



COLUMBIA BASIN TRUST

Carbon Neutral Action Report 2010

EXECUTIVE SUMMARY

Creating a legacy of environmental well-being is one of the cornerstones of Columbia Basin Trust's (CBT's) mission. Our efforts to support carbon neutrality are twofold: our Delivery of Benefits initiatives and programs support a variety of community projects aimed at reducing carbon emissions, while our own corporate actions strive to be carbon neutral.



Recent CBT-supported community projects have ranged from multi-year, collaborative partnerships that weave through the operations of local governments of all levels, to grassroots community efforts that allow Basin residents to become more self-sufficient and less reliant on carbon emissions-creating activities. Communities, businesses, educators and the general public have all learned and benefited from these projects.

At the same time, the effects of our own actions upon the environment are always top of mind, and we continue to successfully implement our Carbon Neutral Action Plan into corporate operations.

For example, in 2010 we encouraged CBT employees to walk, run or bike to work for Earth Day, and provided bike racks, lockers and showers so they can continue to do so on a regular basis. We regularly encourage carpooling when driving is a must, taking the stairs versus the elevator and drinking tap water versus bottled water. We have also installed, or are in the process of installing, water filters in our offices to support our employees' choices.

Although CBT's corporate operations do not attract large outputs of greenhouse gas emissions, our reach across the Columbia Basin stretches over 100,000 square kilometres, and therefore may require CBT employees to travel long distances. We have reduced the need to travel by implementing videoconferencing equipment in all four offices, as well as in the remote community of Valemount. The equipment is frequently used by both CBT employees and community groups and has become our #1 method of face-to-face interaction.

In short, CBT strives to be an organization other Basin organizations can look up to and emulate. We will continue to look at ways our processes can become more environmentally friendly, and will further focus our efforts in future years.



Christine Lloyd
Director, Finance and Operations

2010 GREENHOUSE GAS EMISSIONS

CBT tracks and reports all sources of emissions covered by the Greenhouse Gas Reduction Targets Act. CBT's greenhouse gas emissions for 2010 were 21.68 tonnes CO₂e.

2010 OFFSETS

CBT purchased 21.68 tonnes CO₂e in offsets from Pacific Carbon Trust for 2010 emissions at a total cost of \$542.

EMISSIONS REDUCTION ACTIVITIES

Actions Taken to Reduce Greenhouse Gas Emissions in 2010

CBT's Support of Community Efforts

Through its Delivery of Benefits program, CBT supported a variety of community projects aimed at reducing carbon emissions, including but not limited to:

1. **Carbon Neutral Kootenays:** A three-year project, currently in its second year, that is a collaboration of local governments and First Nations in partnership with CBT. The project is focused on reducing energy consumption and greenhouse gas emissions from municipal, regional and First Nations' corporate operations. For more information: http://www.cbt.org/Initiatives/Climate_Change/?Reducing_Emissions.
2. **CBT's Communities Adapting to Climate Change Initiative:** A CBT-supported initiative that assisted five Basin communities in completing climate change adaption plans, including emissions reduction actions. These plans were based on an evaluation of climate change-related impacts and local vulnerabilities. For more information: http://www.cbt.org/Initiatives/Climate_Change/?Adapting_to_Climate_Change.
3. **Columbia Basin Water Smart Initiative:** A regional water conservation program that provides support to Basin local governments to develop water conservation plans. Water Smart aims to achieve a 20 per cent Basin-wide reduction in community water consumption by 2015. Reductions in water use will result in energy savings and emissions reductions. For more information: <http://www.cbt.org/watersmart>



4. **Columbia Basin Environmental Education Network Workshops:** Professional development workshops that encourage Basin educators to deliver relevant and engaging environmental education to students throughout the region. For more information: [http://www.cbt.org/newsroom/?view&vars=1&content=News Release&WebDynID=1317](http://www.cbt.org/newsroom/?view&vars=1&content=News+Release&WebDynID=1317).
5. **Extended Outreach—Revelstoke Community Energy and Emissions:** A CBT-supported community workshop focusing on opportunities in the business sector to reduce energy and emissions.
6. **Community Gardens:** A CBT-supported project that encourages people to reduce their carbon footprints by growing their own vegetables as opposed to having them trucked in from far distances.
7. **Columbia Mountain Institute of Applied Ecology:** A CBT-supported conference in Nelson outlining the mechanisms of carbon intake, storage and release, and how carbon management has the potential to mitigate climate change.
8. **Reducing Emissions:** A CBT-developed initiative for CBT employees and the general public that outlines ways to reduce carbon emissions. For more information: http://www.cbt.org/Initiatives/Climate_Change/?Reducing_Emissions.

CBT also installed videoconferencing equipment at the Village office in Valemount. This equipment allows residents to attend/host meetings and participate in training courses without travelling.

CBT'S Corporate Operations

CBT engaged in a number of carbon emissions reduction actions in 2010, including hosting an employee Earth Day competition, for which staff in each of CBT's four offices were encouraged to walk, run or bike to work. CBT added to the challenge by asking staff to set goals to continue commuting in environmentally friendly ways. Goals submitted were distributed to all staff.

CBT also supported employees' efforts by installing lockers in its Castlegar building and providing access to shower facilities. Bike racks are also available to staff at each of CBT's four offices.

In 2010, CBT installed a water filtration system at its Castlegar location and encouraged staff to drink tap water instead of bottled water in an effort to reduce energy use by water coolers.



Throughout 2010, CBT distributed reminders to all staff to turn off lights when not in use, take the stairs instead of the elevator, walk/run/bike to work and use the air-dry setting on the dishwasher. Staff responded positively to these reminders.

CBT continued to emphasize and improve its videoconferencing and teleconferencing infrastructure in an effort to reduce travel. In 2010, CBT enhanced fibre optics in Cranbrook and Golden, which improved videoconferencing systems in these communities. CBT has seen increased use of its videoconferencing facilities by both staff and outside community groups.

As the host of a public symposium in 2010, CBT implemented several ways to make the symposium sustainable. For example, CBT donated all unused food to the local food bank, sourced food locally and used reusable, recycled or recyclable products. Carpooling was encouraged and managed by CBT through an online system that matched drivers and passengers geographically. More efforts are listed at <http://www.cbt.org/2010Symposium/Sustainability>. These strategies were very well received by symposium participants.

In addition, based on a carbon offset calculation, CBT donated \$1,500 to a Revelstoke environmental organization, the North Columbia Environmental Society. This donation will go toward initiatives that will further encourage carbon reduction.

Plans to Continue Reducing Greenhouse Gas Emissions 2011 – 2013

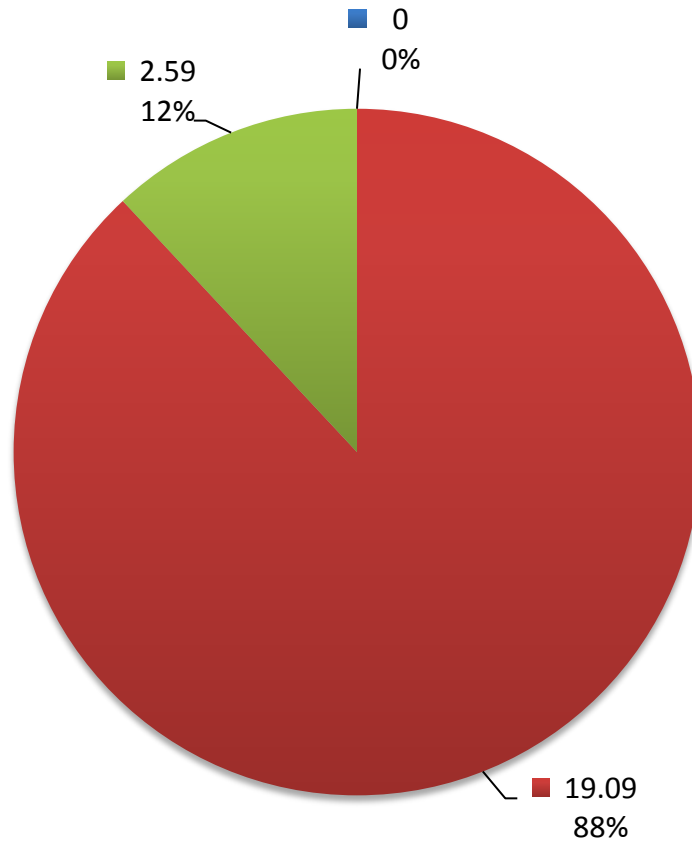
CBT will remain committed to reducing carbon emissions through ongoing Delivery of Benefits programs and initiatives such as Carbon Neutral Kootenays and Water Smart.

CBT also remains committed to reducing carbon emissions in its own corporate operations. For example, in an effort to reduce paper consumption, CBT will be strongly encouraging the adoption of paperless meetings in 2011. Plans include installing the necessary paperless hardware and software, as well as providing staff and Board members with the necessary training and support.



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Greenhouse Gas Emissions by Source for the 2010 Calendar Year (tCO₂e*)



Total Emissions: 21.68

- 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: **21.68**. Total offset investment: **\$542.00**. Emissions which do not require offsets: **0** **

*Tonnes of carbon dioxide equivalent (tCO₂e) 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 Government Neutral 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.

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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 12/31/10)	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 equipment)						
This section is either not applicable, not yet evaluated, or was completed before 2010						
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
Complete energy retrofits on existing, owned buildings	Completed in 2010	100 % of owned buildings have undergone energy retrofits since start year indicated	Finalized review of recommendations and determined not further action required.		2009	2010
Retrofitting owned buildings						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Completed in 2010	100 % of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Finalized review of recommendations and determined not further action required.		2009	2010
Upgrade lighting systems during retrofits	Completed in 2010	100 % of retrofits since start year indicated had lighting systems upgrades	Finalized review of recommendations and determined not further action required.		2009	2010
Upgrade/adjust control systems during retrofits	Completed in 2010	100 % of retrofits since start year indicated had control system upgrades or adjustments	Finalized review of recommendations and determined not further action required.		2009	2010
IT power management						
Implement server virtualization	Ongoing/In Progress		Ordered new energy efficient servers.	Replace servers with new energy efficient servers. Implement server virtualization which will reduce servers from 15 to 7.	2010	2011
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	80 % reduction in printers, copiers, and/or fax machines since start year indicated	No action was taken.	Add fax function to multi-function equipment when stand-alone fax fails. Will not replace stand-alone color printer when it fails.	2010	2013
Appliances and electronic devices						
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	In Development		Planning stages of developing purchasing policy for lamps.	2011: Develop and implement purchasing policy for lamps.	2010	2012
Behaviour change program						
Ask staff to unplug electrical equipment or switch off power bars when not in use	Completed in 2010		It was determined that power bars would not be advisable due to issues with after hours IT maintenance.		2010	2010
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress		Sent periodic reminders to staff to close blinds at the end of the day.	Send periodic reminders to all staff.	2009	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress		Sent periodic reminders to staff to use air dry setting.	Send periodic reminders to all staff.	2009	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress		Sent period reminders to staff to use the stairs.	Send periodic reminders to all staff.	2009	No End Date (Continuous)

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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
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Sent period reminders to staff to turn off lights and other electronic devices when not in use.	Send periodic reminders to all staff.	2009	No End Date (Continuous)
Other Stationary Fuel Combustion and Electricity Actions							
Encourage staff to use tap water instead of water coolers.	Completed in 2010			Installed water filtration system in kitchen. Encouraged staff to use tap water instead of water coolers.		2010	2010
Supplies (Paper)							
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Completed in 2010	100	% of network printers or photocopiers are set to automatic double-sided	Programmed equipment default settings to double-sided print.		2010	2010
Behaviour change program							
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Continued discussions around implementing paperless meetings.	Assess alternative methods to paper meetings. Address issues relating to the cultural change required in going paperless.	2009	2012
Encourage re-use of scrap paper	Ongoing/In Progress			Sent period reminders to staff to use scrap paper before shredding or recycling.	Send period reminders to all staff.	2009	No End Date (Continuous)

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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						
Behaviour change program						
Encourage carpooling to meetings	Ongoing/In Progress		Included carpooling reminders in meeting notices to staff.	Continue to remind staff to carpool to meetings.	2009	No End Date (Continuous)
Education, Awareness, and Engagement						
Team-building						
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress		Carbon Neutral Action Team (CNAT) held meetings via videoconference. All required resources made available.	Assess broadening CNAT to include members from the Board of Directors, Youth and other communities.	2009	No End Date (Continuous)
Staff awareness/education						
Provide education to staff about the science of climate change	Ongoing/In Progress		"What Can You Do?" tips provided on CBT website. See: http://www.cbt.org/Initiatives/Climate_Change/?Reducing/Emissions	Assess and update "What Can You Do?" tips as necessary.	2009	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		CBT's Water Initiatives department, in addition to delivery of benefits partners, researches and provides extensive information to staff on water conservation. See: http://www.cbt.org/Initiatives/Water	CBT will continue to provide information to staff on water conservation.	2009	No End Date (Continuous)
Client/public awareness/education						
Provide education to clients/public about the science of climate change	Ongoing/In Progress		CBT was involved in a variety of climate change educational workshops and developed educational material (brochures, pamphlets and web-based material). See: http://www.cbt.org/Initiatives/Climate_Change	CBT will continue to provide climate change support through our delivery of benefits programs.	2009	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		CBT's Water Initiatives department, in addition to delivery of benefits partners, researches and provides extensive information to residents on water conservation. See: http://www.cbt.org/Initiatives/Water	CBT will continue to provide information to the public through our delivery of benefits programs.	2009	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress		"What Can You Do?" tips provided on CBT website. See: http://www.cbt.org/Initiatives/Climate_Change/?Reducing/Emissions	Assess and update "What Can You Do?" tips as necessary.	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	Completed in 2010		Replaced inefficient water fixtures with efficient, low-flush models.		2010	2010
Commuting to and from home						

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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
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		Sent period reminders to staff to bike or walk to work. Held a contest in the summer to determine which of the four offices walked or biked the most kilometers to and from work on a particular day.	Send periodic reminders to all staff. Consider holding friendly competitions once or twice a year to encourage staff to walk or bike 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		Provided staff with access to shower facilities. Installed lockers in a common area for all staff to use.		2010	2010
Other Sustainability Actions						
Provide sustainability targets for public events	Ongoing/In Progress		CBT created sustainability targets for hosting public events. Targets include car pooling, bussing, arranging accomodations within walking distance of meeting venue, paper reduction, water usage reduction, and catering services sourced locally wherever possible. CBT applied these strategies when it hosted a public symposium in 2010. These strategies were distributed electronically to attendees.	CBT will contue to use sustainability targets when hosting public events and will continue to distribute these strategies to attendees.	2010	No End Date (Continuous)