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Introduction

This report describes BC Housing’s sustainability performance results for the 2018/19 fiscal year, and compares these results to the three-year targets set in the 2017/18 livegreen Sustainability Plan.

This report also outlines key actions taken in the three strategic areas of the plan:
BC Housing 2018/19
Achievements at a Glance

56% of provincially sponsored affordable housing units were designed to meet the energy and sustainability targets defined in the BC Housing Design Guidelines and Construction Standards.

34% reduction in greenhouse gas emissions (GHGs) from buildings owned and leased by BC Housing compared to 2005 baseline.

8 major research projects were published relating to sustainable residential construction, including the BC Energy Step Code Builders Guide, and a Guide to Low Thermal Energy Demand for Large Buildings. Find these studies and many more at www.bchousing.org/research-centre.

Over 3,400 activities organized through BC Housing’s Community Development and People, Plants and Homes programs, to engage social housing residents in capacity building, resilience, health and well-being, and gardening.

29 newly constructed, provincially sponsored affordable housing buildings achieved BC Energy Step Code level 3 or higher.

3 beehives have been installed at BC Housing directly managed sites as part of BC Housing’s People, Plants and Homes project, in collaboration with Hives for Humanity.
Integrated Decisions

Integration of financial, social, and environmental considerations in planning and decision-making

Integrated Decisions ensures sustainability is incorporated into all levels of decision-making at BC Housing. This gives us clear direction via an on-going assessment of the impacts of our corporate actions on local and global communities and ecosystems.

Results

<table>
<thead>
<tr>
<th>AREA</th>
<th>MEASURE</th>
<th>2016/17</th>
<th>2017/18</th>
<th>2018/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) GHG Emissions: Office Paper</td>
<td>Percentage reduction in GHGs from all office paper (2005 baseline)</td>
<td>Target</td>
<td>60%</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Result</td>
<td>57%</td>
<td>59%</td>
</tr>
<tr>
<td>2) GHG Emissions: Fleet</td>
<td>Percentage reduction in GHGs per km travelled from all fleet vehicles¹ (2015 baseline)</td>
<td>Target</td>
<td>N/A</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Result</td>
<td>Baseline established</td>
<td>5%</td>
</tr>
<tr>
<td>3) Sustainable Procurement</td>
<td>Percentage of tenders to suppliers that include sustainability evaluation criteria and other sustainability factors²</td>
<td>Target</td>
<td>40%</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Result</td>
<td>53%</td>
<td>58%</td>
</tr>
</tbody>
</table>

¹ Includes trips by BC Housing staff using the corporate Modo car-sharing account.
² These sustainability factors include sustainable product specifications, waste reduction and diversion, efficiency, and positive contributions to local communities.
We encourage contractors on social housing capital projects to consider sustainability in their procurement processes, including environmental criteria for specific land/building design issues such as conservation, efficiency, and positive contributions to local communities. We consider sustainable product specifications, waste reduction and diversion, efficiency, and positive contributions to local communities when procuring our goods and services. Last year, 43 per cent of tenders included such sustainability factors, a decrease from 58 per cent in 2017/18.

**3. Sustainable Procurement**

**TARGET NOT MET**

Sustainability has become engrained in our procurement process. We consider sustainable product specifications, waste reduction and diversion, efficiency, and positive contributions to local communities when procuring our goods and services. Last year, 43 per cent of tenders included such sustainability factors, a decrease from 58 per cent in 2017/18.

**KEY ACTIONS TAKEN:**

- Tender requirements include product specifications limited to green certified labels, or if not certified, a requirement to meet a minimum criterion.
- We encourage contractors on social housing capital projects to participate in employment programs such as BladeRunners, Tradeworks, or Embers. These programs help clients including unemployed or low-skilled employed individuals, women, Indigenous Peoples, youth-at-risk, and persons with disabilities.
- We inform social enterprises when issuing tender calls so that they are aware of the opportunities.
- Where applicable, construction and service provider tender requirements include environmental criteria for specific land/building design issues and operations.

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**1. GHG Emissions: Office Paper**

**TARGET NOT MET**

Our efforts in 2018/19 saved 450 trees and led to a 59% reduction in emissions compared to our 2005 baseline. We did not, however, meet our 2018/19 target - a 70% reduction in emissions against our 2005 baseline. Last year, our greenhouse gas (GHG) emissions related to paper use increased compared to 2017/18. This could be due to such factors as:

- BC Housing increasing full-time staff by six per cent in 2018;
- A significant increase in our business activities and related increase in the overall amount of paper use;
- Many business processes that still rely on printed paper (such as signing of legal documents).

**KEY ACTIONS TAKEN:**

Our practices and initiatives which led to reductions in GHG emissions from paper use, included the following:

- Eighty-nine per cent of all the paper purchased last year contained 100 per cent recycled content;
- The Licensing & Consumer Services branch launched a new paperless initiative (see the box below);
- The livegreen Employee Council published articles encouraging employees to reduce paper use;
- Office services staff made every effort to buy 100 per cent recycled paper and only purchased paper with a lower recycled content if there was no paper of the type required available with 100 per cent recycled content;
- Individual employees made an effort to reduce their paper use; the annual employee survey revealed that 84 per cent of employees tried to reduce printed materials in our offices.

**Benefits of Paper Conservation for Licensing & Consumer Services**

The Licensing & Consumer Services branch of BC Housing is best known for licensing Residential Builders and Building Envelope Renovators and administering Owner Builder Authorizations in British Columbia. Historically, this has involved a lot of paper, as documents received through fax or email were printed, date-stamped, and scanned into the system.

In 2018/19, Licensing & Consumer Services began experimenting with digital date-stamps and filing. In addition to paper conservation, this approach has led to staff working efficiently and cohesively, having the ability to telework, and learning new skills. It has also streamlined the process of accepting and storing documents and means less physical storage space is needed in office and off-site.

**2. GHG Emissions: Fleet**

**TARGET NOT MET**

In 2018, BC Housing had 59 fleet vehicles, primarily trucks and vans used by grounds and building maintenance staff. Office pool vehicles included Smart Cars and hybrid vehicles. Ten per cent of our fleet vehicles in 2018 were fuel-efficient. During the year, we retired two vehicles from our office fleet and replaced them with two new vehicles.

We have been reporting on GHG emissions related to fleet and equipment since 2015. During that time, we have improved the methodology for reporting, including measuring fleet emissions.

Beginning in 2015, GHG emissions were calculated using reported fuel consumption data. Due to the improved reporting methodology, most fuel consumption data was directly obtained, while only a small portion was estimated, minimizing the uncertainty of estimation. The calculation of kilometers travelled was based on odometer readings for each vehicle.

A baseline was established in the 2016/17 livegreen Sustainability Report for this measure (0.39 kg of GHG per kilometre travelled for fleet vehicles) and targets have been set beginning in the 2017/18 reporting year.

In 2018/19, we did not meet our target of 5% reduction in GHG per km travelled from all fleet vehicles. This may be due to a reduced percentage of fuel-efficient vehicles in the BC Housing fleet.

**KEY ACTIONS TAKEN:**

- In addition to our fleet vehicles, we have a corporate account with Modo, a car-sharing cooperative, for staff use in the Vancouver Coastal and Fraser regions. Our Modo account gives our staff access to a wider range of vehicles and provides flexibility on where to pick them up. Starting in 2016, emissions from staff trips in Modo vehicles were calculated and reported alongside BC Housing’s own fleet. Over 70 per cent of Modo trips in 2018 were taken in hybrid vehicles, resulting in GHG savings.
- Although a large percentage of our fleet is trucks and vans that do not yet have electric equivalents available in the North American market, we have begun research on electric vehicles to ensure we are ready to act when the appropriate technology is available.
- The Lower Mainland grounds and maintenance fleet continued to use a GPS fleet tracking system to reduce fleet mileage. Tracking allows fleet managers to reduce kilometers driven by allocating resources more efficiently and monitoring idling behaviours.

**BC Housing staff completed eco-driving training.**
Housing Excellence
Innovation in the design, construction, renovation and management of housing

Housing Excellence guides activities related to improving expertise and innovation in the delivery, renovation and management of social housing, it also ensures the quality and durability of housing construction and maintenance.

Results

<table>
<thead>
<tr>
<th>AREA</th>
<th>MEASURE</th>
<th>2016/17</th>
<th>2017/18</th>
<th>2018/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) GHG Emissions: Buildings</td>
<td>Percentage reduction in GHGs from all buildings owned or leased by BC Housing (2005 baseline)</td>
<td>Target</td>
<td>20% or more</td>
<td>20% or more</td>
</tr>
<tr>
<td></td>
<td>Result</td>
<td>33%</td>
<td>28%</td>
<td>34%</td>
</tr>
<tr>
<td>2) Green Buildings</td>
<td>Percentage of provincially sponsored affordable housing units designed to meet the energy and sustainability targets defined in the BC Housing Design Guidelines and Construction Standards</td>
<td>Target</td>
<td>N/A</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>Result</td>
<td>34%</td>
<td>41%</td>
<td>56%</td>
</tr>
<tr>
<td>3) Waste Management</td>
<td>Percentage of construction, redevelopment, or retrofit waste diverted from landfill</td>
<td>LM&amp;VI Result</td>
<td>78%</td>
<td>82%</td>
</tr>
<tr>
<td></td>
<td>Rest of B.C. Result</td>
<td>62%</td>
<td>65%</td>
<td>62%</td>
</tr>
<tr>
<td>4) Residential Construction Research and Education</td>
<td>Published research report conducted with key stakeholders</td>
<td>Target</td>
<td>At least one major research project published</td>
<td>At least one major research project published</td>
</tr>
<tr>
<td></td>
<td>Result</td>
<td>5 major research projects published</td>
<td>6 major research projects published</td>
<td>8 major research projects published</td>
</tr>
</tbody>
</table>

**1. GHG Emissions: Buildings**

**TARGET MET**

In 2018, our GHG emissions related to energy consumption for heat, water, electricity for our buildings were 34 per cent lower than in 2005. We saw a decrease in emissions of five per cent between 2017 and 2018.

The winter of 2018 was warmer compared to 2017 in many areas of the province, resulting in less energy used for heating.

GHG emission reductions compared with our baseline are mainly a result of our energy-conservation efforts since 2005, such as multi-year building upgrades and energy programs, increasing energy efficiency standards for new construction, and ongoing improvements in energy management in our portfolio.

**KEY ACTIONS TAKEN:**

- BC Housing administers or supports a range of energy efficiency programs for social housing providers, in collaboration with our partners. In 2018, these programs included:
  - The new EfficiencyBC: Social Housing Incentive Program (SHIP) in partnership with the BC Non-Profit Housing Association (BCNPHA). This provincial program launched in 2018 is intended to help affordable housing owners and operators reduce greenhouse gas emissions in their existing building portfolio. It supports natural gas and fuel switching measures (and other electrification opportunities) that result in significant reduction in current fossil fuel use.
  - The Energy Conservation Assistance Program (ECAP) in collaboration with BC Hydro and FortisBC. Through this program, older furnaces were replaced with energy efficient models at several BC Housing funded group homes and non-profit housing developments. These furnace replacements are expected to result in an annual reduction of 1,600 gigajoules.
  - The Energy Efficiency Retrofit Program (EERP), in collaboration with the BCNPHA, BC Hydro, and FortisBC. This program enables approximately 20 electric and 12 gas-focused energy retrofit projects, for a total estimated savings of 600,000 kWH and 4,000 gigajoules respectively. The program offers non-profit housing providers additional funding to complete small scale, energy saving retrofits of items such as light fixtures and boilers.
  - In partnership with the Columbia Basin Trust (CBT) and BCNPHA, we assisted non-profit housing providers with the costs of increasing energy efficiency. Through an agreement with the CBT, we funded non-profit housing providers for energy retrofits during 2018 and will finalize approved projects during 2019. A total of 33 non-profit housing providers and 48 buildings will benefit from this program.
  - In 2018, our energy management team worked with contractors to conduct 21 energy audits on high-, mid- and low-rise housing buildings to determine details of current energy consumption patterns and opportunities for savings. This will allow for energy conservation measures in future fiscal years. Funding for audits and repairs will come from Capital Renewal Fund.

We also completed a significant energy retrofit on a BC Housing directly managed site located in Vancouver. Grandview Terrace is a 154-unit complex with concrete towers and townhomes. In 2018, additional insulation and upgraded windows were added to this development and are expected to result in significant energy savings.

For more information on our actions related to greenhouse gas and energy reductions in our housing portfolio – please see BC Housing’s 2018 Carbon Neutral Action Report.

**Climate Change Adaptation at BC Housing**

In 2018, BC Housing began implementing our Climate Adaptation Framework, with a focus on education related to reducing the impact of extreme heat and poor air quality events on social housing residents.

As part of our adaptation activities, we launched the Mobilizing Building Adaptation and Resilience (MBAR) project, a multiyear, multi-stakeholder knowledge and capacity building project led by BC Housing, with participation and contribution from over 30 organizations, including from industry and national/local agencies. Through facilitating and piloting sustainable and resilient design and renovation of buildings, MBAR aims at stabilizing communities in a natural disaster (e.g. earthquakes) and helping building owners and occupants better protect their investments and adapt to anticipated climate change stresses (e.g. higher precipitation, warmer summers, fire-related air pollution) and climate change shocks (e.g. severe flooding/fire/windstorms) such that no one is stressed beyond their ability to cope.

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1. This measure was revised in 2017 to reflect the fact that energy and sustainability targets have now been defined in the newly updated BC Housing Design Guidelines and Construction Standards. Previously, we were measuring the percentage of newly constructed units designed to a third-party sustainability standard. This measure was introduced in 2016.
2. This measure is based on projects that are completed within the fiscal year and relies on information supplied by contractors. Information may not be available for all projects completed within the fiscal year at the time of reporting. In addition, not all contractors track their waste diversion and those that do not are not included in the denominator. Overall, 70% of projects in 2017/18 reported on their waste diversion as required.
3. This measure was refined in 2017/18 to reflect the fact that energy and sustainability targets have now been defined in the newly updated BC Housing Design Guidelines and Construction Standards. Previously, we were tracking the percentage of buildings constructed to a third-party sustainability standard.
4. The comparison between 2014 and 2017 is based on absolute emissions, while our 2016 baseline is recalculated to the fiscal year end as part of our annual reporting and benchmarking process.
2. Green Buildings

TARGET EXCEEDED

Our green building measure was modified in 2017/18 to reflect changes to BC Housing’s Design Guidelines and Construction Standards. As of 2017/18, our projects are targeting high levels of the BC Energy Step Code, a performance-based approach that will result in energy savings above base building code in new buildings constructed through our programs.

As of 2017/18, we are measuring the percentage of provincially sponsored affordable housing units designed to meet the energy and sustainability targets defined in the BC Housing Design Guidelines and Construction Standards. This includes projects that are designed to meet other sustainability standards such as LEED and Built Green.

Provincially funded new construction is required to meet the BC Housing Design Guidelines and Construction Standards, while provincially financed projects are also encouraged to target a step of the BC Energy Step Code. Both funded and financed projects are included in our revised target.

In 2018/19, 56 per cent of newly constructed units that were funded or financed through BC Housing programs were designed to meet the energy and sustainability targets in our Design Guidelines and Construction Standards, including those that met a third party sustainability standard.

KEY ACTIONS TAKEN:

› In 2018, we completed 29 projects that have achieved STEP Code levels 3 or higher.
› To date, BC Housing and our non-profit housing partners have over 60 buildings registered with the Canadian Green Building Council and 41 have received Leadership in Energy and Environmental Design (LEED) certification.
› We have also been working with our partners to construct buildings that achieve the Passive House standard. In 2018/19, four developments were built to Passive House standard, and one of these projects was awarded Passive House certification.
### 3. Waste Management

**Lower Mainland and Vancouver Island:** **TARGET NOT MET**

The Rest of B.C.: **TARGET EXCEEDED**

Many of our construction tenders require a percentage of construction, renovation, or demolition waste to be diverted from landfills. Last year, we diverted 65 per cent of waste from 63 projects across the province (average for all projects).

Sixty-three per cent of the waste from projects in the Lower Mainland and on Vancouver Island was diverted from landfills, a diversion rate which did not meet our target of 80 per cent. In the rest of B.C., 82 per cent of waste was diverted from the landfill, exceeding our target of 60 per cent.

In addition to construction, renovation and demolition waste, we have taken strides to reduce the amount of residential waste going to landfill from our directly managed housing. Our staff work with social housing residents to keep recycling and compostable materials out of the landfill.

**KEY ACTIONS TAKEN:**

- Construction and demolition waste diverted from landfill included over 529 tonnes of wood products, 1,332 tonnes of gypsum wallboard, and 1,314 tonnes of concrete. This waste, which would otherwise have ended up in landfills, was recycled or repurposed.
- We provided waste management education for our project management teams, and supply chain managers to ensure tender documents included expectations about waste management.
- Education and monitoring was performed to increase the uptake in recycling and composting among our tenants.

**Ensuring That Our Vendors Meet Our Sustainability Standards**

In 2018/19, BC Housing issued a new RFP for recycling and waste removal for our residential developments and offices. This will allow us to better meet the new challenges we are facing regarding the proper way to recycle and reduce waste. We are choosing to partner with companies that are in line with BC Housing’s sustainability strategy and that help to reduce our carbon footprint.

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### 4. Residential Construction Research and Education

**TARGET EXCEEDED**

BC Housing conducts technical research and provides education to help improve the quality of residential construction and increase building energy efficiency. In 2018/19, we published eight major research reports related to sustainability, in collaboration with our research partners. BC Housing has also been involved in the production of educational videos for the building sector, which have been a successful communication channel for technical information and case studies.

BC Housing has a significant role to play in the implementation and adoption of the BC Energy Step Code in communities across B.C. and has assisted the Energy Step Code Council in conducting research related to this code.

**KEY ACTIONS TAKEN:**

- The following reports were completed in 2018/19:
  - **BC Energy Step Code Builder Guide.** This guide provides comprehensive information on installing a PV system on a social housing project.
  - **Energy Efficient Lighting Technologies for Multi-Unit Residential Buildings.** This guide addresses the key issues when replacing the lighting system in multi-unit residential buildings in B.C.
  - **Guide to Low Thermal Energy Demand for Large Buildings.** This guide aims to broaden the common understanding of how large buildings can meet higher levels of performance and energy efficient technologies and practices, with different geographic and market conditions—from small towns to dense urban centres and from affordable rental accommodation to high-end condominiums.
  - **Mid-Rise Best Practice Guide – Proven Construction Techniques for Five and Six-Storey Wood-Frame Buildings.** This BC Housing-funded guide highlights five mid-rise wood-frame construction projects with different geographic and market conditions—from small towns to dense urban centres and from affordable rental accommodation to high-end condominiums.
  - **Residential Solar Power Systems for Affordable Housing in BC.**
  - **Solar Photovoltaic Systems for Multi-Unit Residential Buildings.** This guide addresses the key issues when replacing the lighting system in multi-unit residential buildings.

These publications and many more can be found on the BC Housing Research Centre webpage: [www.bchousing.org/research-centre](http://www.bchousing.org/research-centre)
Change Agent
Guiding and supporting others in taking actions towards sustainability

As a Change Agent, BC Housing serves as a leader in sustainability, working towards positive change with our clients and partners in the social housing sector, and the residential construction industry.

Results

<table>
<thead>
<tr>
<th>AREA</th>
<th>MEASURE</th>
<th>2016/17</th>
<th>2017/18</th>
<th>2018/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Employee Engagement on Sustainability</td>
<td>Percentage of employees who indicated they feel supported by BC Housing to make good sustainability choices at work and at home</td>
<td>Target</td>
<td>75%</td>
<td>77%</td>
</tr>
<tr>
<td></td>
<td>Result</td>
<td>85%</td>
<td>83%</td>
<td>84%</td>
</tr>
<tr>
<td>2) Leadership in Sustainability and Residential Construction&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Number of hours of training related to sustainable building practice, offered to the residential construction industry</td>
<td>Target</td>
<td>4,500hrs</td>
<td>4,500hrs</td>
</tr>
<tr>
<td></td>
<td>Result</td>
<td>5,347hrs</td>
<td>6,668hrs</td>
<td>3,214hrs</td>
</tr>
<tr>
<td>3) Tenant Engagement on Sustainability</td>
<td>Percentage of tenants who indicated they had been involved in a livegreen activity</td>
<td>Target</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Result</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>4) GHG Emissions: Employee Commuting</td>
<td>Percentage reduction in GHG emissions from employee commuting (emissions per employee from 2009 levels)</td>
<td>Target</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Result</td>
<td>-3%</td>
<td>9%</td>
<td>-2%</td>
</tr>
</tbody>
</table>

<sup>1</sup> This measure was introduced in 2016/17.

1. Employee Engagement on Sustainability

TARGET EXCEEDED

Sustainability is firmly engrained as part of our organizational culture at BC Housing, and is built into our training for new employees. We support BC Housing employees to both reduce work-related GHG emissions and integrate sustainability into their lives. Our livegreen Sustainability Plan has been in place for 10 years and has provided direction to the organization as we continued in our role as a sustainability leader in Canada in the housing sector.

Our livegreen Employee Council is an employee-run, cross-organizational team that plans activities and educational opportunities to not only raise awareness of sustainability issues but to help employees modify their behaviour and effect tangible change. The Council sets measurable goals, creates an annual strategic plan, tracks and measures outcomes, and receives professional training. Our dedication to sustainability is paying off; last year 84 per cent of employees indicated that they feel supported by BC Housing to make sustainable choices at home and at work.

KEY ACTIONS TAKEN:

- The livegreen Employee Council organizes activities to engage employees in sustainability. Every year, the Council creates a strategic plan identifying activities in the four focus areas: home, food, workplace, and commuting/travel. In 2018/19, the Council initiated over 20 campaigns and educational events for our employees throughout B.C., including:
  - A bulk product sale of green cleaning products. Employees were offered the opportunity to purchase green cleaning products in bulk, reducing the cost of these items, and encouraging staff to pick environmentally responsible products.
  - Cleanup events. Staff participated in the Great Canadian Shoreline Cleanup and removed 23 kg of garbage and 7 kg of recyclables from a Vancouver beach. Other staff took part in neighbourhood cleanups near their offices, removing litter from sidewalks and streets.
  - Vegetarian and Vegan events. Employees were invited to attend events on cooking sustainably by reducing meat and dairy consumption.
  - Commuter events. Employees participated in events designed to lower the environmental impact of commuting, including Bike to Work Week and the Commuter Challenge.
The annual sustainability survey measures the impact of the activities led by the livegreen Employee Council. These annual surveys reveal that employees are recycling more than ever (in particular containers, plastics, paper and cardboard), considering sustainability when making household decisions, and are consuming less meat and eating more organic and local foods since our 2009 baseline measurements. The percentage of employees who minimize their use of plastic bags by reusing or using cloth bags was at an all-time high, at 90.5 per cent of employees.

BC Housing’s employee-led community investment program, Community Connections, raises more than $150,000 for local charities annually. The program had a record-year in 2018/19, with staff raising over $180,000 for 70 different charities, the majority of which have strong ties to environment or social sustainability. Through the program’s Employer Supported Volunteerism component, staff volunteered over 1,200 hours at local charities.

RECOGNITION:
Largely due to our employee engagement practices, Canada’s Top 100 Employers project has named BC Housing one of Canada’s Greenest Employers for the fifth consecutive year and we have been recognized as a Transformational Company by Canadian Business for Social Responsibility.

2. Leadership in Sustainability and Residential Construction

TARGET NOT MET
One of the goals in BC Housing’s 2017-18 to 2019-20 Service Plan is to “provide leadership in sustainability and residential construction”, bringing together two areas where we have significant leadership responsibilities. We partner with industry and government organizations to initiate technical research and education projects that promote the durability and energy efficiency of new residential construction.

Last year, BC Housing provided 3,214 hours9 of training related to sustainable building practices to the residential construction industry through both in-person and online seminars. We did not meet our target of 4,500 hours in 2018/19, as many of our training hours last year were dedicated to changes to the BC Building Code.

KEY ACTIONS TAKEN:
› Now in its fourth year, BC Housing’s Building Excellence Research & Education Grants program encourages research and education to improve the quality of residential construction, as well as strengthening consumer protection for buyers of new homes in B.C. Projects funded in 2018 included:
  • Developing a method to determine the total thermal resistance of a house on-site.
  • Enhancing a Green Professional Building Skills Training program for those who build, renovate, and maintain high performance buildings.
  • Expanding the energy literacy program in the East Kootenay region to address roof and below grade building science.

For a complete list of projects funded in 2018 or for more information about the grant, please visit: https://www.bchousing.org/research-centre/research-education-grants

› Topics covered in Building Smart training for construction industry professionals included airtightness testing, the BC Energy Step Code, and mitigating thermal bridging.

3. Tenant Engagement on Sustainability

TARGET NOT MET
BC Housing is the biggest landlord in the province and manages over 7,000 housing units, which provide homes to many more tenants. In 2018/19, eight per cent of our tenants (approximately 560) participated in a livegreen activity, the same percentage as the past three years. Unfortunately this means we did not meet our target of 15 per cent. This could be partially due to insufficient promotion of events as ‘livegreen’ events.

According to our annual tenant survey, the organic waste diversion program continues to receive a significant level of participation. In 2018/19, 64 per cent of tenants reported that they currently participate or would participate in this program.

KEY ACTIONS TAKEN:
› Staff worked with tenants to reduce the amount of residential waste that goes to landfills through our organic waste diversion program.
› Last year, BC Housing conducted a pilot project called “Resilient and Connected Neighbours” at two sites in the Lower Mainland and one

9 The total number of hours is calculated based on the total number of participants for each training opportunity and the scheduled meeting time in hours

10 Source: BC Housing 2018 Tenant Survey
on Vancouver Island. The project identified opportunities and barriers for collaboration within communities. Other areas of focus included ways of enhancing tenant capacity and social connections and increasing tenant ability to better respond in challenging times.

- Community developers, partners, and other staff engaged tenants on energy efficiency, showing how real energy savings can be realized through behaviour-based energy-efficiency programs. Tenant engagement can lead to an estimated two to five per cent increase in annual energy savings. Our website has further resources on how to engage social housing tenants on sustainability focusing on energy conservation and waste diversion.

- The People, Plants & Homes program organized over 420 events for BC Housing tenants across the province, with a total attendance of more than 3,600 participants. These events included:
  - Almost 250 events related to gardening, including plant distribution, gardening workshops, festivals, and kid’s clubs.
  - 30 events focused on sustainability or access to nature. Many of these events engaged tenants in beekeeping and honey extraction.
  - Over 100 events which used therapeutic horticulture to promote health and well-being.
  - Over 50 events related to food literacy, such as cooking demos and a community kitchen program.

- BC Housing’s Community Development team works with non-profit partners to engage social housing residents in events aimed at capacity building and developing communities at BC Housing sites. In the past few years, they have worked towards a zero-waste philosophy at all of their events. Last year, the Community Development team and our non-profit partners engaged residents in the Lower Mainland in over 3,400 activities, including:
  - Over 450 activities related to capacity, resilience and self-sufficiency, including arts & crafts activities, workshops on community resuses, and tea & coffee discussions.
  - Over 1,800 events designed to promote engagement and connection in communities, including games events, community outings, and a kids’ day camp.
  - Approximately 1,120 activities related to health and well-being, including a mental wellness program, physical activities, and a food program.

Note that this is not a count of unique participants, as a participant may attend more than one People, Plants and Homes event.

4. GHG Emissions: Employee Commuting

TARGET NOT MET

In 2018, our average GHG emissions per employee from commuting returned from our lowest on record, back up to our 2009 baseline. This was due to an increase in single occupancy vehicle trips used for commuting compared to 2017, as well as an increase in the average distance our employees travel from home to work.

While our percentage of trips taken by transit has increased since our 2009 baseline, the percentage of trips in high occupancy vehicles (carpools) has decreased significantly.

KEY ACTIONS TAKEN:

- An annual commuting survey was conducted with a 52% participation rate. The data identified challenges related to our employees living further from their workplace, a reduction in carpooling, and an increase in single occupancy vehicle trips.
- Almost 100 employees participated in the 2018 Commuter Challenge, a nation-wide competition between organizations and cities. BC Housing saved 1,600 kg of CO2 during the challenge week.
- BC Housing continued to support ongoing employee programs such as:
  - A transit pass program
  - Teleworking
  - Discounts on bikes and bike accessories as well as storage and route planning for cyclists
  - Taxi vouchers in emergency situations for employees who commute sustainably
  - Employee incentives to sustainable modes of transportation through the Green Rewards Program

BC Housing tenants take part in community gardening through the People, Plants & Homes program.

BC Housing hosted Earth Day celebrations at our social housing sites.

BC Housing staff participate in the Commuter Challenge, Bike to Work Week, and a transit pass program.
Next Steps

This past year BC Housing saw some significant achievements related to our sustainability goals, but we also saw several areas where we did not meet our goals.

Our priorities and goals were established ten years ago, and while they have been updated on an annual basis, they are due for a full review.

In 2019, BC Housing initiated a strategic review of our sustainability commitments, priorities and indicators. This review involves an assessment of sustainability activities to date against best practices and the new provincial climate action plan: CleanBC. We have also started employee and stakeholder engagement to identify new opportunities for mitigation and adaptation on climate change and other sustainability priorities through our core businesses.

We will be publishing our new sustainability plan next year.