Act 1994 to Beacon Pathway Limited.

Disclaimer

The opinions provided in the Report have been provided in good faith and on the basis that every endeavour has been made to be accurate and not misleading and to exercise reasonable care, skill and judgment in providing such opinions. Neither Beacon Pathway Limited nor any of its employees, subcontractors, agents or other persons acting on its behalf or under its control accept any responsibility or liability in respect of any opinion provided in this Report.

Contents

1	Executive Summary	4
1	Introduction	5
2	Background	5
3	Method	6
4	Results	6
	4.1 Evaluation Criteria	6
	4.2 Clustering of initiatives	7
	4.3 Findings of evaluation	8
5	5 Discussion	10
	5.1 Priority initiatives for further development	10
6	6 Conclusions	11
7	References	11
8	B Appendix A	12
	8.1 Regulation: District Plan provisions	12
	8.2 Regulation: Bylaws	13
	8.3 Non-regulatory policies: Design guidelines	14
	8.4 Council codes of practice and engineering standards	
	8.5 Economic instruments	16
	8.6 Process initiatives	17
	8.7 Public education	

1 Executive Summary

This is the second working report prepared as part of the *Best Practice Policy Approaches* project, a sub-project of the Beacon Home *Smart* Renovation project. The purpose of this research is to develop and apply a set of evaluation criteria for reducing the long list of initiatives identified in phase 1 of the project to a short list of five initiatives for further development. The report introduces the evaluation criteria and then briefly assesses each of the initiatives, concluding with recommendations for the next stages of the project.

Evaluation criteria have been developed by the research team to address existing best practice, information gaps, costs, benefits and effectiveness and interest from councils. Analysis of the clusters against evaluation criteria has concluded that there is interest from councils in the range of initiatives identified in stage 1 of this project. Some initiatives (particularly education initiatives and minor district plan changes) are more advanced in practice than others and appear to be more acceptable and straightforward to implement. The potential for implementation in some initiative areas is less clear or at least untested, particularly economic tools and bylaws. Other initiatives have the potential to achieve change, but would require more research and development than is possible within the scope of this project, especially for design guidelines and council codes of practice. Finally, previous research (Easton et al, 2006; Trenouth and Mead, 2007; and Howell and Birchfield, 2008) has concluded how important it is to focus on process – the means by which any of these initiatives will be implemented.

The authors have therefore concluded that there is merit in covering all five clusters within the *Resource Manual*, but some in more detail than others. These priority areas are:

- District plans, in particular development controls
- Bylaws
- Economic tools, in particular consent fee rebates and waivers, and development contribution reductions
- Process initiatives, in particular sustainability checklists
- Public education, particularly profiling the success factors of Eco Design Advisors and other programmes

The following areas will be profiled in less depth. This is either because the information is unavailable and would require too much further research (or implementation by Councils) to be able to write authoritatively, or because it is not viewed as an area with sufficient scope for encouraging sustainable building in New Zealand:

- Non-regulatory policies design guidelines and Council codes of practice / engineering standards
- Some economic tools, namely discounts on sustainable products and services, pricing policies, and co-funding of retrofit initiatives
- Some process initiatives, namely fast-tracking consents, one-stop shops/consent managers, and practice notes
- Some public education initiatives, namely community education and leading by example.

1 Introduction

This is the second working report prepared as part of the *Best Practice Policy Approaches* project – a sub-project of the Beacon Home *Smart* Renovations project - which will deliver, among other outcomes, a *Resource Manual for Local Government*. The purpose of this report is to develop and apply a set of evaluation criteria for reducing the long-list of initiatives identified in phase 1 of the project to a short list of five initiatives for further development and inclusion in the *Resource Manual*. The report introduces the evaluation criteria and then briefly assesses each of the long-listed initiatives. It concludes with recommendations for the next stages of the project.

2 Background

Stage 1 of this research project scoped the range of local government policy initiatives for sustainable building that are currently underway in New Zealand and internationally. In-depth, questionnaire-based interviews with council officers revealed that:

- There is strong interest in sustainable building within the councils interviewed.
- The main drivers for council activity on sustainable building are the social, environmental and long-term financial benefits, as well as political drivers where councils are committed to sustainability.
- Almost all respondents to the questionnaire saw themselves at the beginning of a transition pathway to improved residential sustainability.
- Currently, there are limited resources, knowledge gaps, and a generally piecemeal approach to policy initiatives.
- There is some uncertainty as to the parameters of possible interventions particularly around what can be specified in a District Plan (due to the relationship between the Resource Management Act and the Building Act), and the scope of application of financial incentives.

The following long list of initiatives was identified in stage 1 of this research, with information gathered through the background research; international literature review and the questionnaire:

- 1) District Plan changes subdivision controls
- 2) District Plan changes development controls
- 3) Development bonuses
- 4) Bylaws
- 5) Council codes of practice and engineering standards
- 6) Design guidelines
- 7) Consent fee rebates and waivers
- 8) Grants
- 9) Development contribution reductions
- 10) Discounts on sustainable products and services
- 11) Pricing policies (e.g. rates and user pays)

- 12) Co-funding of retrofit initiatives
- 13) Fast-tracking consents
- 14) One-stop shops/consent managers
- 15) Sustainability checklists
- 16) Practice notes (e.g. to improve consistency of Building Consent inspections)
- 17) Officer training
- 18) Eco-Design Advisors
- 19) Community education
- 20) Leading by example

3 Method

The outputs for evaluation in stage 2 of the project were specified in the research project work plan as follows:

- 1) Set of criteria for determining the most appropriate policy provisions to develop further, based on findings from the council survey (e.g. whether examples are already being implemented, transferability, cost-benefit, likely effect within Beacon's 2012 timeframe).
- 2) Evaluation of the long list of provisions against the criteria.
- 3) Consultation with partner councils to inform the final short-list of five policy provisions to develop and implement.
- 4) Identification of a short-list of provisions for development in Part III, Modelling.

The method for this report has followed these steps.

4 Results

4.1 Evaluation Criteria

The *Resource Manual for Local Government* needs to provide readily-applicable information to councils, about what they can do to encourage and support more sustainable building in their districts. Determining which of the 20 long-listed initiatives should be developed further requires a balancing of factors including coverage of existing information, significance of information gaps, council demand for information, and likelihood and impact of uptake.

The following evaluation criteria have been developed by the research team, based on the objectives of their initial work plan and findings from stage 1 of the project.

- 1) Existing best practice
 - a) Are there examples of the initiative already being implemented in New Zealand? Or internationally?
 - b) Do the examples give comprehensive coverage of sustainable building issues? Or could they be expanded?

- c) Are the examples transferable to other councils and other parts of New Zealand? If not, could they be adapted?
- 2) Information gaps
 - a) Is this an area where there are significant information gaps?
 - b) Is there potential to improve existing performance by providing information?
- 3) Costs
 - a) Is the cost of introducing the initiative likely to be high?
 - b) Are there ongoing operating costs?
- 4) Benefits and effectiveness
 - a) How long would it take to introduce the initiative?
 - b) Could the initiative be expected to have widespread uptake?
 - c) If introduced, would the initiative potentially have a notable impact by 2012?
- 5) Interest from councils
 - a) Have councils expressed interest in further information/support for this kind of initiative?
 - b) Have any councils signalled their intention to introduce such an initiative in the next 3 years?

4.2 Clustering of initiatives

For ease of analysis, the twenty long-list initiatives were clustered into five categories. The Regulation category has been divided into two, as the detailed evaluation is necessarily different between District Plan changes under the Resource Management Act 1991 and bylaws under the Local Government Act 2002.

Category	Sub-category	Long-list initiatives	
Regulation District Plan		Subdivision controls	
	Provisions (RMA)	Development controls	
		Development bonuses	
	Bylaws (LGA)	Bylaws	
Non-regulatory policies		Council codes of practice and engineering standards	
		Design guidelines	
Economic instruments		Consent fee rebates and waivers	
		Grants	
		Development contribution reductions	
		Discounts on sustainable products and services	
		Pricing policies (e.g. rates and user pays)	
		Co-funding of retrofit initiatives	

Process instruments	Fast-tracking consents One-stop shops/consent managers Sustainability checklists Practice notes Officer training
Public education	Eco-Design Advisors Community education Leading by example

4.3 Findings of evaluation

This section provides a summary and discussion of findings. Evaluation sheets for each of the five clusters of initiatives are included in Appendix A. It should be noted that the evaluation has been undertaken through an analysis of the information gathered in stage 1 of the project, and from continued informal discussion with council officers.

The summary overview provided in table 1 is based on the answers to the evaluation questions identified in the evaluation sheets. Descriptions of low, medium and high costs and benefits have not been arrived at through any additional quantitative evaluation, but rather through preliminary estimates. More detailed information is expected to come to light in the next stage of the research, and could see revision of some of the assumptions.

	Existing best practice e.g.	Information gaps	Costs	Benefits and Effectiveness	Interest from Councils
Regulation – Dist. Plans	Some	Yes	Medium – High	High	High
Regulation – Bylaws	Few	Yes	Medium – High	Medium – High	Low
Non- regulatory policies	Some	Yes	High	Medium – High	Medium
Economic instruments	Some	Yes	Medium – High	Low – Medium	Medium
Process initiatives	Few	Yes	Low	High	High
Public education	Lots	Yes	Low – High	Low – High	Medium – High

Table 1 Summary overview of evaluation

4.3.2 Regulation: District Plan Provisions

There are some good examples of provisions to encourage more sustainable building in District Plans (especially for water), and also a good body of work identifying existing barriers that need to be overcome. District Plans are seen by councils interviewed in stage 1 of the project as a good method to encourage sustainable building, and several councils have plans to introduce changes in the immediate future. There are better examples (and possibly greater scope) for subdivision controls and development controls, rather than development bonuses (although there may be useful parallels in other areas, e.g. bonuses for provision of public access and art).

Plan changes would potentially affect all new building and major renovations, and could be expected to take effect in 2-5 years, depending on the council's process and whether the Plan change goes to appeal.

4.3.3 Regulation: Bylaws

There are very few examples of bylaws being used to directly require more sustainable building (or building practices). There is also uncertainty over the scope of their potential application – particularly where alternative methods are available. Changes could, however, have widespread effect and be implemented quickly (less than 1 year to develop and implement).

4.3.4 Non-regulatory policies

Design guidelines and council codes of practices (e.g. for subdivision and wastewater engineering) are simpler tools to develop and implement, because they do not require the same level of consultation and due process that is required for regulatory tools. However, they can be referred to in regulatory documents as a method of demonstrating compliance with a council's design expectations. There are some good examples for sustainable building; however their level of uptake is unknown. There is potential to improve the sustainability aspects of a number of existing guidelines and codes of practice; however this is a large-scale undertaking, requiring research and development beyond the scope of this project.

4.3.5 Economic instruments

Further work has already been commissioned on the potential of councils using economic instruments to encourage sustainable building. This is because the issue was identified as an area of significant uncertainty in stage 1, with many councils interested in understanding what might be possible to achieve. The range of economic instruments is quite broad, and it is expected that the work commissioned by Ascari will help to identify those tools with greater potential.

4.3.6 Process initiatives

Easton et al (2007) and Trenouth and Mead (2007) have identified that council processes can be substantial barriers to sustainable building, for example, adding uncertainty, time and costs to consent processes. Improving council processes is therefore an important area of focus for this

work. Other than the waiving of consent fees, no process initiatives to encourage sustainable residential building were identified in the course of stage 1 of the research. However there is potential to learn from other, parallel examples (e.g. fast-tracking consents) and from international practice (e.g. sustainability checklists). Uptake could be expected to be reasonably quick and widespread, at reasonably low cost.

4.3.7 Public education

Councils are already involved in a lot of public education initiatives, such as the Eco Design Advisors, and various outreach programmes for retrofitting homes. The effectiveness of such programmes is varied, depending on the depth and breadth of their reach. For example, Eco Design Advisors can make a great deal of difference on a home by home basis. Information leaflets and product displays may be seen by a much wider audience but have less impact. There is potential for the next stage of this project to pull together some advice on the 'success factors' of such programmes, and to profile some of the best available examples.

5 Discussion

5.1 Priority initiatives for further development

The objective of this report was to identify a short-list of five initiatives for further development and inclusion in the *Resource Manual*. Evaluation of the twenty initiatives on the long-list, clustered into five categories, has revealed the following:

- District Plans are an area of particular council focus
- Some areas, such as bylaws and financial incentives are less clear in the parameters of their application.

The research team has therefore concluded that there is merit in covering all five clusters within the *Resource Manual*, but in providing more detail on some areas than others. These priority areas are:

- District Plans, in particular, development controls
- Bylaws
- Economic tools, in particular consent fee rebates and waivers, and development contribution reductions
- Process initiatives, in particular sustainability checklists
- Public education, particularly profiling the success factors of Eco Design Advisors and other programmes

The following areas will be profiled in less depth. This is either because the information is unavailable and would require too much further research (or actual implementation by councils) to be able to write authoritatively, or because it is not viewed as an area with sufficient scope for encouraging sustainable building in New Zealand:

- Non-regulatory policies design guidelines and council codes of practice and engineering standards
- Some economic tools, namely discounts on sustainable products and services, pricing policies, and co-funding of retrofit initiatives
- Some process initiatives, namely fast-tracking consents, one-stop shops/consent managers, and practice notes
- Some public education initiatives, namely community education and leading by example

6 Conclusions

The purpose of this report has been to develop and apply a set of evaluation criteria for reducing the long-list of initiatives identified in phase 1 of the project to a short list of five initiatives for further development. In applying the evaluation criteria, the research team has concluded that there is merit in providing coverage of all the five clusters of initiatives, with more detail in those areas where there is considered to be greater evidence of good practice, and greater potential for encouraging sustainable building. These conclusions will form the basis of the next stage of the project, which is intended to develop a draft resource manual for consultation with councils.

7 References

Easton, L., Mead, D., Trenouth, C., Fulbrook, D. & Arnold, P. (2006). Local Council Sustainable Building Barriers and Incentives: Auckland City Case Study. Report PR200 for Beacon Pathway.

Howell, M., Birchfield D. July 2008. Best Practice Policy Approaches to Encourage Sustainable Residential Building and Renovation: Survey and Literature Review Results. Report HR2420/2 for Beacon Pathway Limited.

Trenouth C., & Mead D. (2007). District Plan Barriers and Incentives to Sustainable Residential Building: Case Studies. Report PR201 for Beacon Pathway Limited.

8 Appendix A

8.1 Regulation: District Plan provisions

This covers items 1 to 3 in the long-list: (1) District Plan changes – subdivision controls; (2) District Plan changes – development controls; and (3) Development bonuses.

1. Existing best practice	
a. Are there examples of the initiative	Yes, especially for water and some energy
already being implemented in New Zealand?	issues in preparation. Also work identifying
Or internationally?	barriers within District Plans. International
	examples not so relevant.
b. Do the examples give comprehensive	No. Need to identify solutions to barriers. May
coverage of sustainable building issues? Or	be potential to expand further, but RMA tests
could they be expanded?	are high, and some issues may be considered
	risky/ have a low probability of implementation
	because too far outside existing practice.
c. Are the examples transferable to other	Yes.
Councils and other parts of New Zealand? If	
not, could they be adapted?	
2. Information gaps	
a. Is this an area where there are significant	Yes. Only limited examples of District Plans
information gaps?	enabling sustainable building, and many more
	examples of barriers to sustainable building.
b. Is there potential to improve existing	Yes, sharing existing best practice and
performance by providing information?	extending to other issues where possible.
	Potential to develop tools/text to remove
	barriers within District Plans.
3. Costs	
a. Is the cost of introducing the initiative	Yes, if done as a stand-alone Plan Change. No,
likely to be high?	if included in other Plan Change processes.
b. Are there ongoing operating costs?	Not likely.
4. Benefits and effectiveness	
a. How long would it take to introduce the	Potentially 2 – 5 years, depending on Plan
initiative?	Change process and whether it is appealed.
b. Could the initiative be expected to have	Yes, would affect all new buildings and
widespread uptake?	consented renovations.
c. If introduced, would the initiative	Yes. Could be affecting new building and
potentially have a notable impact by 2012?	consented renovations by 2012 (even if only at
	notified stage). Limited to no effect on existing
	stock.

5. Interest from councils	
a. Have councils expressed interest in further	Yes.
information/support for this kind of	
initiative?	
b. Have any councils signalled their intention	Yes.
to introduce such an initiative in the next 3	
years?	

8.2 Regulation: Bylaws

This covers item 4 in the long-list: (4) Bylaws

1. Existing best practice	
a. Are there examples of the initiative	Yes. Christchurch City's Cleanfill Licensing
already being implemented in New Zealand?	Bylaw.
Or internationally?	
b. Do the examples give comprehensive	No. However, uncertainty over potential scope
coverage of sustainable building issues? Or	of expansion, particularly where there are
could they be expanded?	alternative methods for councils.
c. Are the examples transferable to other	Yes.
Councils and other parts of New Zealand? If	
not, could they be adapted?	
2. Information gaps	
a. Is this an area where there are significant	Not apparent from current research.
information gaps?	
b. Is there potential to improve existing	Not apparent from current research.
performance by providing information?	
3. Costs	
a. Is the cost of introducing the initiative	Yes.
likely to be high?	
b. Are there ongoing operating costs?	Yes, any enforcement costs.
4. Benefits and effectiveness	
a. How long would it take to introduce the	Reasonably quick (less than 1 year). Some risk
initiative?	of delay due to challenge.
b. Could the initiative be expected to have	Yes, becomes mandatory.
widespread uptake?	
c. If introduced, would the initiative	Yes, with mandatory status. However, scale of
potentially have a notable impact by 2012?	impact would depend on where bylaw targeted
	(e.g. new development only or all homes).
5. Interest from councils	
a. Have councils expressed interest in further	Yes.
information/support for this kind of	
initiative?	

b. Have any councils signalled their intention	Yes. Far North District Council is considering
to introduce such an initiative in the next 3	introducing a bylaw for rain tanks.
years?	

8.3 Non-regulatory policies: Design guidelines

This covers items 5 and 6 in the long-list: Design guidelines

1. Existing best practice	
a. Are there examples of the initiative already	Yes. Waitakere City Council Sustainable
being implemented in New Zealand? Or	Home Guidelines; Kapiti Coast District
internationally?	Council Sustainable Subdivision Guidelines;
	North Shore City Council Medium Density
	Housing Guidelines. Some international
	examples too, but would require adaptation to
	New Zealand situation.
b. Do the examples give comprehensive	No.
coverage of sustainable building issues? Or	
could they be expanded?	
c. Are the examples transferable to other	Yes.
Councils and other parts of New Zealand? If	
not, could they be adapted?	
2. Information gaps	
a. Is this an area where there are significant	Yes. Sustainable medium density housing and
information gaps?	apartment design.
b. Is there potential to improve existing	Yes.
performance by providing information?	
3. Costs	
a. Is the cost of introducing the initiative likely	Sliding scale. No if applying existing
to be high?	guidelines to own council. Yes if developing
	new guidelines.
b. Are there ongoing operating costs?	Yes.
4. Benefits and effectiveness	
a. How long would it take to introduce the	Quick. Up to 1 year to develop new
initiative?	guidelines. However, would require
	substantial research and development.
b. Could the initiative be expected to have	Moderate.
widespread uptake?	
c. If introduced, would the initiative	Moderate. Examples already exist, so
potentially have a notable impact by 2012?	questionable how much greater impact could
	be expected. Would require links to other
	initiatives to support uptake.

5. Interest from councils	
a. Have councils expressed interest in further	Yes. Smaller councils in particular have
information/support for this kind of initiative?	expressed interest in getting hold of as much
	additional information as possible, especially
	as they feel they do not have the human
	resources to pursue initiatives themselves.
b. Have any councils signalled their intention	North Shore City Council is looking at taking
to introduce such an initiative in the next 3	its practice notes developed for Long Bay and
years?	applying them to all other new development
	areas in the city.

8.4 Council codes of practice and engineering standards

This covers item 6 in the long-list: Council codes of practice and engineering standards

Existing best practice	
a. Are there examples of the initiative already	Yes. For example, Waitakere and water.
being implemented in New Zealand? Or	
internationally?	
b. Do the examples give comprehensive	No. Could be expanded, but would require
coverage of sustainable building issues? Or	substantial research and development.
could they be expanded?	
c. Are the examples transferable to other	Yes.
Councils and other parts of New Zealand? If	
not, could they be adapted?	
2. Information gaps	
a. Is this an area where there are significant	Yes.
information gaps?	
b. Is there potential to improve existing	Yes, but substantial work required to develop
performance by providing information?	new information.
3. Costs	
a. Is the cost of introducing the initiative likely	Yes.
to be high?	
b. Are there ongoing operating costs?	Possible costs during transition, e.g. upskilling
	staff etc.
4. Benefits and effectiveness	
a. How long would it take to introduce the	Quick, as codes of practice are internal to
initiative?	council and do not require public notification
	and consultation.
b. Could the initiative be expected to have	Yes.
widespread uptake?	
c. If introduced, would the initiative	Yes, although development of codes could
potentially have a notable impact by 2012?	take time and could expect further delay

	between introduction of code and changes to
	developer practices.
5. Interest from councils	
a. Have councils expressed interest in further	Yes.
information/support for this kind of initiative?	
b. Have any councils signalled their intention	Not apparent from this research.
to introduce such an initiative in the next 3	
years?	

8.5 Economic instruments

This covers item 7 to 12 in the long-list: (7) Consent fee rebates and waivers; (8) Grants; (9) Development contribution reductions; (10) Discounts on sustainable products and services; (11) Pricing policies (e.g. rates and user pays); (12) Co-funding of retrofit initiatives.

1. Existing best practice	
	Vac annione again mis instruments being
a. Are there examples of the initiative already	Yes, various economic instruments being
being implemented in New Zealand? Or	applied, although quality of performance is
internationally?	currently low.
b. Do the examples give comprehensive	No. Unclear as to scope of expansion (research
coverage of sustainable building issues? Or	currently underway to better inform this
could they be expanded?	question).
c. Are the examples transferable to other	Yes.
Councils and other parts of New Zealand? If	
not, could they be adapted?	
2. Information gaps	
a. Is this an area where there are significant	Yes.
information gaps?	
b. Is there potential to improve existing	Yes.
performance by providing information?	
3. Costs	
a. Is the cost of introducing the initiative likely	Range of costs depending on initiative.
to be high?	Changing policies potentially quite high cost,
	offering rebates less so.
b. Are there ongoing operating costs?	Yes.
4. Benefits and effectiveness	
a. How long would it take to introduce the	Varies, according to initiative and whether
initiative?	subject to public consultation processes.
b. Could the initiative be expected to have	Not likely, based on current experience. But
widespread uptake?	potential to learn why uptake is so low and to
	improve design.
c. If introduced, would the initiative	Yes, if incentives are effectively designed and
potentially have a notable impact by 2012?	implemented, e.g. well-publicised, easy to

	access and of a 'tipping point' scale.
5. Interest from councils	
a. Have councils expressed interest in further	Yes.
information/support for this kind of initiative?	
b. Have any councils signalled their intention	Yes, e.g. Wellington City Council looking at
to introduce such an initiative in the next 3	financial incentives to support solar hot water.
years?	

8.6 Process initiatives

This covers item 13 to 17 in the long-list: (13) Fast-tracking consents; (14) One-stop shops/consent managers; (15) Sustainability checklists; (16) Practice notes (e.g. to improve consistency of Building Consent inspections); and (17) Officer training.

Existing best practice	
a. Are there examples of the initiative already	None identified in interviews that are specific
being implemented in New Zealand? Or	to sustainable building. Potential to tailor
internationally?	sustainable building initiatives from other,
	parallel examples and from international
	examples identified in literature review.
b. Do the examples give comprehensive	No.
coverage of sustainable building issues? Or	
could they be expanded?	
c. Are the examples transferable to other	No.
Councils and other parts of New Zealand? If	
not, could they be adapted?	
2. Information gaps	
a. Is this an area where there are significant	Yes.
information gaps?	
b. Is there potential to improve existing	Yes, as evidenced in Beacon's 'barriers' work
performance by providing information?	(Easton et al, 2007).
3. Costs	
a. Is the cost of introducing the initiative likely	No.
to be high?	
b. Are there ongoing operating costs?	Unlikely to be significant, if can be folded into
	existing practice
4. Benefits and effectiveness	
a. How long would it take to introduce the	Quick.
initiative?	
b. Could the initiative be expected to have	Yes, although will often depend on
widespread uptake?	receptiveness of officers for its success.
c. If introduced, would the initiative	Yes, could make council processes easier for
potentially have a notable impact by 2012?	applicants who want to make sustainable
	choices.

5. Interest from councils	
a. Have councils expressed interest in further	Yes, particularly a desire to remove
information/support for this kind of initiative?	bureaucratic obstacles.
b. Have any councils signalled their intention	No.
to introduce such an initiative in the next 3	
years?	

8.7 Public education

This covers item 18 to 20 in the long-list: (18) Eco-Design Advisors; (19) Community education; and (20) Leading by example.

education, and (20) Leading by example.	
1. Existing best practice	
a. Are there examples of the initiative already	Yes. Particularly the Clean Heat Programme,
being implemented in New Zealand? Or	various retrofit programmes, Ecoshows and
internationally?	other communications.
b. Do the examples give comprehensive	Yes, although more effective examples are
coverage of sustainable building issues? Or	focused on narrower range of issues.
could they be expanded?	
c. Are the examples transferable to other	Yes.
Councils and other parts of New Zealand? If	
not, could they be adapted?	
2. Information gaps	
a. Is this an area where there are significant	No.
information gaps?	
b. Is there potential to improve existing	Yes, learning from success factors of best
performance by providing information?	practice examples.
3. Costs	
a. Is the cost of introducing the initiative likely	Range of costs, depending on scale and depth
to be high?	of initiative.
b. Are there ongoing operating costs?	Yes.
4. Benefits and effectiveness	
a. How long would it take to introduce the	Generally quick, although again depends on
initiative?	scale and depth.
b. Could the initiative be expected to have	Can be widely disseminated, but does not
widespread uptake?	necessarily translate into behavioural change.
c. If introduced, would the initiative	Yes, if homeowners choose to apply their new
potentially have a notable impact by 2012?	knowledge (relies on other incentives).
5. Interest from councils	
a. Have councils expressed interest in further	Yes, although not as strong as request for
information/support for this kind of initiative?	some other (regulatory and financial) areas.
b. Have any councils signalled their intention	Yes.
to introduce such an initiative in next 3 years?	