Pacific Carbon Trust
Carbon Neutral Action Report
2011

BRITISH COLUMBIA

Pacific Carbon Trust

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Overview

Pacific Carbon Trust (PCT) was established in 2008 to deliver quality made-in-BC greenhouse gas (GHG) offsets to help clients reduce their carbon footprint and to drive the growth of BC's low-carbon economy. PCT is responsible for purchasing offsets from BC-based GHG reduction projects that are in compliance with the BC Emission Offsets Regulation, ensuring world-class offsets built on recognized international standards.

This report is an overview and analysis of PCT's GHG emissions for 2011. It includes a summary of the actions taken to reduce GHG emissions to date, as well as planned actions for the upcoming year. Emissions are reported in a manner consistent with the *Greenhouse Gas Reduction Targets Act* (GGRTA).

Emissions from paper and buildings in 2011 were 2 tCO_2e. This represents a 67% reduction from 2010, in large part due to the company's relocation to a new high-performance facility, which reduced our building energy consumption.

While our emissions reported under the *Greenhouse Gas Reduction Targets Act* were reduced in 2011, our total emissions, which include business travel, increased from 26 tCO_2e to 33 tCO_2e, a 27% increase. This increase in travel emissions can be attributed to corporate efforts to further diversify the PCT portfolio by reaching out to new organizations and sectors across BC.

PCT Values – As PCT grows, its development will be centred on three core values:

1. ***Entrepreneurial***
   PCT is an innovative company that puts results above process, seizing opportunities and taking the risks necessary to drive the growth of the low-carbon economy.
2. ***Credible***
   PCT is recognized for its expertise, professional standards, and high-quality, credible carbon products.
3. ***Sustainable***
   PCT is a champion for sustainable business practices and a role model for low-carbon operations.

Emission reductions are our core business, which makes reducing and eliminating PCT's carbon footprint a priority in terms of organizational alignment. Our focus for 2009-2012 included reducing the office footprint, targeting travel patterns, and encouraging sustainable behaviour amongst employees. As we move forward, our focus will continue to be on reducing travel emissions and increasing employee engagement. We also strive to ensure that sustainability and emission reductions are embedded in our business practices throughout the entire value chain.

2011 Greenhouse Gas Emissions

PCT's total 2011 emissions were 33 tCO_2e, an increase of 27% from 2010, which is entirely due to an increase in business travel by staff. PCT's emissions in 2011 from all sources covered by the *Greenhouse Gas Reduction Targets Act,* which include building energy consumption and paper usage, were 2 tCO_2e. Operational emissions consisted of 0.4 tonnes from office supplies and 1.6 tonnes from building emissions, an absolute reduction of 74% from 2010, and nearly 80% from 2009.[1] This reduction was the result of PCT's relocation to a high-performance building mid-way through 2010. Travel emissions from 2011 were 31 tCO_2e, an absolute increase from 2010 of 62%.

A carbon offset represents a quantified reduction in greenhouse gas emissions, occurring through activities such as improved energy efficiency, which can be used to balance the emissions from another source, such as travel. PCT delivers offsets to many clients, including the BC government and broader public service organizations.

PCT Emissions by Source (tCO_2e)

Reporting Period	In Scope		Out of Scope
	Supplies	Buildings	Business Travel
2009	0.59	8.02	–
2010	0.43	6.21	18.8
2011	0.44	1.64	30.53

Similar to last year, PCT maintained a lower than average organizational carbon footprint as compared to core government (~2.7 tCO_2e/FTE). In 2011, PCT recorded 1.8 tCO_2e per full-time employee (FTE), which includes buildings, supplies, and travel. While we achieved our goal of falling below the average for core government, we did experience an overall increase of 29% from 2010 emissions levels.

PCT continued to voluntarily track emissions from business-related travel, which includes staff transportation and hotel accommodation for meetings, conferences, and other business activities that require staff to travel. While the GGRTA does not require Crown corporations to report or offset emissions from business-related travel, these emissions represent the largest source of emissions related to our organization, and PCT considers them to be material to our operations. In the spirit of sustainability and accountability, PCT has measured, reported, and offset business-related travel emissions since 2010 and will continue to do so in the future.

[1] From building-related emissions only.

Offsets Applied to be Carbon Neutral

In order to achieve carbon neutrality for 2011, PCT offset a total of 33 tonnes of CO_2e, of which 2 tonnes were required under the *Greenhouse Gas Reduction Targets Act*. The remaining 2011 offsets of 31 tonnes for business travel were offset on a voluntary basis.

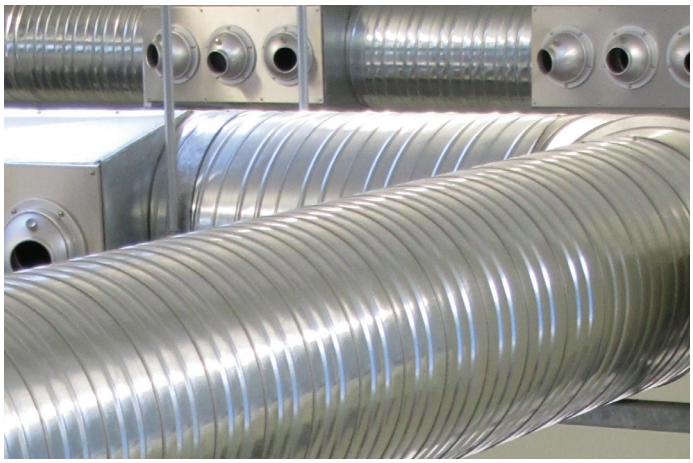
PCT has been carbon neutral under the GGRTA since 2009. We began tracking our footprint in 2009 and voluntarily offset emissions from our buildings and supplies the same year. We began tracking and offsetting our business travel emissions in 2010 and will continue to consider these emissions within our reporting and offsetting scope for the future.

Emission Reduction Activities

With environmental stewardship being one of the driving forces behind PCT, we pride ourselves in maintaining a minimal footprint in our operations and ensuring that sustainability thrives within the culture of our organization. To support that, we've taken the following actions to reduce our emissions since 2009:

BUILDINGS

In September 2010, PCT moved to a new office space in a high-performance green building. The building has not been LEED certified, however, it meets the requirements for the certification. The facility includes an ASHRAE 90.1[2] compliant HVAC system with a heat pump, which eliminates the need for natural gas onsite. The facility also features daylight sensors, energy star appliances, recycled and reclaimed building materials, and Cradle 2 Cradle[3] certified furniture.



WASTE DIVERSION

Recycling Program – PCT has a full recycling program for consumable goods. Currently we also recycle electronics at the government asset warehouse. Rechargeable batteries are used when new batteries are needed and waste batteries are properly recycled. For 2012 we are looking to participate in a tetra-pak recycling program, as this is one of the few consumable products we have yet to be able to recycle.

Composting – In 2011, PCT began participating in the Pedal to Petal compost program. Pedal to Petal is a Victoria-based, bicycle powered compost pick-up company.[4] Through participation in this program we are able to minimize PCT's landfill waste and support a local business. On average this results in 30-36lbs of organic waste diverted out of the landfill every week.[5]

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[2] Standard for minimum requirements for energy efficient buildings as recognized under LEED certification standards. http://www.ashrae.org/standards-research--technology/standards--guidelines

[3] Third-party certification program that assesses a product's safety to humans and the environment and design for future life cycles based on 5 categories: Material Health, Material Reutilization, Renewable Energy Use, Water Stewardship, and Social Responsibility http://www.mbdc.com/detail.aspx?linkid=2&sublink=8

[4] http://pedaltopetal.com/pickup-service

[5] Based on estimates from Pedal to Petal staff (2 buckets a week at approximately 15-18lbs each)

EMPLOYEE ENGAGEMENT

Green Savings Account – In 2010, PCT developed an incentive program for staff to engage in low-carbon practices. The program provides partial reimbursement annually for personal carbon reduction initiatives such as purchasing a bus pass, commuter bicycle equipment, or technology devices to reduce paper consumption.

Green Team – PCT has a staff-led green team that identifies and implements specific actions to further reduce the organization's emissions and encourage staff participation.

TRAVEL

We try to minimize travel as much as possible, although with the growth of our business, some travel is unavoidable. Approximately 95% of our carbon footprint is due to travel by our team. In managing this portion of our footprint, we utilize sustainable methods of travel and encourage our transportation providers to engage in sustainable practices and to offer carbon neutral services.

Staff are encouraged to carpool and combine meetings for any out-of-town business travel. PCT voluntarily offsets any remaining emissions related to business travel. PCT also has a no-fleet policy, and encourages staff to use public transit by making available transit tickets for in-town meetings.

PCT staff are dedicated to reducing emissions related to commuting. Currently 100% of PCT staff utilize alternative methods of travel (public transit, bike, or foot) three or more days a week and 50% of staff bike or walk to work everyday. PCT encourages staff to bike to work by providing interior bike racks, showers, and lockers.

Web and teleconference tools are also used by PCT staff on a regular basis to minimize the requirement for travel. Currently all of our meeting rooms have audio conferencing equipment and our two main boardrooms have video conferencing units installed.

PAPER & SUPPLIES

Our team continues to use laptop computers supporting paperless meetings and electronic records management practices. All PCT computers have collaborative software installed, such as OneNote and SharePoint, reducing the need to print documents and supporting virtual meetings. All paper purchases are 100% recycled content.

PCT also purchases eco-label cleaning products and organic fair-trade coffee. While these actions alone have a minimal impact on our carbon footprint as an organization, it is important in terms of consistency and value alignment for PCT. We intend to formalize a sustainable procurement policy for general purchases in the upcoming year, which will include the requirement for responsible GHG reporting and management by our suppliers.

Looking Ahead: Plans to Continue Reducing

Moving into our fifth year of operations, PCT will continue to build on the carbon neutral action plan and maintain its commitment to carbon neutrality. General actions moving forward include continuing to ensure environmental sustainability is embedded in internal business processes and policies, promoting sustainable practices and technologies internally and throughout the province, and influencing change amongst our stakeholders.

Specific actions for 2012 include the formalization of a sustainable procurement policy. While it is general practice at PCT to factor environmental sustainability into decision making, we plan to develop a process that is more rigorous and ensures environmental stewardship goes into all decision-making.

PCT champions sustainable business practices and is a role model for low-carbon operations. Over the next year PCT will take additional action to further reduce emissions, particularly in business travel, and will motivate behavioural changes across the corporation and beyond.

For information about Pacific Carbon Trust and access to our other corporate reports: www.pacificcarbontrust.com.

The PCT 2010-2012 Carbon Neutral Action Plan is available on our website under corporate reports at: www.pacificcarbontrust.com.

Approved: _____

D. Scott MacDonald, CEO Pacific Carbon Trust

Pacific Carbon Trust
British Columbia

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Carbon Neutral Company

Pacific Carbon Trust

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Actions Towards Carbon Neutrality

The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act.*

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)							
This section is either not applicable, not yet evaluated, or was completed before 2011							
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Planning/management							
Reduce office space (square meters) per employee	Ongoing/In Progress			PCT moved to a new office space in 2010. The space is an open concept and was developed to support mobility of individual staff within the office. It also supports growth in employee numbers/decrease in office space while maintaining a low-carbon footprint.	PCT will continue to manage and minimize the carbon footprint per employee for office space.	2010	No End Date (Continuous)
Leased buildings							
Establish energy performance baseline for leased buildings	Ongoing/In Progress			Currently Developing Baseline (completed full year in new building)	Continue to assess energy usage and reduce where possible.	2010	No End Date (Continuous)
Develop a green lease policy that requires green features to conserve energy be included in all lease negotiations	Ongoing/In Progress	100	% of leases negotiated since start year indicated have included green features	PCT moved to a new office space in 2010. The space is an open concept and was developed to support mobility of individual staff within the office. It also supports growth in employee numbers/decrease in office space while maintaining a low-carbon footprin	Formalize Policy	2011	No End Date (Continuous)
IT power management							
Implement server virtualization	Completed in 2011			Completed full IT switchover		2011	2011
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress			Continued to encourage workstation tune-ups.	Continue to encourage workstation tune-ups.	2009	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Ongoing/In Progress			Staff resources: information on energy meter readings for computer and kitchen appliances posted on SharePoint. Energy usage gauge available to employees.	Continue to promote awareness in office of workstation energy conservation.	2009	No End Date (Continuous)
Supplies (Paper)							
Behaviour change program							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress			Used collaborative software including SharePoint and OneNote. Additional training is available as required.	Continue to provide training when required.	2009	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Meetings are paperless, agendas and presentations are distributed electronically through OneNote and staff use tablets at meetings.	Continue to use collaborative software and portable hardware to their full potential.	2009	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress			Used very little paper overall, however staff are encouraged to use scrap paper as needed.	Continue to encourage use of scrap paper.	2009	No End Date (Continuous)

Actions to Reduce Provincial Emissions and Improve Sustainability

The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*. Public sector organizations can optionally use this section to report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Business Travel							
Policy and budgeting							
Create a low-carbon travel policy or travel reduction goal	Ongoing/In Progress			Out of-town-travel is limited by individuals through use of web and teleconferences. When staff need to attend out-of-town meetings they stack them. Green Key Hotel information provided to staff. PCT identified green key hotels that have lowest carbon footprint, staff book with these hotels when available.	2012/2013: Set baseline and reduction targets.	2011	No End Date (Continuous)
Virtual meeting technology							
Make desktop web-cameras available to staff	Ongoing/In Progress	100	% of staff have access to a desktop web-camera	Web-cameras on all staff computers/laptops.	All new computer purchases include web-camera	2009	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Completed in 2011	50	% of meeting rooms have access to video-conferencing equipment	Installed new equipment in meeting rooms. All meeting rooms are have audio conferencing equipment and two boardrooms equipped with video-conferencing units.		2009	No End Date (Continuous)
Behaviour change program							
Train staff in web-conferencing	Ongoing/In Progress			Staff are competent users of web-conferencing, as required staff are provided training. PCT hosts a number of webinars each year.	New staff will be provided training as required for web-conferencing.	2009	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress			New video conferencing equipment installed in 2011, staff trained as needed.	New staff will be provided training as required for video-conferencing.	2010	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Staff encouraged to attend virtual presentations and training. Technology to support virtual attendance of webinars, live meetings, web conferences, etc. are available to all staff.	Continue to provide technology to promote virtual meetings.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			If travel by vehicle to a meeting is necessary then staff carpool.	Continue policy.	2009	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress			New office location considered proximity to client, partner and supplier offices; and access to bus stops to support alternate green travel for staff. Staff walk, use bus tickets provided by PCT, or cycle to and from meetings rather than drive where possible.	Continue to support green travel alternatives.	2009	No End Date (Continuous)
Education, Awareness, and Engagement							
Staff Professional Development							

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Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress			Sustainability and carbon management are core to PCT's business. PCT employees take part in several conferences, training sessions and workshops in this field, which focus on or include sections related to green professional development. (e.g. Climate Smart, ISO training, Carbon Finance, Govt Carbon Neutral working groups, etc). PCT staff presented at 28 events in 2011 supporting stakeholder engagement and training relating to climate change, specifically the carbon market. Participants at these events were from all facets of business, including both private and public sector.	Continue to support green professional development.	2009	No End Date (Continuous)
Staff awareness/education							
Provide education to staff about the science of climate change	Ongoing/In Progress			PCT Staff are carbon market experts. PCT staff present to suppliers, clients and partners at various events such as the Green Team Summit, 2011 Industry workshop and Carbon Finance Conference. Information about climate change is also available on PCT's website.	Continue to engage in knowledge sharing among staff and stakeholders and maintain up-to-date information on our website	2009	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress			Provided information about climate change on PCT's website.	Continue to share information.	2009	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress			Provided tips and ideas on our SharePoint.	Continue to share information.	2009	No End Date (Continuous)
Provide sustainability education during new staff orientation	Ongoing/In Progress			New staff directed to our website and SharePoint which has sustainability information.	Continue to share information.	2009	No End Date (Continuous)
Client/public awareness/education							
Provide education to clients/public about the science of climate change	Ongoing/In Progress			PCT partnered with Climate Smart Business in 2011/2012 to assist in public education and awareness about climate change, emissions measurement and reductions, and offsetting. Also participated in several conferences to education about climate change solutions.	Launch of new Climate Smart Business series	2009	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress			Provided tips and ideas on our SharePoint.	Continue to update information on our website.	2009	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress			Provided information about climate change on PCT's website.	Continue to update information on our website.	2009	No End Date (Continuous)
Other Sustainability Actions							
Waste reduction/diversion							
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress			Recycling and composting program in place for waste diversion.	Implement tetra-pak recycling.	2009	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress			Electronics are recycled at the government asset warehouse. Rechargeable batteries are used when new batteries are needed. Waste batteries are recycled.	Maintain existng program.	2009	No End Date (Continuous)
Procurement (non-paper supplies)							

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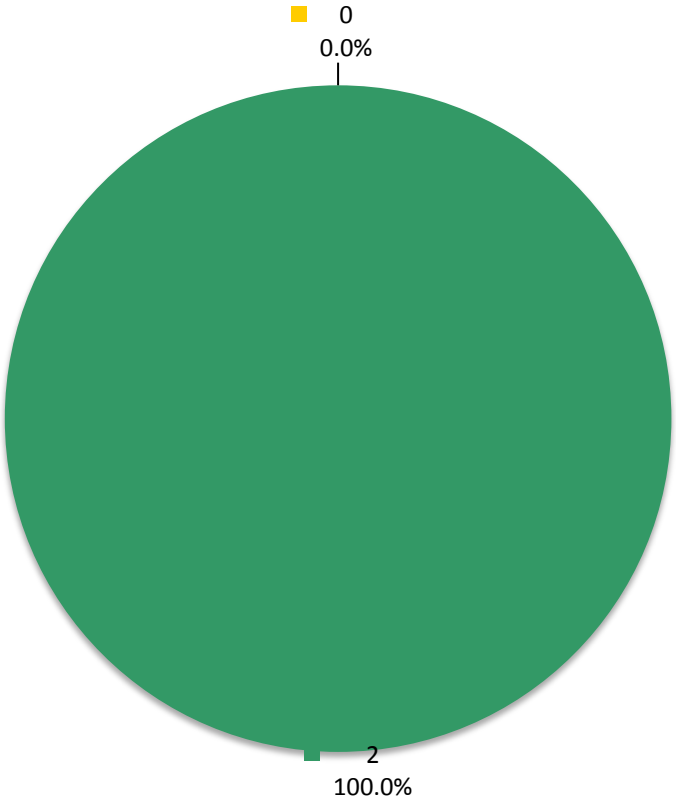
Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	Ongoing/In Progress			Green products purchased whenever possible.	Continue purchasing green products. Develop and implement sustainable procurement policy for all purchases, with minimum required specs for regular purchases.	2012	2013
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	Ongoing/In Progress			Green standards are always considered in purchase of all items (capital and non-capital).	Develop and implement sustainable procurement policy for all purchases with specified considerations and scoring for sustainable attributes.	2012	2013
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress			Continued to use caterers that use local, sustainable or organic foods and use only reusable plates, containers and cutlery for catered events.	Incorporate food and catering purchases within sustainable procurement policy.	2012	2013
Indoor air quality							
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress			All applicable office purchases are low VOC such as office furniture, carpet, and paint. PCT purchases are also locally sourced when possible, and sustainable.	PCT will continue with current practises to purchase low VOC, sustainable and local products.	2009	No End Date (Continuous)
Commuting to and from home							
Introduce telework/work from home policy	Ongoing/In Progress			Staff are able to work from home when required. Staff provided with laptops and mobile phones to enable working from remote locations. Video conference units installed in two boardrooms and audio conference units available in all meeting rooms.	Continue enabling staff to work from home.	2009	No End Date (Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress			Staff are encouraged to commute by foot, bicycle, carpool and public transit. The majority of PCT staff currently commute to and from work in this manner.	Maintain culture of sustainable commuting.	2009	No End Date (Continuous)

Pacific Carbon Trust
Greenhouse Gas Emissions by Source
for the 2011 Calendar Year (tCO_2e*)



Total Emissions: 2

Stationary Fuel Combustion (Building Heating and Generators) and Electricity

Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2011 (Generated May 18, 2012 10:27 AM)

Total offsets required: **2**. Total offset investment: $**50**. Emissions which do not require offsets: **0** **

*Tonnes of carbon dioxide equivalent (tCO_2e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

** Under the *Carbon Neutral Government Regulation* of the *Greenhouse Gas Reduction Targets Act,* all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.