**March 2011** 

### **Executive Summary**

Pacific Carbon Trust's (PCT) mandate is to deliver quality BC-based greenhouse gas offsets to help clients, including public sector organizations, meet their carbon reduction goals and to support growth of the industry in BC. One of PCT's values is to champion sustainable business practices and to be a role model for low-carbon environmentally responsible operations.

Actions were set out in PCT's Carbon Neutral Action Plan for 2009-2012. Three key opportunities in reducing PCT emissions were realized during 2010:

- changing the office footprint,
- aggressively targeting travel patterns, and
- engaging all employees in sustaining the change.

#### **2010 Greenhouse Gas Emissions**

PCT maintained a lower than average organizational carbon footprint as compared to core government. In 2010, PCT recorded 1.4 tonnes CO2e /FTE; an overall decrease of 22% from 2009. Total emissions for 2010 were 25.6 tonnes, including 6.8 tonnes for operations and 18.8 tonnes for employee business travel.

Operational emissions consisted of 0.5 tonnes from office supplies and 6.3 tonnes from building emissions. PCT moved to a high-performance green building resulting in a reduction of 20% in building emissions compared to 2009.

PCT continued to voluntarily track emissions for employee business travel. Total emissions from business travel were 18.8 tonnes; or 1.2 tonnes per employee for 2010.

#### Offsets Applied to Become Carbon Neutral in 2010

PCT was carbon neutral for 2010, offsetting a total of 25.6 tonnes of CO2e of which 6.8 tonnes were required under the *Greenhouse Gas Reductions Target Act*. The remaining 2010 offsets of 18.8 tonnes for business travel were offset on a voluntary basis, public sector organizations were not required to offset employee business travel for 2010.

#### Actions Taken to Reduce Greenhouse Gas Emissions in 2010

PCT made substantive progress on managing its carbon emissions in 2010. PCT moved to a new office space in September. The new office, a high-performance green building, supported PCT to reduce building emissions from 0.66 tonnes/month to 0.23 tonnes/month.



PCT's new office includes environmental options such as an HVAC system and heat pump, light sensors on all lights and low-flush toilets.

All new office furniture purchased was Cradle 2 Cradle<sup>1</sup> certified, and all appliances are energy star rated. PCT also purchased a reclaimed wood boardroom table and ensured a full recycling program was in place for consumable goods.

PCT has a staff-led green team and a green savings account. Both of these initiatives engage and encourage staff to identify and implement specific actions to reduce carbon emissions even further.

PCT incorporated greener approaches for purchase of consumable goods, cleaning products and capital purchases with its move to the new office space.

<sup>&</sup>lt;sup>1</sup> Cradle to Cradle<sup>®</sup> Certification is a multi-attribute eco-label that assesses a product's safety to humans and the environment and design for future life cycles.

PCT takes a low-emissions approach for business travel. Staff are encouraged to carpool and must stack 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 encourages staff to bike to work by providing staff with interior bike racks, showers and lockers. PCT also encourages participation in bike-to-work week.

Web and teleconference tools are used by PCT staff on a regular basis. Staff continue to use tablet computers supporting "paperless" meetings and electronic records management. All computers have collaborative software installed, such as OneNote and SharePoint, reducing the need to print documents and to further support virtual meetings.

#### Plans to Continue Reducing Greenhouse Gas Emissions 2011 – 2013

As PCT moves into its fourth year of operations, it will build on the carbon neutral action plan and maintain its carbon neutral status. As a growing organization in the low-carbon economy, PCT plans to:

- continue to ensure business processes and policies have a "green" lens to ensure environmental sustainability is factored into all decisions,
- promote sustainable practices and technologies, and
- influence change within its sphere of suppliers, clients, partners and business community.

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

For information about the Pacific Carbon Trust: www.pacificcarbontrust.com

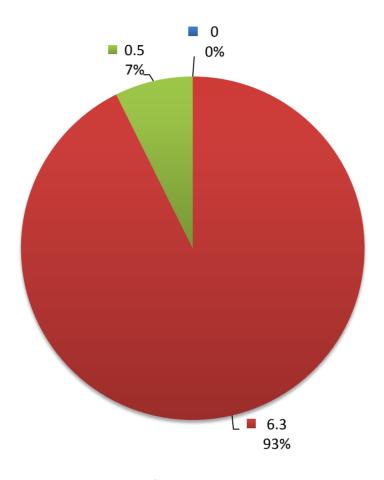
The PCT 2009-2012 Carbon Neutral Action Plan is available on our website under corporate reports at: <a href="https://www.pacificcarbontrust.com">www.pacificcarbontrust.com</a>

Approved:

D. Scott MacDonald, CEO Pacific Carbon Trust

### **Pacific Carbon Trust**

Greenhouse Gas Emissions by Source for the 2010 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 6.8** 

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion and Electricity (Buildings)
- Supplies (Paper)

#### Offsets Applied to Become Carbon Neutral in 2010

Total offsets purchased: 6.8. Total offset investment: \$170.00. Emissions which do not require offsets: 0 \*\*

<sup>\*</sup>Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) 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.

<sup>\*\*</sup> 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.

## **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*.

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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year		
Mobile Fuel Combustion (Fleet and other mobile equip	ment)							
This section is either not applicable, not yet evaluated, or was completed before 2010								
Stationary Fuel Combustion, Electricity and Fugitive Em	nissions (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		Moved to a high-performance green building in September 2010.	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	In Development		Moved to a new high-perfromance green building in September 2010, it is the policy of PCT to apply a "green lens" to make choices for the office space.	Continue to apply "green lens" to all lease negotiations and decisions in future.	2010	No End Date (Continuous)		
IT power management								
Implement server virtualization	Ongoing/In Progress		Completed IT assessment, including server virtualization.	Implementation of IT plan includes server virtualization for 2011.	2010	2011		
Apply auto-sleep settings on computer monitors and CPUs	Completed in 2010		CPU's have sleep mode.		2009	2010		
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Completed in 2010	% of devices have auto-sleep settings applied	MFD has sleep mode.		2009	2010		
Appliances and electronic devices								
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Completed in 2010		Purchased energy star appliances/devices when available.		2009	No End Date (Continuous)		
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)		
Ask staff to unplug electrical equipment or switch off power bars when not in use	Completed in 2010		Unplugged electrical equipment at the end of the day. Signs are posted as a further reminder.	Staff will maintain this practise.	2009	No End Date (Continuous)		
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Completed in 2010		Closed blinds at the end of the day before leaving the office. Signs are posted as a further reminder.	Staff will maintain this practise.	2009	No End Date (Continuous)		
Encourage staff to use air dry setting on dishwashers	Completed in 2010		Dishwasher set to air dry.	Dishwasher will be set to air dry.	2009	2010		

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
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)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Completed in 2010		Turned off lights at the end of the day. Signs are posted as a further reminder. Many of the lights have sensors to automatically turn them on or off.		2009	2010
Supplies (Paper)						
Paper Type						
Purchase 100% post-consumer recycled paper	Completed in 2010	% of total paper purchased contains 100% recycled content	PCT buys all 100% post consumer recycled paper for printing.		2009	No End Date (Continuous)
Printer/document settings						
Switch networked printers and photocopiers to automatic double- sided	Completed in 2010	% of network printers or 100 photocopiers are set to automatic double-sided	Set its MFD to automatic double-sided.		2009	2010
Electronic media in place of paper						
Use electronic document library for filing common documents	Completed in 2010		SharePoint and shared computer drives are used for electronic filing system.		2009	No End Date (Continuous)
Post materials online that were previously printed	Completed in 2010		Materials are posted for staff meetings and working groups either on SharePoint or OneNote for distribution.		2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress		Use electronic payroll notification.	Continue to maintain 100% electronic payroll stubs in 2011 for existing and new employees.	2009	No End Date (Continuous)
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 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	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.	2011: Set baseline and reduction targets.	2009	No End Date (Continuous)
Virtual meeting technology						
Make desktop web-cameras available to staff	Ongoing/In Progress		Shared web cameras available for all staff.	Continue to provide all staff with access to web cams, reassess need for individual web cams.	2009	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress		Teleconference and web conference tools used currently by all staff to conduct out-of-town meetings as much as possible. Information technology (IT) plan included assessment of installing video-conferencing equipment in PCT meeting rooms.	IT Plan includes installation of video-conferencing equipment in PCT meeting rooms in 2011.	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. In 2010 PCT hosted four webinars for industry, in addition to partnering with Stantec and the Climate Registry on business opportunities in the carbon market.	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	In Development		Assessment on training needs completed for development of Information Technology plan.	Training will be provided to staff 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		Decision on 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.	Continue to support green travel alternatives.	2009	No End Date (Continuous)
Other Business Travel Actions						
PCT will continue to voluntarily track and offset the organization's business travel emissions.	Ongoing/In Progress		Tracked travel emissions and will purchase offsets to ensure PCT 2010 business travel is carbon neutral.	Continue to track and purchase offsets to ensure PCT	2009	No End Date (Continuous)
Education, Awareness, and Engagement						

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Staff Professional Development						
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		PCT employees participated in several conferences, training sessions and workshops in this field, which focused on or included sections related to green professional development. (e.g. Climate Smart, ISO training, Carbon Finance, Govt Carbon Neutral working groups, etc).  PCT staff presented at 40 events in 2010 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)
Include green options in employee performance measurement system	Ongoing/In Progress		One of PCT's values is to be sustainable. PCT completes annual employee performance reviews. One key metric for the review includes assessing individuals on how they contribute to PCT's efforts to be environmentally sustainable.	Continue to include sustainability metric in PCT's employee review process.	2010	No End Date (Continuous)
Staff awareness/education						
Provide education to staff about the science of climate change	Ongoing/In Progress		Provided reports on climate change and carbon market are shared, including information related to science of climate change.	Continue to share information.	2009	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		Provided articles, tips and news shared between staff; BC Government and BC Hydro green tips made available to staff.	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 Staff are carbon market experts. PCT staff present to suppliers, clients and partners at various events such as the Green Team Summit, 2010 Industry workshop and Carbon Finance Conference. Information about climate change is also available on PCT's website.	Continue to update information on our website.	2009	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		Provided information about climate change on PCT's website.	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						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		New office has water efficent fixtures for toilets, taps and showers.	Maintain water efficient fixtures	2010	No End Date (Continuous)
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 program in place for waste diversion.	Continue with recycling program.	2009	No End Date (Continuous)

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
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.	Continue to recycle.	2009	No End Date (Continuous)
Procurement (non-paper supplies)						
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 are purchased whenever possible.	Continue to purchase green products	2009	No End Date (Continuous)
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). Purchased reclaimed wood boardroom table for new office and rubber flooring that can easily be moved to new space. New office furniture is cradle 2 cradle.	Continue to purchase green sustainable products.	2009	No End Date (Continuous)
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress		Identified caterers that use local, sustainable or organic foods and use only reusable plates, containers and cutlery for catered events.	Continue to use sustainable food suppliers	2009	No End Date (Continuous)
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		A number of staff work from home when possible	Continue to explore work from home options	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.	Continue to encourage staff to find alternative methods to get to work.	2009	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Completed in 2010		New office location has showers and lockers.		2009	2010
Provide secure bicycle storage	Completed in 2010		New office location has in-office bike storage		2009	2010