

BC Oil and Gas Commission

Carbon Neutral Action Report 2010



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EXECUTIVE SUMMARY

The BC Oil and Gas Commission (Commission) is the Crown corporation responsible for regulating oil and gas activity for the province of B.C. and is committed to environmental sustainability in its business practices and transparent reporting of the same. This is the second annual Carbon Neutral Action Report prepared in accordance with the reporting guidelines under the *Greenhouse Gas Reduction Targets Act* adopted in November 2007.

2010 was marked by recognizing and enhancing the awareness around carbon reduction actions specific to the Commission. Sustainable business practices and steps to environmentally conscious living continue to foster a culture of conservation. To become carbon neutral, emission offsets for 433 tonnes of CO₂e were purchased from the Pacific Carbon Trust.

The Commission's Health and Wellness Program and associated initiatives continue to motivate positive behavioural shifts by providing employees and their families health education, nutritional information and wellness activities. The program is integral to the Commission's culture and supports positive lifestyle choices within and outside of the workplace.

Commission employees in the Victoria LEED® Platinum Dockside Green office continue to provide real-time feedback in post-occupancy evaluation. Identifying what works and what doesn't in a completed building is especially important in projects with innovative technologies, products, and design approaches. The Commission will use and adapt these learnings in its four other office locations around the province, especially in the planning for new office space in Fort St. John.

The Commission's Mission, Vision and Values and strategic objectives renewed in 2010 will guide the implementation of the carbon neutral plan. The over-arching priorities for the organization include a commitment to conserving the environment and fostering values and behaviours that are the foundation for successfully executing carbon reduction initiatives.

The Commission's Service Plan anticipates strengthening performance in employee-led green initiatives. This enhances the Commission's, and the Province's, commitment to continuous improvement and upholding the best interests of British Columbians.

MISSION

We regulate oil and gas activities for the benefit of British Columbians.

We achieve this by:

- Protecting public safety,
- Respecting those affected by oil and gas activities,
- Conserving the environment, and
- Supporting resource development.

Through the active engagement of our stakeholders and partners, we provide fair and timely decisions within our regulatory framework. We support opportunities for employee growth, recognize individual and group contributions, demonstrate accountability at all levels, and instill pride and confidence in our organization.

We serve with a passion for excellence.

VISION

To be the leading oil and gas regulator in Canada

VALUES

Respectful

Accountable

Effective

Efficient

Responsive

Transparent



MESSAGE FROM THE COMMISSIONER

A strategically-focused organization aligns its efforts to achieve its overarching goals. The renewal of this foundation in 2010 has seen employees, executive and Board members alike identify the need to focus the organization's attention on regulating oil and gas activities for the benefit of British Columbians. Inherent to this need is to continue advancing the green initiatives the Commission has underway while identifying additional ways we can support our communities and our own operations in the quest of being carbon neutral.

Our agency is extremely fortunate to have many talented and dedicated employees who have the capability to develop a leading oil and gas regulatory agency. These employees feel passionately about the work they do, and the lasting impressions their work leaves behind. Continuing with the plan set forth in the 2009 Carbon Neutral Action Report, the Commission has the resources behind numerous initiatives and projects that are carried out by employees of various functions across the organization. The Commission is an extremely engaged group which bodes well in the recognition that the process towards carbon neutrality is not carried out by a single individual or exercise, but is a continuous effort by the entire organization.

True to its values of accountability and transparency, the Commission is taking its carbon reduction commitment seriously. As a formal measure, the 2011/12 - 2013/14 Service Plan includes public reporting of carbon emissions per employee. Using 2010 values as a baseline, the effectiveness of carbon reduction actions will be tracked in future years.

The Commission is committed to advancing its position as the leading oil and gas regulator in Canada.



Alex Ferguson
Commissioner and CEO



ACTIONS TAKEN TO REDUCE GHG EMISSIONS IN 2010

2010 EMISSIONS

The Commission submits the second Carbon Neutral Action Report 2010 in accordance with the *Greenhouse Gas Reduction Targets Act*.

The Commission's total 2010 emissions estimated by SMARTTool under the reporting requirements of the Act were 441.62 tCO₂e. By source, these emissions distribute as follows: Fleet - 299.2 tCO₂e; Buildings - 130.12 tCO₂e; Procurement - 12.3 tCO₂e. Emissions estimated for offset purposes were 433 tCO₂e.

The Commission aims to be a leader among oil and gas regulatory agencies by addressing environmental sustainability and improving overall environmental performance. Actions and behaviour shifts targeting emissions reduction from Vehicle Fleet, Facilities and Information Technology are discussed below.

VEHICLE FLEET

The Commission's fleet consists of 39 vehicles, all used in the northern locations. These vehicles are used mostly by compliance and enforcement staff as the primary transportation to the field for oil and gas inspections.

As per the initiative set forth in the 2009 Carbon Neutral Action Report, the division responsible for occupational health and safety researched various programs specific

to providing fleet driver training to reduce fuel use. The programs identified confirmed the Commission Motor Vehicle Policy represents best practices considering the work environment. Inherent to the Policy, employees cannot drive at excessive speeds and can only idle when warming up vehicles before heading out into the field, not for the duration of the day or at wellsites.

A defensive eco-efficient driver education program was piloted in 2010, combining safety and environmental impact training. Thus far, forty-six employees have been trained, with the program continuing in the coming years.

The Commission has three hybrid vehicles all located in Fort St. John. The Commission continues to assess the viability of acquiring more fuel-efficient vehicles.

The principles of right-sizing and optimizing fuel efficiency for road and weather conditions in which vehicles are operated will govern future acquisitions. A needs assessment has been completed and a procurement plan is in place to meet the attributed vehicle needs.

During 2010, the Motor Vehicle Policy ensured regular maintenance of fleet vehicles and fuelling and usage best practices. Fleet information is collected monthly for preventative maintenance purposes to ensure all vehicles are serviced based on mileage.



ACTIONS TAKEN TO REDUCE GHG EMISSIONS IN 2010

Assisting in the synergy between road safety and fuel economy, the GPS satellite locator systems installed in Commission vehicles target employee safety and time efficiency. The GPS systems have led to a tangible reduction in fuel use by optimizing travel distances to wellsites and preventing drivers from getting lost in the field. The centralized resource scheduler continues to be utilized in booking fleet vehicles to optimize employee carpooling.

FACILITIES

2010 was marked by recognizing and enhancing the green initiatives launched over the previous year, specifically monitoring the performance of the green features of the Dockside Green building in Victoria.

This LEED® Platinum building seeks to reduce its environmental footprint through reduced energy usage, water conservation, cradle-to-cradle materials and furniture, and built-in recycling and composting programs.

Planning continues for a LEED® Gold headquarters in Fort St. John. The current building does not correspond to contemporary design and government smart-living specifications although conservation efforts have been made in all five office locations as detailed below.

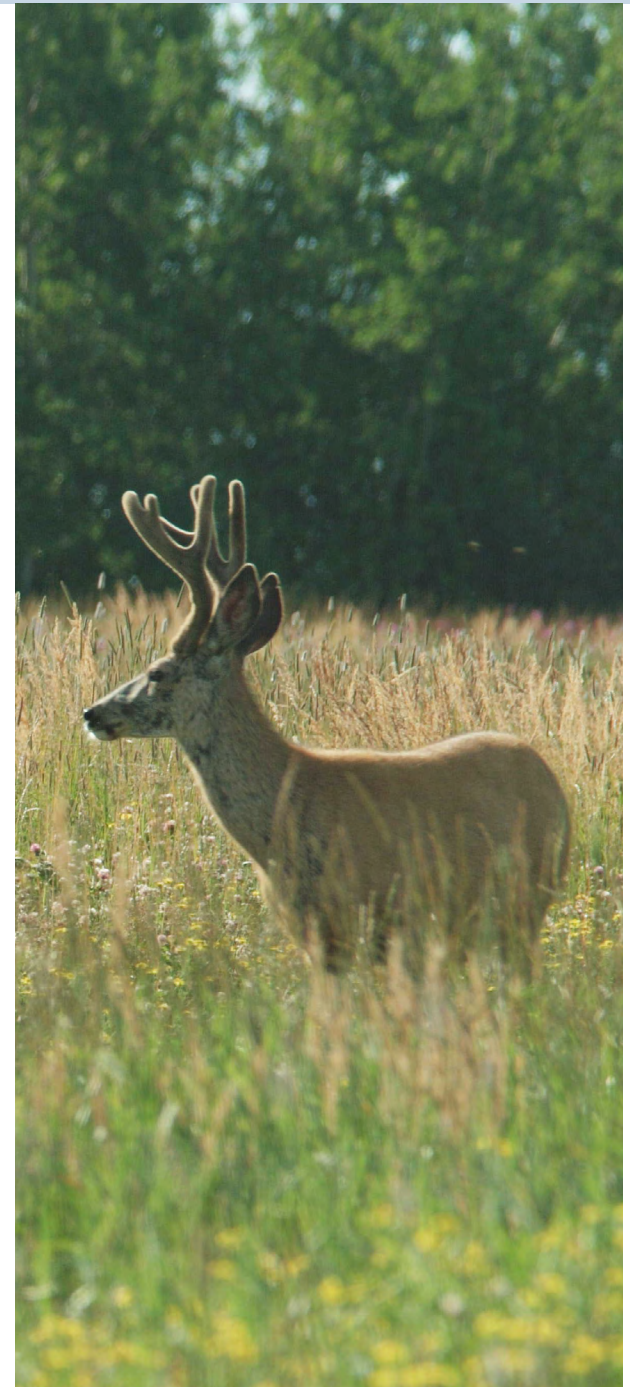
The office space at all Commission locations is analyzed quarterly for workspace availability and efficiency

through ratios between vacant and occupied space, and between common areas, cubicles, meeting rooms and offices.

For energy efficiency, workflow and communications considerations, current trends in office space design call for utilizing the largest windowed space along external walls for cubicles where the majority of employees spend most of their time. This concept has worked well in the Victoria office where offices and meetings rooms are located in the middle of the floor plan, providing cubicle space with the greatest exposure to daylight, reducing energy consumption and costs.

The Dockside Green building is heated by a biomass plant that, when completely operational, will use waste wood biomass to produce clean gas heating for office space and hot water. This eliminates the need for boilers in individual buildings, saving on maintenance, replacement costs and associated CO₂ emissions. The biomass system is backed up by central boilers in the event the primary plant is shut down. The greenhouse gas neutral heating system in Victoria will significantly reduce the carbon offsetting cost that the Commission will incur following 2010, as well as operating costs for the building.

As 2010 was the first full year of occupying the green office space, employees had to make adjustments in getting used to how the building is heated and cooled. The building uses a 100 per cent fresh air system with



ACTIONS TAKEN TO REDUCE GHG EMISSIONS IN 2010

a heat recovery ventilator that saves energy by pre-warming incoming air. All windows open for natural ventilation, and air quality inside the building is superior to other commercial premises constructed to regular specifications.

Without statistical precision, it is believed that the air quality and ventilation systems in the building have contributed to the reduction in sick time taken by Victoria employees from 31 hours average per employee in 2009 to 23 hours average per employee in 2010.

Over 2010, the Dockside Green community has grown to include amenities employees can use through the Commission's Health and Wellness program, such as the Arcacia Integrated Health Clinic and the Myo Clinic.

Sewage is treated on site and treated water is re-used for flushing toilets and irrigation. Rainwater is collected in onsite naturalized creeks and ponds, and potable water is not used for landscaping and water features. Moving forward with new office space in Fort St. John, the Commission is looking for ways to incorporate water conserving features, on-site water treatment capacity and a storm water management system from the lessons learned from the Victoria building.

Facilities Managers responsible for Commission offices continue to drive energy conservation practices and implement improvements in building operations leading to a reduction in energy consumption.

INFORMATION TECHNOLOGY

Moving forward with the initiatives set forth in the 2009 Carbon Neutral Action report, 2010 saw the replacement of older servers, where possible, into new, virtual servers. Work has been done to expand the physical hardware to support future virtualization. At this time, the Victoria, Kelowna and Fort St. John offices' systems have up to 50 servers running on four physical servers.

Information technology also applied power management solutions to personal workstations, including monitors, to reduce power consumption during non-business hours when all network backup and updates are taking place.

Polycom video-conferencing equipment is available in all Commission offices allowing employees to conduct live meetings with peers using state-of-the-art technology. The benefits of reduced travel and expenses is clear and the additional face-to-face time and ability to communicate with all Commission offices has aided in enhancing cross-divisional communication and team building exercises.

Adding 220-volt outlets into the server rooms in Victoria and Fort St. John is an initiative currently underway to manage and ultimately reduce power consumption. Upon its successful implementation and review of power savings, the remaining three Commission offices may also move to the 220-volt server power system.



ACTIONS TAKEN TO REDUCE GHG EMISSIONS IN 2010

The printer replacement and reduction initiative was completed in 2010 with great success. 34 Printers have been replaced and employees have adjusted to the automatic double-sided printing and the required PIN entry in order to execute a print job.

Work is continuing on the four-year migration project for electronic acceptance of new oil and gas activities applications. Slated for rollout in 2012/13, this initiative will significantly decrease paper usage and improve productivity and the quality of service provided by the Commission.

BEHAVIOUR CHANGE

This past year, the Commission has explored the big questions of what employees enjoy about their work, how they feel they 'fit' within the organization and how could they enrich their own or their co-workers' day-to-day work. By initiating these types of conversations across the organization, employees are recognizing the importance of their own behaviours in influencing organizational morale, motivating behaviour patterns, and in converting high-level ideals into tangible results.

Capitalizing on the momentum of this process, the team responsible for steering carbon reduction initiatives has realized the need to reach out to each individual employee. The 2013/14 Service Plan captured this in the added corporate measure, Carbon Emissions Per Employee.

This measure represents the spread of carbon emissions reported into the provincial SMARTTool carbon calculator over the average number of employees in the year. This indicator speaks to the Commission's participation in LiveSmartBC initiatives and the provincial efforts to reduce greenhouse gas emissions. It also reaches out to each individual employee and solidifies their critical role influencing organizational performance.

To encourage positive behaviour shifts at the individual level, the Commission provides opportunities for consistent and meaningful employee engagement and means for participation in green initiatives, such as recycling, composting, power and paper saving, etc.

A more extensive recycling and composting system is planned for the new Fort St. John office space, based on the success of the program in Victoria.

In 2010, the Health and Wellness Program allowance per employee was increased to \$650 from \$500 in 2009. Employees were encouraged to use their Health and Wellness dollars towards reimbursements for green living lifestyle changes, active living or support

by a registered naturopath or dietician. Results of the Workplace Environment Survey attest to the fact that such financial incentives strike a better work/life balance and boost performance through improved health and an appealing work environment.

The weekly Health and Wellness newsletter continues in popularity with employees. Green living suggestions, healthy recipes and featured promotions encourage employees to make healthy decisions in various aspects of their life. As suggested through feedback from the newsletters, a bi-weekly salad club has been formed for employees to meet and share recipes, healthy eating tips and their home-grown fruits and vegetables.

Promotions through the Health and Wellness Program strongly encourage bicycling, walking, and public transit as alternatives to motor vehicle travel. Unfortunately, due to adverse weather conditions for a large part of the year, such alternatives are impractical or unsafe in the northern corporate locations. In Victoria, bicycling is the main transportation mode for a large group of employees, greatly facilitated by the office location on a cross-city bicycle trail.



PLANS TO CONTINUE REDUCING GREENHOUSE GAS EMISSIONS 2011-2013

STRATEGIC PLANNING

The mandate to serve the public interest of all British Columbians is well understood at the Commission. Of equal importance, the Commission recognizes its employees as a principal stakeholder group and is committed to supporting their continuous professional development and to providing a healthy work environment.

To strengthen employee awareness and the organizational commitment to a sustainable workplace, the 2011/12 - 2013/14 Service Plan introduced a new performance measure of carbon emissions per employee.

Planning, focusing and providing resources for these deliverables will be actioned by a team-based approach, coupled with individual level projects.

Looking at the strategies of other provincial agencies for achieving carbon neutrality, cross-functional 'green teams' seems to be a common theme. These collaborative groups action the carbon neutral initiatives for the organization without assigning them to a particular corporate level. The Commission will further this team-based approach to ensure the climate change actions will be owned at every level of the organization, ingraining it into corporate culture.

CARBON DATA COLLECTION AND MANAGEMENT

Procedures have been established for data collection from all five geographically dispersed offices. The SMARTTool emissions estimator program remains the driver behind data analysis and conversion to a CO₂ equivalent estimate.

Developing facilities, infrastructure and information technologies to support internal processes is a key strategic objective defined in the organization's strategic plan. Since data collection, verification and integrity continue through manual spreadsheets, integrating the carbon emissions data into an existing database will be considered and evaluated.

VEHICLE FLEET

Specific actions that have been identified with respect to the vehicle fleet include:

- Continue defensive eco-efficient driver education programs piloted in 2010.
- Continue the "right-sizing" plan for pool vehicles.
- Establish fuel use and mileage baseline for comparability purposes and benchmarking.

Driver education, fleet carpooling, preventative maintenance for fuel efficiency and increasing

awareness for need to change driving habits, will continue as established practices in 2011 onward.

FACILITIES

The plans for LEED® Gold certified office space for Fort St. John will advance in 2011, taking into consideration weather conditions and fiscal constraints.

Eco-features that will be sought and required for LEED® certification include real-time metering, lighting sensors, water conservation devices, daylight maximization and air quality friendly materials among others.

The transition to electronic records management continues through 2013. The project affords tangible savings in office space, significant reduction in paper use, efficiency in retrieving and searching records, and reduced risk of records loss or improper use.

PLANS TO CONTINUE REDUCING GREENHOUSE GAS EMISSIONS 2011-2013

INFORMATION TECHNOLOGY

The server virtualization project continues, with feasibility for all five offices appraised in the coming year.

Other information technology initiatives contributing to carbon neutrality include:

- Installing 220 volt outlets in the server rooms to increase efficiencies and decrease power use.
- Planned overhaul of both the Internet and Intranet sites to improve accessibility to company documents and facilitate enhanced communications internally and externally.
- Continue research into electronic editing of documents.
- Continue installation of web conferencing software, e.g. GoTo Meeting.

BEHAVIOUR CHANGE

Promotions on bicycle, transit and other alternative travel options will continue to be offered at least twice a year as an opportunity for employees to use their health and wellness dollars. Additionally, alternative travel means will be encouraged through employee orientations.

Integrating the Commission's carbon neutrality strategy and objectives into the yet to be designed Employee Orientation Program will introduce new employees and those who have changed functions within the organization to participating in green living initiatives.

The Health and Wellness weekly newsletter and the monthly staff newsletter "The Pipeline" will consistently include reminders on:

- Familiarization with recycling and composting programs available.
- Turning lights off when not in use.
- Energy saving when working outside of regular office hours.
- Using the air dry setting on dishwashers.
- Taking stairs instead of elevators.
- Water conservation habits.
- Paper conservation through paperless meetings, elimination of unnecessary printing, etc.

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