

Home Performance Stakeholder Council Utility and Government Sector Working Roadmap

JANUARY 2018

The Home Performance Stakeholder Council is working together with BC's home improvement industry sectors to develop and grow the home performance industry into a sustainable and profitable market segment.

HOME PERFORMANCE STAKEHOLDER COUNCIL
UTILITY AND GOVERNMENT SECTOR WORKING ROADMAP

Table of Contents

Executive Summary	3
1 Introduction	8
1.1 Background	8
1.2 Vision	8
1.3 Mission and Core Objectives	8
1.4 Organizational Structure	9
2 Roadmap Development Process.....	10
2.1 Roadmap Toolkit.....	11
3 Home Performance Industry Overview	12
3.1 Political Landscape	12
3.2 Industry Landscape	12
3.3 Home Performance Industry Vision.....	12
3.4 Summary of Utility and Government Sector Issues.....	13
4 Recommendations to Address the Issue of Capacity Building: Availability of Trained Trades, Workforce Development, and Professionalism	15
4.1 Current Situation	15
4.2 Recommendations	15
5 Recommendations to Address the Issue of Market Growth: Consumer Demand and Quality Awareness.....	17
5.1 Current Situation	17
5.2 Recommendations	17
6 Recommendations to Address the Issue of Advocacy: Industry Collaboration on Program & Policy Design	19
6.1 Current Situation	19
6.2 Recommendations	19
7 Resources Available.....	20
8 Summary and Next Steps.....	20

Executive Summary

The Home Performance Stakeholder Council aspires to assist industry stakeholders involved in residential renovation in delivering exceptional services and solutions, priced at affordable levels for consumers, to support the growth of a long-term, sustainable market for home performance related activities that significantly reduce energy use and carbon emissions in homes across the province while enhancing building durability, occupant comfort, and health.

To this end, the HPSC has established six Sector Councils (HVAC, Fenestration, Insulation, Renovation, Energy Advisors, and Utility and Government) composed of key industry players tasked with amalgamating and addressing the fragmented interests, opportunities, and challenges that exist in a home performance industry, which is evolving and growing.

The following *Utility and Government Sector Working Roadmap* documents the recommendations made by the Utility and Government Sector Council to address the issues and opportunities prioritized by the Sector Council. The recommendations are directed primarily at industry, by industry, but also include recommendations for Utilities and Government. The recommendations are directed at achieving the following goals in response to the issues identified in Table 1 below. The priority of each recommendation is indicated by the following key:

HIGH	MEDIUM	LOWER
------	--------	-------

Recommendations are prioritized according to when their development must begin in order to meet the 2025 Vision. Some recommendations are dependent on the development of other recommendations and some will take several years to reach full implementation. High priority recommendations include those whose development needs to start in 2018, and those which can start right away as soon as resources are available.

Table 1: Summary of the Issues and Goals for the Utility and Government Sector Council's Draft Home Performance Roadmap

ISSUE	INDUSTRY ASSOCIATIONS	UTILITIES	GOVERNMENT
Capacity Building: Availability of Trained Trades, Workforce Development, and Professionalism	1. Set home performance standards for product and installation specifications.	Support	Support
	2. Develop home performance specific training materials, programs, and certifications to help differentiate qualified contractors.	Support	Support
	Support	3. Recognize and reinforce the home performance industry as a critical voice in the province for advancing home energy retrofits in BC.	
	4. Establish and maintain lists of qualified manufacturers and installers. This includes developing a protocol for how people get onto the list and how they get removed from it, and ensuring that the protocol is followed.	Consult	Consult
	Consult	5. Phase in the use of industry-defined and -qualified home performance professionals and contractors as a requirement for participation in home performance related utility programs.	
	6. Develop and deliver training and information on how to sell home performance upgrades.	Support	Support
	Consult	7. Develop an incentive for whole home performance contractors.	
	8. Offer warranties to give consumers confidence that their projects will be done properly, and provide recourse if problems arise.	Consult	Consult

	9. Develop an industry-agreed-upon expanded set of roles and responsibilities for energy advisors. This should include working with NRCan to better meet the customer needs for recommended contractors, for coaching/project management throughout their renovation, and for quality assurance.	Consult	Consult
Market Growth: Consumer Demand and Quality Awareness	Support	1. Develop and implement an initiative to improve consumer knowledge of home performance using the Home Energy Coach website and other tools.	
	Support	2. Instill consumer confidence through whole home labelling, branding, and customer care.	
	Consult	3. Identify for the customer and phase in the use of industry-defined and -qualified home performance professionals and contractors as a requirement for participation in home performance related programs.	
	Support	Support	4. Develop an outreach program for consumers who are considering renovations to educate them about the reasons for relevant regulations, the importance of meeting them, and the consequences of not meeting them.
	Support	Support	5. Develop an outreach program for home performance professionals and contractors who are applying codes and standards within the supply chain and educate them about the reasons for relevant regulations, the importance of meeting them, and the consequences of not meeting them.
Advocacy: Industry Collaboration on Program and Policy Design	1. Set up and employ a consistent, systematic approach to getting industry input on program and policy design on a continuous basis and in a coordinated fashion.		

**HOME PERFORMANCE STAKEHOLDER COUNCIL
UTILITY AND GOVERNMENT SECTOR WORKING ROADMAP**

	2. Take an active role in assisting with program and policy design.	Support	Support
	3. Use the HPSC as a venue for communicating industry updates, discussing new ideas, and enhancing existing initiatives.	Support	Support

This *Utility and Government Sector Working Roadmap* herein organizes recommendations by issue and presents the current situation, goals, and recommendations, along with the suggested lead(s).

This Roadmap has been developed by the Home Performance Sector Council with input from the Utility and Government Sector Council and other industry representatives. The members of the HPSC Utility and Government Sector Council include:

- Tom Berkhout, BC Provincial Government, Ministry of Energy, Mines and Petroleum Resources
- Pat Mathot, BC Hydro
- Beth Ringdahl, FortisBC
- Melissa Manley, FortisBC
- Tanya Rumak, FortisBC

The information and recommendations within this Roadmap are intended to represent the input of the HPSC Utility and Government Sector Council and other industry representatives. However the information and recommendations within the Roadmap may not be representative of the views or opinions of the broader industry.

The primary purpose of the *Utility and Government Sector Working Roadmap* is to provide input into the broader, cross-sector *Home Performance Industry Roadmap*.

1 Introduction

1.1 Background

Home performance is a holistic approach to identifying and addressing energy efficiency, comfort, health, and safety related issues to make a home perform better.

It is estimated that nearly 500,000 single detached houses in BC may benefit from home performance upgrades. Row houses and townhouses present an additional opportunity. And whole home performance renovations in BC could represent a four-billion-dollar industry over the next 10 years.

The Home Performance Stakeholder Council (HPSC) is composed of key industry players tasked with amalgamating and addressing the fragmented interests, opportunities, and challenges that exist in the home performance industry, which is evolving and growing. *We gratefully acknowledge the financial support of BC Hydro, FortisBC, and the Province of British Columbia.*

1.2 Vision

The HPSC aspires to assist industry stakeholders in delivering exceptional services and solutions, priced at affordable levels for consumers, to support the growth of a long-term, sustainable market for home performance related activities that significantly reduce energy use and carbon emissions in homes across the province while enhancing building durability, occupant comfort, and health.

1.3 Mission and Core Objectives

The mission of the HPSC is to work together with BC's home improvement industry sectors to develop and grow the home performance industry into a sustainable and profitable market segment that delivers products and services to:

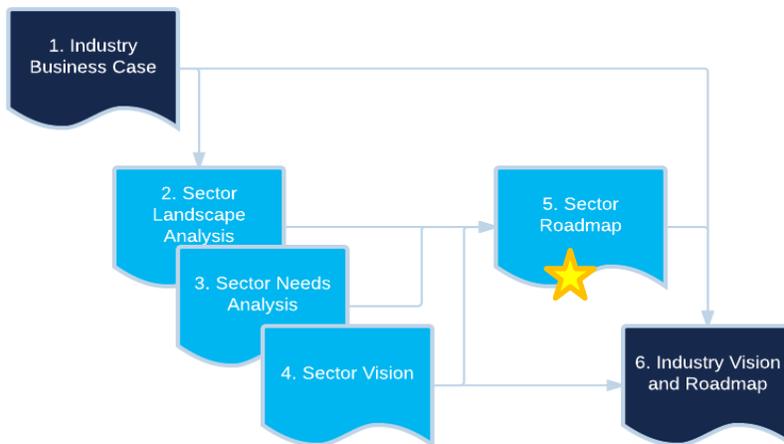
- Lower utility bills through reducing energy use
- Improve home comfort and building durability
- Reduce environmental impact
- Improve air quality, health, and safety

1.4 Organizational Structure



2 Roadmap Development Process

The Roadmap is a key step in organizing the industry to reach their vision.



The Roadmap aims to:

- bridge the gap between the Needs Analysis and Industry Vision,
- take into consideration the issues and priorities of other sectors operating in the home performance industry and identify areas for potential synergies,
- and provide a specific set of actionable recommendations for the public and private sectors.

2.1 Roadmap Toolkit

Recommended solutions to the issues identified draw from a common “toolkit,” which includes:

Information

Consultation and Collaboration

Education and Training

- Consumer
- Trades
- Business
- Real Estate Industry

Marketing and Lead Generation

- Home Labelling
- Branding

Standards

Codes and Regulations

- Product
- Installation

Legislation

Inspections and Quality Assurance

Accreditation

- Tradespeople
- Businesses

Capacity Building

Incentives

- Consumer
- Contractor
- Supply Chain

Tax Credits

- Federal
- Provincial
- Municipal

Financing

- Utility
- Bank (for Energy Efficiency)
- Municipality

Utility Rates

Consumer Advocacy

Warrantees

- Contractor
- Third Party

3 Home Performance Industry Overview

3.1 Political Landscape

Canada's Buildings Strategy has the following goals:

- Federal, provincial, and territorial governments will work to develop a model code for existing buildings by 2022, with the goal that provinces and territories adopt the code.
- Federal, provincial, and territorial governments will work together with the aim of requiring the labelling of building energy use by 2019.

The Ministry of Energy, Mines and Petroleum Resources has been given the mandate to make substantial progress on the following priority:

- Create a Roadmap for the future of BC energy that will drive innovation, expand energy efficiency and conservation programs, generate new energy responsibly and sustainably, and create good, lasting jobs across the province.

3.2 Industry Landscape

- Includes disparate industries with some key players interested in home performance.
- There are few coordinated home performance contractors in BC.
- Representatives from the HVAC, Renovator, Insulation, Energy Advisors, and Fenestration industries, as well as Utilities and Government, are interested in working together to develop and grow a home performance industry into a sustainable and profitable market segment.

3.3 Home Performance Industry Vision

3.3.1 2025 Consumer Vision:

- Valued Services: Home performance contractors are a valued and major component of whole home multiple-measure projects.
- Increased Volume: Retrofits that value home performance are being carried out at a significantly greater rate, and are in steady demand, resulting in greater energy savings and GHG emission reductions.
- Consumer Understanding: Consumers understand the benefits of home performance retrofits, including more comfortable and durable homes with a higher resale value, and the importance of selecting a qualified contractor.
- Consumer Resources: There are viable resources and mechanisms for consumers to seek out industry advice if they have questions or concerns about their certified contractor or their home performance project.

3.3.2 2025 Industry Vision:

- **Accredited Professionals:** There are recognized, accredited professional home performance contractors available to advise consumers and guide them through the process of home improvements, often in combination with broader home performance projects.
- **Benefits Tools:** Home performance contractors have the means to easily estimate customer benefits and include these benefits as part of their standard offerings of products and services.
- **Industry Organization:** A contractor-led industry organization represents accredited contractors by ensuring ongoing, coordinated two-way communication of issues and ideas to utilities and governments, providing coordinated communication to consumers about the industry, its members, and its benefits, and working to ensure sufficient capacity and geographic coverage within the province so consumers have reasonable access to its members.
- **Home Performance Education:** Building science, product knowledge, and related business training and support are required and available on an ongoing basis for home performance contractors and their employees.

3.3.3 2025 Utility And Government Vision:

- **Utility and Government Support:** Utilities and Government promote professional home performance upgrades within renovation projects by providing credibility to potential benefits and encouraging consumers by giving them information and examples of success.
- **Regional and Community Goals and Targets:** Cities, regional districts, and municipalities play a key role at the regional and community level in encouraging residents to participate in home performance upgrades by setting local goals and targets around GHG emission reductions and energy savings, along with specific local programs help spur consumers to act.
- **Home Labelling System:** A well-known and well-understood home labelling system for energy efficiency is supported by government, utilities, mortgage lenders, the real estate industry, and purchasers.

3.4 Summary of Utility and Government Sector Issues

The following three issues were identified, by the Utility and Government Sector Council, as priorities in working towards the vision of a home performance industry in BC:

- **Capacity Building:** Availability of Trained Trades, Workforce Development, and Professionalism
- **Market Growth:** Consumer Demand and Quality Awareness
- **Advocacy:** Industry Collaboration on Program & Policy Design

While the recommended actions in this Roadmap are specific to the Utility and Government Sector being discussed, each of the other Sector Councils identified their priority issues. The HPSC recognizes the many synergies between the sectors' issues, as shown in Table 2 below.

Table 2: Roadmap Issues Across the HPSC Industry Sectors

Issue	U&G	HVAC	EA	Reno.	Insul.	Fen.
Quality Workmanship: Industry Reputation, Standards of Practice, and Installation Quality	✓	✓	✓	✓	✓	✓
Market Growth: Consumer Demand and Quality Awareness	✓	✓	✓	✓	✓	✓
Capacity Building: Availability of Trained Trades, Workforce Development, and Professionalism	✓	✓	✓	✓	✓	✓
Advocacy: Connectivity to and Engagement in Utility and Government Program & Policy Design	✓	✓	✓	✓	✓	✓
Advocacy: Effectiveness and Enforcement of Codes, Regulations, and Bylaws	✓	X	X	✓	X	✓
Advocacy: Longevity and Consistency of Utility and Government Programs	✓	X	✓	X	✓	X
Advocacy: Industry Representation for Contractors	✓	X	✓	X	✓	X
Capacity Building: Changing Landscape and Demands on Industry	X	X	✓	X	X	X
Market Growth: Limited Ability to Connect Consumers with Quality Contractors	✓	X	✓	X	X	X

4 Recommendations to Address the Issue of Capacity Building: Availability of Trained Trades, Workforce Development, and Professionalism

4.1 Current Situation

- There are many organizations that supply information, training, and resources; however, there is no single BC or Canadian authority for home performance in residential renovation.
- There are no standards or credentials to differentiate home performance professionals and contractors from low-quality, low-cost companies whose work and behaviour reflects poorly on the entire industry, and makes the sale of projects with quality installations difficult.
- It is difficult for consumers to find and select quality contractors to do home performance work.
- There is no industry organization representing home performance contractors.
- Many manufacturers, suppliers, and installers don't understand what home performance is or the value that it can provide.

4.2 Recommendations

The following table outlines the HPSC's recommendations for the Utility and Government Sector best achieving these goals:

INDUSTRY ASSOCIATIONS	UTILITIES	GOVERNMENT
1. Set home performance standards for product and installation specifications. INITIATIVE LEADERSHIP: Industry Associations	Support	Support
2. Develop home performance specific training materials, programs, and certifications to help differentiate qualified contractors. INITIATIVE LEADERSHIP: Industry Associations	Support	Support
Support	3. Recognize and reinforce the home performance industry as a critical voice in the province for advancing home energy retrofits in BC. INITIATIVE LEADERSHIP: Shared (Government and Utilities)	
4. Establish and maintain lists of qualified manufacturers and installers. This includes developing a protocol for how people get onto the list and how they get removed from it, and ensuring that the protocol is followed. INITIATIVE LEADERSHIP: Industry	Consult	Consult

Associations		
Consult	<p>5. Phase in the use of industry-defined and -qualified home performance professionals and contractors as a requirement for participation in home performance related utility programs.</p> <p>INITIATIVE LEADERSHIP: Shared (Government and Utilities)</p>	
<p>6. Develop and deliver training and information on how to sell home performance upgrades.</p> <p>INITIATIVE LEADERSHIP: Industry Associations</p>	Support	Support
Consult	<p>7. Develop an incentive for whole home performance contractors.</p> <p>INITIATIVE LEADERSHIP: Shared (Government and Utilities)</p>	
<p>8. Offer warranties to give consumers confidence that their projects will be done properly, and provide recourse if problems arise.</p> <p>INITIATIVE LEADERSHIP: Industry Associations</p>	Consult	Consult
<p>9. Develop an industry-agreed-upon expanded set of roles and responsibilities for energy advisors. This should include working with NRCan to better meet customer needs for recommended contractors, for coaching/project management throughout their renovation, and for quality assurance.</p> <p>INITIATIVE LEADERSHIP: Industry Associations</p>	Consult	Consult

5 Recommendations to Address the Issue of Market Growth: Consumer Demand and Quality Awareness

5.1 Current Situation

- The consumer demand for home performance upgrades is low and inconsistent.
- Consumers don't fully understand what is required for a quality job and don't appreciate the value of improving home performance. Consumers often make their decisions around cosmetic or functional upgrades, with little thought to improving energy efficiency, envelope upgrades, or building science issues. Educating them regarding efficiency options, needed performance improvements, the need to comply with regulations, potential for hazardous materials, and basic building science at this point is extremely challenging.
- It is difficult for consumers to find and select quality contractors to do home performance work. There is no industry organization representing home performance contractors.
- Contractors are unaware of the benefits and/or do not promote them to homeowners. The current approach to residential energy use reduction is based on individual measures, not a whole home approach, which results in surface level energy savings.
- Too often consumers select a contractor based on low cost rather than value and quality. Consumers face conflicts between their wants, needs, and available budget. Many do not understand that cost-effective home performance upgrades can actually improve the affordability due to lower operating costs.
- Utilities and Governments, including local governments, have targets for energy efficiency and GHG reduction. However, the organizations are governed differently and have different accountabilities.

5.2 Recommendations

The following table outlines the HPSC's recommendations for the Utility and Government Sector best achieving these goals:

INDUSTRY ASSOCIATIONS	UTILITIES	GOVERNMENT
Support	1. Develop and implement an initiative to improve consumer knowledge of home performance using the Home Energy Coach website and other tools. INITIATIVE LEADERSHIP: Shared (Government and Utilities)	
Support	2. Instill consumer confidence through whole home labelling, branding, and customer care. INITIATIVE LEADERSHIP: Shared (Government and Utilities)	
Consult	3. Identify for the customer and phase in the use of industry-defined and -qualified home performance professionals and contractors as a requirement for participation in home performance related programs. INITIATIVE LEADERSHIP: Shared (Government and Utilities)	

Support	Support	<p>4. Develop an outreach program for consumers who are considering renovations to educate them about the reasons for relevant regulations, the importance of meeting them, and the consequences of not meeting them.</p> <p>INITIATIVE LEADERSHIP: Government</p>
Support	Support	<p>5. Develop an outreach program for home performance professionals and contractors who are applying codes and standards within the supply chain and educate them about the reasons for relevant regulations, the importance of meeting them, and the consequences of not meeting them.</p> <p>INITIATIVE LEADERSHIP: Government</p>

6 Recommendations to Address the Issue of Advocacy: Industry Collaboration on Program & Policy Design

6.1 Current Situation

- A number of home performance initiatives have been tried in the past but have not been sustained. Utility and Government support for the home performance industry is inconsistent.
- There is no systematic approach to getting and using industry input on Utility and Government program design, or vice versa.
- There is a lack of consistent and coordinated engagement and follow through within the industry.
- Utility and Government program impacts have been mixed, and have had some unintended consequences.

6.2 Recommendations

The following table outlines the HPSC's recommendations for the Utility and Government Sector best achieving these goals:

INDUSTRY ASSOCIATIONS	UTILITIES	GOVERNMENT
1. Set up and employ a consistent, systematic approach to getting industry input on program and policy design on a continuous basis and in a coordinated fashion. INITIATIVE LEADERSHIP: Shared (Industry Associations, Government and Utilities)		
2. Take an active role in assisting with program and policy design. INITIATIVE LEADERSHIP: Industry Associations	Support	Support
3. Use the HPSC as a venue for communicating industry updates, discussing new ideas, and enhancing existing initiatives. INITIATIVE LEADERSHIP: Industry Associations	Support	Support

7 Resources Available

Financial and in-kind resources may come from several sources. Utilities and Government contribute time and funding. Government contributions may come from federal (NRCan), provincial (MEMPR, Ministry of Housing, Building Standards Branch), and local levels of government. These potential sources have not yet been fully explored but consideration is underway.

Contractors, industry associations, manufacturers, suppliers, and distributors contribute their time and possibly funding where appropriate.

8 Summary and Next Steps

Resources need to be put in place and a plan developed to move the priority initiatives ahead in 2018.

The plan would cover 2018 to 2025 and specify timing, dependencies, and resources for each initiative. It should also include a dashboard, or online tracking tool, so everyone can see progress measured against the plan.

The implementation of many of the Roadmap recommendations needs to begin in 2018. This process should focus on recommendations that have a long development cycle (e.g. the development of an accreditation program), and those that are clearly needed and don't require other recommendations to be completed first (e.g. the development of trades training). It is important that the industry starts to see real benefits from this work in 2018.