

# Pacific Carbon Trust

## 2010/11 – 2012/13 Service Plan



**Investing in quality offsets and our future**

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## Message from the Board Chair to Minister Responsible

The Honourable Colin Hansen  
Minister of Finance  
Government of British Columbia

Dear Minister,

On behalf of the Board of Directors and employees of Pacific Carbon Trust (PCT), I am pleased to present our **2010/11 – 2012/13 Service Plan**.

Pacific Carbon Trust has been identified as the lead organization charged with advancing greenhouse gas (GHG) reductions and growing a low-carbon economy in BC through offset projects. This year's service plan reflects this growing responsibility.

The number of GHG offsets that we will be required to deliver in 2010/11 will leap from the tens of thousands to up to 1 million annually as 130 public sector organizations – health authorities, boards of education, universities and colleges and Crown agencies – take action to become carbon neutral in 2010. That is equivalent to taking 260,000 cars off the road for one year. Other BC organizations such as Helijet, West Coast Air, and the Vancouver Aquarium are also joining our clientele of carbon conscious citizens. At the same time, PCT is partnering with like-minded organizations such as ETHOS and Climate Smart who are working with small- and medium-sized businesses to provide education and tools about climate change, reducing emissions, and offsetting.

To meet this demand, the corporation has launched an open and continuous call for offsets that is receiving a steady response from throughout the province. The call for offsets will continue into 2010/11 along with other types of more targeted procurement calls. The corporation is also stepping up its outreach activities – workshops, conferences, webinars, meetings and the like - to business, non-governmental organizations, and others that are interested in project development. These activities are expected to result in larger volume purchases of quality offsets that will meet the growth in demand for carbon reductions. This in turn is providing new economic opportunities for BC businesses.

PCT is also looking to expand its role, as directed in the most recent Shareholder's Letter of Expectations. This expansion includes developing strategies to accelerate GHG emission reductions and support clean technology developments. The intent is to build the supply of offsets available for sale in the province while generating more jobs and economic opportunities for businesses and industries. This is captured in the newly added objectives and revised strategies that help to clarify PCT's Service Plan goals.

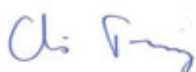
As the Chair, it has been a privilege to have led a strong board in PCT's formative years. In 2009, the board added three new members to begin the transition to a permanent Board of Directors that is independent from management and external to government operations. As part of this transition one of our former members, Graham Whitmarsh, Deputy Minister of Finance stepped down. As past head of the Climate Action Secretariat, Mr. Whitmarsh was instrumental in spearheading the development of PCT, and we greatly appreciate his efforts and progressive vision for BC.

While the carbon market has not escaped the reach of the global recession, anticipated international commitments to climate change are expected to spur significant growth in the carbon market – a key opportunity for PCT and BC in general. However, the uncertainties concerning market structures, exact offset rules and offset supply continue to present risks to market participants. This could also impact PCT's business, including its financial outlook. PCT will continue to monitor regulatory developments in North America to combat climate change. One of our goals is to ensure a smooth transition from BC's offset system to the evolving North American carbon markets so that BC is well positioned to take a leadership role both now and in the future.

Pacific Carbon Trust is a small organization but it has an important role to play in BC's future. Its employees are committed to helping British Columbia embrace a new way of doing business and a lower carbon footprint in our province.

Pacific Carbon Trust's 2010/11 – 2012/13 Service Plan was prepared under the direction of the Board of Directors in accordance with the *Budget Transparency and Accountability Act* and the BC Reporting Principles. The plan is consistent with government's strategic priorities and fiscal plan. The board is accountable for the contents of the plan, including the information and how it is reported.

All significant assumptions, policy decisions, and identified risks as of November 30, 2009 have been considered in preparing the plan. The performance measures are consistent with PCT's mandate and goals, and focus on aspects critical to the organization's performance. The performance targets in this plan have been determined based on an assessment of PCT's operating environment, forecast conditions, risk assessment and expected performance.



Chris Trumpy  
Chair, Board of Directors

# 1. Organizational Overview

## Overview

Pacific Carbon Trust (PCT) is a Crown corporation that delivers BC-based greenhouse gas offsets to help clients meet their carbon reduction goals. Its goal is to reduce emissions province-wide and help grow BC's low-carbon economy. PCT is responsible for purchasing offsets from BC-based projects that are in compliance with BC's Emission Offsets Regulation, ensuring credible offsets built on recognized international standards.

A carbon offset represents a qualifying reduction in greenhouse gas emissions generated by activities, such as improved energy efficiency, that can be used to balance the emissions from another source, such as travel. In its first year, PCT successfully purchased over 37,000 tonnes of offsets through investments in 15 innovative BC-based projects, with a five-year stream of future offsets. PCT has delivered offsets to several clients, including the BC government to offset travel emissions. Since then, it has issued an open procurement call that has to date resulted in 29 additional project proposals.

## Benefits to the Public

Pacific Carbon Trust benefits the people and economy of BC by:

- incenting new reductions in greenhouse gas emissions in the province and improving the environment;
- systematically building the BC offset market, with a projected annual demand of approximately 1 million tonnes;
- providing new economic opportunities for BC business. For example, the price attached to selling offsets can help make clean technology projects a reality, resulting in many economic and social benefits;
- ensuring high quality offset purchases for a carbon neutral public sector as well as for other organizations and individuals; and
- providing a focal point for industry to leverage new approaches to sustainability investments.

## Business Model

PCT's business model focuses on building a portfolio of credible offsets and growing the low-carbon economy to ensure delivery of quality offsets for a broad base of clients. To effectively carry out this activity, the corporation's three business lines centre on offset procurement and strategic investments, business development and a strong supporting infrastructure. As a Crown

### About PCT

**Enabling Legislation** – Pacific Carbon Trust was incorporated as a provincial Crown corporation in March 2008 under the *Business Corporations Act*. The corporation is owned by the Province of British Columbia and reports to its shareholder – the Minister of Finance.

**PCT Mandate** – to deliver quality BC-based greenhouse gas offsets to help clients meet their carbon reduction goals and to support growth of this industry in 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 growth of the low carbon economy.

#### 2. *Sustainable*

PCT is a champion for sustainable business practices and role model for low-carbon operations.

#### 3. *Credible*

PCT is recognized for its expertise, professional standards and high quality, credible carbon products.

**Seed Funding** – PCT will receive \$24 million over four years to develop its operations and the offset industry – an investment in our green economy.

corporation, PCT must also be transparent and publicly accountable in its operations and performance.

In keeping with this business model, PCT's primary activities are aligned under the following three core business functions:

Core Business Functions		
Strategic Acquisitions	Business Development	Market Strategy and Operations
Procurement and Strategic Investments	Industry Education and Outreach	Governance/Strategic Planning
Offset Technical Expertise	Client and Supplier Relations	Research and Market Development
Project Development	Offset Sales	Finance and Accounting
Contract Negotiations / Monitoring	Offset Portfolio Design	Human Resources
Validation and Verification	Marketing and Communications	Administration/Information Technology
Offset Inventory and Management		Performance Reporting
Risk Management		

**Strategic Acquisitions** is responsible for purchasing offsets from BC-based projects that meet requirements of the Ministry of Environment's Emission Offsets Regulation. Issuing and managing offset procurement calls, negotiating contracts, monitoring the validation of project plans against regulatory requirements and overseeing verification of reduced emissions of the project are key responsibilities of this department. This area will work with project proponents, including project developers and aggregators to buy offsets. Another key focus is developing specific investment strategies to buy larger volumes of offsets quickly.

**Business Development** will build and manage relationships with clients, suppliers and other interested parties, e.g. the public, partner ministries and others. This area is responsible for marketing and communications, working with industry to educate clients about emissions reductions and offsets, and managing client offset purchases. They also manage education and outreach activities across industry sectors including industry meetings, workshops and conferences to build awareness of PCT and help organizations learn about offset development and opportunities in their sectors. These activities help to support development of this emerging marketplace.

**Market Strategy and Operations** focuses on strategic direction and the operations of the company to ensure an effective, accountable and environmentally-responsible organization. Key corporate activities will include implementing and managing financial, accounting and information technology systems, managing a transition to new set of board members, and managing human resources, facilities and record management requirements. This area is also responsible for developing the service plan and annual report, and implementing the company's Carbon Neutral Action Plan. Another key focus is market research and analysis to explore opportunities for market development in tandem with evolving regulatory systems in North America.

The major changes for PCT in 2010/11 are influenced by the rapidly growing carbon market and expectations for a more certain regulatory environment in North America within the next few years. As a result, PCT is taking on more responsibilities in the coming year, including:

- expanding its client base to include more public sector organizations and private sector clients;
- building on its outreach to industry to identify offset opportunities;
- expanding its procurement activities to purchase large volumes of offsets quickly;
- looking for additional opportunities to grow the low-carbon economy (e.g. clean technology sector and investment strategies); and
- building its infrastructure to accommodate a fast-growing corporation and low-carbon business practices.

### **Organizational Structure**

PCT is located in Victoria, BC, and is expected to grow from a staff of four to twenty in 2009/10 to carry out its mandate, aligned with the three business functions - Strategic Acquisitions, Business Development, and Market Strategy and Operations. The corporation has hired its first Chief Executive Officer, Scott MacDonald, who is responsible for overseeing the day-to-day operations of the company. For more information about the PCT team, go to [www.pacificcarbontrust.ca](http://www.pacificcarbontrust.ca).

## Our Stakeholders

PCT's stakeholders include those who have a significant interest in the corporation: our employees, our shareholder – the Minister of Finance, our clients and our partners within government and in the industry.

### Clients

The corporation's largest client is BC's public sector. In October 2007, ministries began counting all greenhouse gas emissions from business travel. By 2010, the commitment expanded to cover not only all of government's broader operations, but also boards of education, schools, colleges, universities, health authorities, Crown corporations and other government agencies. These organizations are collectively known as Public Sector Organizations (PSO). PSOs are using offsets as part of a larger strategy to become carbon neutral.

Outside of the BC government, PCT is taking on more clients including companies in air travel and tourism.

### Partners and Suppliers

A primary focus of the company is to work with industry to develop credible, made-in-BC offsets. Offsetters Clean Technology and Sempa Power Systems were the corporation's first suppliers. PCT is working with more offset suppliers and related industry associations as its offset procurement progresses. There are also a growing number of environmental and business consultants and assurance providers (validators and verifiers) in the industry to support offset development. Professionals who have validated project plans and verified project reports for PCT are found on our website's Record of Retired Offsets. PCT is also meeting with municipalities, First Nations, environmental groups and other non-government organizations (NGOs) to discuss opportunities and challenges in this growing industry.

PCT also works in close partnership with the Ministry of Environment's Climate Action Secretariat (responsible for the Climate Action Plan, *Greenhouse Gas Reduction Targets Act*, and government's Carbon Neutral Program); Ministry of Citizens' Services (Shared Services BC) who provide GHG emission measurement and reduction services; and climate change experts in the Ministries of Agriculture and Lands, Transportation and Infrastructure, Forests and Range, and Energy, Mines and Petroleum Resources.

## Corporate Governance

PCT is owned by the Province of British Columbia and reports to its shareholder, the Minister of Finance. As a Crown agency registered under the *Business Corporations Act*, it operates under the governance and accountability system set out by government. This process includes a regular review of the corporation's mandate and activities, guided by a Shareholder's Letter of Expectations. The letter outlines the corporation's and the shareholder's responsibilities and is jointly signed by the Minister of Finance and Chair of the PCT Board.

PCT has also posted on its website ([www.pacificcarbontrust.ca](http://www.pacificcarbontrust.ca)) key accountability documents such as its Shareholder's Letter of Expectations, updated service plans and annual reports, and financial statements.



During its first year, PCT was led by an interim Board of Directors: Chris Trumpy (Chair), who was Deputy Minister of Finance until March 31, 2009 and Graham Whitmarsh, previously head of the Climate Action Secretariat and now the Deputy Minister of Finance. On February 20, 2009, James Gorman, Deputy Ministry of Education, joined as the third member of the Board of Directors.

In 2009, the board started its transition to a permanent Board of Directors to include individuals who are independent from management and external to government operations. Since then, Graham Whitmarsh has stepped down, and the Minister of Finance, PCT's shareholder has appointed three new members. These Board members bring a range of competencies that were identified as those required to carry out board responsibilities effectively. This is in keeping with best practices of board governance as outlined by BC's Board Resourcing and Development Office (BRDO).

The new board members include:

- Heather Holden, with environmental and financial expertise;
- Jim Mutter, with legal expertise; and
- Michael H. Watson, with financial and strategic management expertise.

Chris Trumpy remains the Board Chair, and James Gorman has stayed on to ensure a smooth transition to a new board over 2010/11.

The Board is responsible for the overall direction of the company, including:

- Setting its strategic direction;
- Ensuring appropriate financial and operational controls are in place;
- Ensuring PCT has the appropriate resources to meet its mandate;
- Monitoring its key activities;
- Reporting to the Minister of Finance on activities, accountabilities and performance; and
- Providing the public with relevant and timely information about PCT's intentions and operations.

Information about the board members and their terms is posted on the PCT website and on the Directory of Agencies under BC's Board Resourcing and Development Office (BRDO) ([www.lcs.gov.bc.ca/BRDO/currentBoards.asp](http://www.lcs.gov.bc.ca/BRDO/currentBoards.asp)).

## Shareholder's Letter of Expectations

Government direction for the PCT is provided in the Shareholder's Letter of Expectations (SLE). This is an agreement between the Minister of Finance on behalf of government and the Board of PCT that establishes priorities and expectations for PCT.

The most recent SLE builds on earlier direction for the corporation to support growth of the offset industry in BC's carbon market. This includes developing investment strategies that accelerate GHG emission reductions while stimulating growth of a low-carbon economy, developing strategic options to support clean technologies, and continuing to work cooperatively with market participants and key stakeholders to support growth of the offset industry.

The chart below lists the expectations outlined in the most recent letter as well as PCT's response.

<i>Shareholder's Letter of Expectations</i>	<i>PCT Alignment</i>
<b>Specific Government Direction to PCT</b>	
Work cooperatively with other BC-based carbon offset market participants to support the overall growth of the carbon offsets industry and service sector in BC	PCT has been building capacity to increase its outreach activities to accelerate offset production. PCT meets with industry and service sector participants, speaks at business and sustainability events, participates in joint workshops and hosts industry conferences.
Immediately implement a strategy to deliver quality short term and long term offsets to a broad base of clients including the provincial public sector, businesses, organizations, and individuals	In addition to the BC public sector, PCT is selling offsets to businesses (e.g. Helijet, West Coast Air, Vancouver Aquarium) as well as working with carbon management companies to promote emission reductions and offsets across BC.
Continue to develop internal policies and procedures to meet the government's Crown Agencies Governance and Accountability Framework.	PCT is meeting established guidelines and information requirements for Crown agencies, including requirements for service plans and budgets, financial forecasts, annual reports, and audited financial statements.
<p>Acquire offsets in a transparent and competitive manner, using the following principles. Acquisitions will:</p> <ul style="list-style-type: none"> <li>• Meet the requirements of the Ministry of Environment <i>Emission Offsets Regulation</i> while minimizing cost to the PCT;</li> <li>• Be made through contracts, contribution agreements and strategic investments with service providers that are designed to ensure that offsets meet anticipated requirements, and</li> <li>• Take into consideration, to the extent that doing so does not have a significant impact on credibility, efficiency or effectiveness, other government priorities, including, but not limited to, developing economic opportunities for carbon credits for First Nations.</li> </ul>	<p>To date, PCT has signed agreements to purchase over 300,000 tonnes of offsets over five years. This follows the launch of an ongoing public procurement process for a wide range of offset project types.</p> <p>During the purchasing and offset delivery process, PCT oversees contract and quality assurance documents to ensure that the offsets meet regulatory and other anticipated requirements. This includes evaluating proposals, developing purchase agreements with project proponents, overseeing the validation and verification process, and ensuring delivery of verified offsets.</p> <p>PCT is working with public sector partners (e.g. Ministries of Environment; Energy, Mines and Petroleum Resources; Forests and Range; Agriculture and Lands; Aboriginal Relations and Reconciliation; and Small Business, Technology and Economic Development) to meet legislative requirements and ensure consistency with respect to government objectives, including climate change priorities and economic opportunities for First Nations.</p>

Develop and implement investment strategies that accelerate GHG emissions reductions while stimulating growth of a low carbon economy in BC;	PCT is assessing the market for additional investment opportunities to advance the reduction of GHG emissions as the carbon market develops.
Develop options with a strategy to support and grow BC-based clean technology companies' export activities;	PCT is exploring options to help expand opportunities for BC-based clean technologies.
Maintain a registry for verified offsets and implement ongoing improvements as the market develops.	PCT records Retired Offsets on its website to identify verified offsets that have been delivered to clients. It is working to ensure continuous improvement in recording its offset transactions in a transparent and robust manner.
Develop and maintain a risk management strategy that includes a diversified portfolio of GHG emission reductions and removals, and establishment of reserves to help mitigate the reversal of offsets.	<p>PCT's portfolio strategy is designed to diversify offsets with respect to short- and long-term delivery schedules and among project type and location. PCT's purchases to date include projects from energy efficiency and fuel-switching projects, with the ability to deliver a stream of offsets over five years. Its recent ongoing procurement call, and future targeted calls, are expected to broaden PCT's offset portfolio with respect to project type, location and delivery time.</p> <p>PCT will continue to manage its portfolio risk through a variety of actions including the use of self insurance techniques such as purchasing "extra" offsets that may be needed at a later date, and entering into both short- and long-term contracts and purchasing offsets which originate from a variety of project types and locations across BC.</p>

#### Climate Change and Carbon Neutrality Initiatives

Comply with the Shareholder's requirements to make the public sector carbon neutral by 2010, including: accurately defining, measuring, reporting on and verifying the greenhouse gas emissions from the Corporation's operations; implementing aggressive measures to reduce those emissions and reporting on these reduction measures and reduction plans; and offsetting any remaining emissions through its procurement activities.	<p>PCT acts as the government's agent in delivering GHG offsets to help achieve carbon neutral objectives.</p> <p>It plans to be carbon neutral in 2009, one year earlier than required and is taking action to reduce office-related energy consumption as well as travel emissions (e.g. using communications technology to reduce out of town travel).</p>
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## 2. Strategic Context

### Trends, Opportunities and Challenges

#### **Carbon market**

The carbon market, like other commodity markets, has not escaped the global economic crisis. After exponential growth in 2007 and 2008, the value of the global carbon market for 2009 is expected to land at 2008 levels – around US\$120 billion, supported by higher trading activity but lower prices.<sup>1</sup>

The voluntary carbon market operates outside regulated carbon trading schemes such as Kyoto's European Union Emissions Trading Scheme (EU ETS) and its related offset program, the Clean Development Mechanism. While the global voluntary market is expected to decline in 2009 by 62-76% to a value of \$171-261 million,<sup>2</sup> market participants expect continued growth in the longer term driven by pre-compliance and pure voluntary market motivation.<sup>3</sup> The pre-compliance market describes purchases of offsets that are expected to be credited under future regulatory markets.

2009 has been a year of uncertainty in both regulated and voluntary markets. Yet anticipated developments in climate change regulation are creating growth momentum. For example, there was a surge in traded volumes last summer in the US Climate Action Reserve offset market that coincided with the House passage of Waxman-Markey, a proposed cap-and-trade bill. At another level, there has been increased activity with respect to new products and partnerships among registries and standards, industry conferences and workshops, and ongoing voluntary carbon credit issuances on market registries.

International efforts to address climate change were expected to culminate at the United Nations Climate Change Conference in Copenhagen in December 2009. This conference has been designed to shape an international response to climate change – through to 2020 and beyond. However, there are uncertainties around the signing of a new global climate treaty at that time. It is hoped that some kind of consensus will be reached in 2010.

Developments in North America will have the biggest impact on B.C. and indeed on other global markets. The US is continuing to debate draft legislation that proposes an 80 per cent reduction in greenhouse gases from 2005 levels by 2050 through an economy-wide cap-and-trade system. Agreement for meaningful reductions at the global level is not expected without US involvement through a cap-and-trade bill or similar piece of legislation. Regional North America systems such as Alberta's offset system, the Regional Greenhouse Gas Initiative, and BC's own Greenhouse Gas Reduction Targets Act offset system continue to operate within their own regulated frameworks while involved or paying close attention to larger developments at the regional level (Western Climate Initiative) or within federal Canadian or US jurisdictions.

It is not yet clear how the North American carbon market will unfold. However, it is expected that regulatory developments will lead to a firmer price on carbon either regionally or nationally to stimulate ongoing greenhouse gas reductions. The potential outcome scenarios are likely to

<sup>1</sup> Carbon Industry Intelligence – New Carbon Finance, April 2009

<sup>2</sup> Fortifying the Foundation, Ecosystem Marketplace and New Carbon Finance, 2009

<sup>3</sup> New Energy Finance, Carbon Markets – Voluntary Markets, Sept 2009,

present both opportunities and challenges for offset markets. It is important for PCT and other BC organizations to monitor these developments.

### ***BC regulatory environment***

In BC, the government's commitment to make the public sector carbon neutral by 2010 through the *Greenhouse Gas Reduction Targets Act* is creating a large demand for carbon offset projects. PCT estimates that it will require approximately 1,000,000 tonnes of carbon dioxide equivalent offsets by 2011 largely to meet BC's carbon neutral commitment. Revenues generated from offsets are expected to help fund innovative solutions to climate change and stimulate industry growth in the province. This presents a growing economic opportunity for British Columbians to be involved in the development, sale and management of carbon offsets.

Additional opportunities for PCT may be created by the more than 170 towns and cities that have signed the province's Carbon Neutral Local Governments Charter. They have made a commitment to reduce emissions from their operations as much as possible and, where emissions cannot be reduced, offset them by equivalent amounts to achieve carbon neutrality by 2012.

The dramatic growth in offset requirements in BC also presents challenges for market participants as it is a new market with limited suppliers, undeveloped but growing expertise, and evolving market conditions. Additionally, specific BC legislation designed to reduce GHG emissions, such as the requirement for zero net greenhouse gas emissions from all new electricity generating facilities or for landfill gas capture from municipal solid waste landfills by 2016, will in turn reduce potential offset supply in these sectors. As a result, a key market challenge is the uncertainty around the supply and cost of offsets in BC. This could affect PCT's ability to deliver the high volume of verified quality offsets required by 2011.

It is important for PCT and other BC organizations to assess the implications for BC, and work together to develop creative ways to advance real GHG reduction opportunities through offsets.

### ***BC industries***

British Columbia's broad resource industry presents specific opportunities for offset development. PCT's first offset purchases came from energy efficiency and fuel switching projects at a cement plant, one of the province's largest emitting sectors, as well as greenhouses, hotels and residences.

Further offset opportunities are expected from BC's industry sectors including cement, pulp and paper, mining, oil and gas, agriculture, forestry, buildings, and transportation. Projects with high potential include fuel switching, optimizing energy efficiency, converting waste to energy through anaerobic digesters, and carbon sequestration. Capturing landfill methane is a key opportunity that is expected to develop offsets for BC in the near term.

The response to the launch of PCT's continuous procurement process in October 2009 indicated strong interest from most of these industry and business sectors in exploring offset opportunities. By the end of November, the process identified 29 possible projects with a potential of 400,000 tonnes of offsets by 2011. An additional targeted call for information on forest offsets also showed interest in developing offset projects in afforestation and forest management practices.

***Labour market***

The number of new carbon market systems developing in North America will require professionals and technical experts to provide market analysis, develop offset projects, and provide assurance in validating projects and verifying environmental benefits. Given the newness of this market in BC, recruiting knowledgeable professionals and experts in this new area will be challenging.

**Operating Environment**

PCT plans to continue operating under its three central business functions in 2010/11 – Strategic Acquisitions, Business Development, and Market Strategy and Operations. The volume and scope of work within each is likely to increase to meet offset demand and other business objectives. For example, PCT has issued a continuous procurement process, including a guidance document on the Emission Offsets Regulation, to execute an ongoing cycle of reviewing offset project proposals.

## Maximizing Opportunities and Minimizing Risks

PCT is pursuing several strategies to take advantage of new market opportunities and mitigate risks.

<b>Opportunities</b>	
<b><i>Growing Carbon Market</i></b>	<p>The establishment of PCT is a government initiative that will position BC to take advantage of the emerging carbon market. The market also provides an additional approach for the public sector to reach its carbon neutral goals.</p> <p>PCT is working cooperatively with industry participants to identify and take advantage of offset opportunities, while supporting growth of the industry. PCT plans to also develop new strategies for investment in clean technologies that will help to open new markets and accelerate growth of the low-carbon economy.</p>
<b><i>BC's Greenhouse Gas Reduction Targets Act</i></b>	<p>The provincial act and its carbon neutral commitment have created a sizable market for offsets in BC.</p> <p>PCT is building a portfolio of high quality offsets through a competitive and streamlined procurement process.</p> <p>BC's carbon neutral commitment is also stimulating demand in the voluntary market. The "client" side of PCT is developing relationships with clients and partners, and helping them to navigate the path to reporting, reducing and offsetting emissions accurately and openly.</p>
<b><i>Increasing Climate Change Developments</i></b>	<p>An increasing level of developments and regulatory activity around climate change in North America generates possible new markets for offsets, clean technology and other carbon market services.</p> <p>PCT is monitoring regulatory developments (e.g. Western Climate Initiative, Canadian and US federal legislation and policies) to identify these market opportunities and implications for PCT. PCT is also participating in BC's Green Energy Advisory Task Force on Carbon Pricing, Trading and Export Market Development</p> <p>It has also expanded offsets sales beyond the provincial public sector to progressive organizations interested in offsetting their greenhouse gas emissions</p>
<b>Risks</b>	
<b><i>New Carbon Market</i></b>	<p>There is considerable uncertainty in the supply and cost of high quality offsets in BC, given the infancy of the offset industry and BC's high quality offset standards. With initial purchase agreements, PCT is in a position to meet requirements expected for 2009 and 2010 and to begin building inventories for future years. The corporation will require a large increase in offset purchases to meet the 1 million tonne target for 2011.</p> <p>PCT's ongoing procurement strategy and support for industry development (e.g. education and outreach) is building awareness, interest and expertise in offset development in BC. This will help to</p>

<b>Risks</b>	
	<p>build an increasing supply of offsets at competitive prices in future years.</p> <p>PCT's longer-term portfolio strategy is designed to diversify offsets both with respect to short- and long-term delivery schedules and among project type and location. PCT's first purchase includes projects from energy efficiency and fuel-switching projects, all with the ability to deliver offsets within five years. Another procurement process is targeted to forestry offsets, which is expected to lead to carbon sequestration projects throughout many areas of BC with an ability to deliver offsets over a longer time period. A larger open call posted October 2009 is looking for potential projects across most sectors in the near-medium future timeframe.</p>
<b><i>New Carbon Market and the Economy</i></b>	<p>Over the medium-long term, another major risk for PCT is not being able to source enough quality offsets because of failures during project development.</p> <p>The company has asked potential suppliers to provide proposed approaches for managing any risks that the offsets may not be delivered to PCT on time. PCT also plans to build up its offset inventory. The mitigation strategy also includes establishing a robust procurement process with strong contract terms and project oversight in developing a diversified portfolio of offsets.</p>
<b><i>Climate Change Regulation</i></b>	<p>As cap and trade systems emerge, the potential for offsets from sectors covered under the cap will be reduced. There are also uncertainties around the market structure, exact offsets rules and offset prices.</p> <p>PCT is monitoring regulatory developments and working with industry and other stakeholders to identify current and future offset potential pending proposed cap and trade legislation.</p>
<b><i>Labour Market</i></b>	<p>One of the risks to PCT and the industry in general is a possible shortfall in offset industry professionals for the emerging carbon offset markets.</p> <p>PCT plans to monitor development of accreditation programs (e.g. ISO's validator and verifier program) and other professional programs (e.g. Greenhouse Gas Management Institute), and participate in industry events to communicate the need for qualified professionals. The corporation plans to work with industry in developing strategies to identify and build the capacity of this profession.</p>
<b><i>Offset Market</i></b>	<p>The global offset market has generated concerns about the quality of offsets and organizations' claims of carbon neutrality.</p> <p>PCT's procurement process is designed to evaluate offset project proposals against the stringent criteria of BC's Emission Offsets Regulations. It has also developed partnerships with firms that teach organizations how to report, reduce and offset emissions accurately and openly.</p>



## Capacity Issues

PCT is expecting to hire 20 people within its first two years of operations to meet the challenge of large provincial offset purchase requirements and associated support for a local industry. This complement of staff will have to be re-evaluated from time to time to ensure adequate resources are in place to carry out PCT's requirement to develop a substantial offset market quickly and its other growing responsibilities. For example, starting in 2009, PCT is expanding sales beyond the provincial public sector and assessing additional investment strategies to accelerate growth of the carbon market. The company is also developing staff and industry training programs to build industry expertise. Increasing offset purchases and sales may also require additional corporate infrastructure to ensure quality data and information management systems (e.g. offset registry).

### 3. Goals, Strategies, Measures and Targets

PCT's mandate is to *deliver quality BC-based greenhouse gas offsets to help clients meet their carbon reduction goals and to support growth of this industry in BC*. This direction evolves from the Climate Action Plan's goal to reduce greenhouse gases by 33% from 2007 levels by 2020 and the larger provincial goal to "lead the world in sustainable environmental management, with the best air and water quality, and the best fisheries management, bar none."

PCT has established three goals to guide fulfillment of its mandate:

- Goal 1: An organization that delivers quality, cost-effective offsets.
- Goal 2: An organization that is highly valued by its clients and industry.
- Goal 3: An effective, environmentally responsible organization known for its industry expertise.

The goals focus corporate efforts on three important areas required by the mandate – providing quality offsets cost-effectively, helping clients to meet their carbon reduction goals, and supporting growth in the industry.

This year, the service plan includes five new objectives that clarify how the corporation will attain its goals. In 2009, PCT's offset purchases satisfied its immediate requirements to offset government travel. For Goal 1, the new objective represents PCT's changing focus to the longer term requirement of building a balanced portfolio of offsets to meet increasing future demand and manage risk. PCT expects to purchase up to 1 million offsets annually by the spring of 2011.

Two objectives have also been added to Goal 2 to clarify expanding requirements of the corporation: selling offsets to wider base of clients including the private sector and directing more resources to stimulate growth of the low-carbon economy in B.C. PCT can help to reduce risk for offset market participants by growing the carbon market through sizable and ongoing procurement purchases and other investment strategies.

Goal 3 also has two objectives – one based on developing the corporate capacity and infrastructure to support operations and another to focus resources on market research and development.

Similarly, the strategies have been refined to reflect a growing organization with increasing responsibilities. The five performance measures are taking shape as data is being collected for the new corporation to establish baselines and within the new industry to develop benchmarks. A few more years of data will help to paint a more accurate picture over time. Developing systems to monitor industry performance and benchmarks as more reliable and comparable information emerges continues to be part of PCT's strategy to ensure robust evaluation of its own performance.

**Goal 1: An organization that delivers quality, cost-effective offsets.**

As the carbon market matures, ensuring the legitimacy of intangible carbon offsets continues to be a major theme in the marketplace. While 2007 was seen as the year for development of offset standards and registries, 2008 saw increased establishment and functionality of standards, emergence of new registries, partnerships between infrastructure providers, and increased transparency.<sup>4</sup> In 2009 PCT posted its own record of retired offsets on its website to allow public access to offset purchase information, including verification reports. The corporation also issued a guidance document for offset developers concerning criteria to meet BC's high quality offset standards from the Emission Offsets Regulation.

Attaining this first goal – delivering quality, cost-effective offsets – directly relates to PCT's mandate to provide BC-based offsets that help clients meet their carbon reduction goals through the purchase of real GHG reductions. Providing cost-effective offsets is also important to ensure value for PCT's clients, including the BC government and other organizations.

***Objective 1.1 Build a portfolio of high quality offsets.***

This first objective not only focuses corporate attention on the cornerstone of PCT's operations – delivering quality offsets - but also on an initial obligation that presents considerable challenges. One is the uncertainty about the ability of the BC supply market to provide a large volume of offsets in coming years that meet BC's high environmental standards.

With its first offset purchase agreements in 2009, PCT is positioned to meet its first two years of estimated offset requirements, and has made a good start to reducing uncertainty of supply. PCT is now focused on buying much larger volumes of approximately 1 million tonnes annually by spring 2011. In the fall of 2009, PCT issued a comprehensive procurement call that is targeted to a wide range of offset project types and is designed to be continuous as demand requires. There may also be targeted calls to particular sectors. Market innovators are responding, and the offset supply is building.

**Strategies:**

- Streamline procurement processes to quickly buy offsets in a competitive manner while ensuring offset quality and diversity.
- Measure and maintain an appropriate level of risk in the portfolio of offset projects.
- Manage inventory levels and link to a transparent registry of offsets projects.
- Develop investment strategies that advance GHG reductions and stimulate growth of a low-carbon economy in B.C.
- Implement strategies to support and grow BC-based clean technologies.
- Monitor offset market information, in particular prices of offsets comparable to those generated by BC-based projects.

<sup>4</sup> Fortifying the Foundation, Ecosystem Marketplace and New Carbon Finance, 2009.

PERFORMANCE MEASURES		TARGETS		
	09/10 Forecast	2010/11	2011/12	2012/13
1. Meets offset purchase orders on time	100%	100%	100%	100%
2. Average price paid for offsets per tonne	Less than \$25	Less than \$25	Less than \$25	Less than \$25

Note: The price of \$25/tonne is tied to the current offset price that clients pay to purchase offsets from PCT.

## Description and Rationale for Performance Measures and Targets

Description of Measure	Rationale/Benchmarks
<p><b>Performance Measure: Meet offset orders on time</b>  <i>The first measure monitors the company's ability to deliver purchase orders for its clients. This includes all orders of regulated clients and purchases by voluntary clients.</i></p> <p><b>Target:</b> PCT has selected a target of meeting <b>100% of offset orders on time</b> for the next three years.</p> <p><b>Data:</b> This information is available from PCT operations, and is collected through offsets accounting and retired offsets information.</p>	<p>This measure was chosen because it directs corporate strategies towards ensuring PCT delivers enough offsets to meet client requirements at a time when supplies may be limited in an immature industry. At the same time, it ensures that the purchase of quality offsets is entrenched in basic corporate operations.</p> <p>This target sets high expectations for the corporation in an area that presents risks to PCT, e.g., not sourcing enough quality offsets because of failures during project development. The company has asked potential suppliers to provide proposed approaches for managing any risks that the offsets may not be delivered. PCT also plans to "self-insure" by buying enough additional offsets to manage this risk and will try to ensure offsets originate from a variety of suppliers, project types and locations in BC.</p>
<p><b>Performance Measure: Average price paid for offsets</b>  <i>The second measure monitors average price paid by PCT for offsets.</i></p> <p><b>Target:</b> PCT has selected a target of <b>Less than \$25</b> for the next three years.</p> <p><b>Data:</b> This information is available from PCT operations, and is collected from its purchase expense accounting information.</p>	<p>This measure was chosen because offset prices are a large component of expenses. Providing cost-effective offsets is an important part of managing public sector costs and helping clients to meet their carbon reduction goals. It also ensures PCT remains financially viable.</p> <p>PCT has set this target to ensure that the corporation does not purchase offsets at a price over the client purchase price, currently set at \$25 per tonne of GHG offset.</p> <p>PCT will be monitoring industry and market information for comparable pricing information. (Note: given the newness and diversity of the industry, it may be difficult to find reliable comparisons.)</p>

## Goal 2: An organization that is highly valued by its clients and industry.

Ensuring responsiveness to two of the corporation's key stakeholders – its customers and suppliers – is an integral part of the corporate strategy to help *clients to meet their carbon reduction goals and support growth in this industry in BC.*

### ***Objective 2.1: Deliver quality offsets to a broad base of clients.***

PCT is expanding its customer base beyond the provincial public sector and providing offsets to other organizations interested in combating climate change. Progressive companies are taking the opportunity to act early while preparing for the emerging carbon economy.

#### **Strategies:**

- Implement a sales strategy to deliver quality offsets to a broad base of clients including the provincial public sector, businesses, organizations and individuals.
- Provide a high-level of service to our clients, including delivering quality offsets in a timely manner and promoting accuracy and transparency in offsetting greenhouse gas emissions.
- Retire offsets for our clients in an open and transparent manner.

### ***Objective 2.2: Accelerate growth of BC's carbon market***

PCT has embarked on a series of industry outreach activities – meetings, speaking engagements, conferences, workshops and webinars – to identify offset development opportunities and build market expertise. PCT plans to identify further opportunities to stimulate growth in BC's low-carbon economy and clean-technology sector.

#### **Strategies:**

- Work cooperatively with offset market participants and industry stakeholders to build expertise and drive growth in the carbon market.
- Build and manage a pipeline of offset projects across the province.
- Design a balanced offset portfolio to stimulate a low-carbon economy.

#### **Description and Rationale for Performance Measures and Targets:**

PERFORMANCE MEASURES		TARGETS		
	09/10 Forecast	2010/11	2011/12	2012/13
1. % of customers and suppliers satisfied / very satisfied	Not available	N/A*	90%	N/A*

- PCT will conduct and report on the satisfaction survey every two years.

Description of Measure	Rationale/Benchmarks
<p><b>Performance Measure: Customer and Supplier Satisfaction</b> <i>This measure monitors the satisfaction of PCT's services and activities from customers and industry suppliers. It will be conducted through a bi-annual survey.</i></p> <p><b>Target:</b> PCT has selected a target of 90% as a satisfaction rate from customers and suppliers.</p> <p><b>Data:</b> This information will be collected from a bi-annual survey of customers and suppliers.</p>	<p>Customer satisfaction measures the value of PCT to clients in helping them meet their carbon reduction goals. Throughout the next year, PCT will continue to develop customer relationships as it provides offsets to its clients.</p> <p>Supplier satisfaction is a way to measure how key industry players view PCT's role and activities in supporting an offset industry in BC. Having PCT as a focal point in the province for offsets enables an easy-to-access organization to spur innovation and synergies in this sector. This central hub together with the increased demand for offsets from the public sector carbon neutrality requirements is expected to stimulate industry activity and growth. Industry growth is very important to shore up the supply of offsets for PCT and other aggregators as consumer and corporate demand increases. Industry growth is also important to support successful participation in the emerging low-carbon economy.</p> <p>This target was chosen to set high standards for the corporation's client and supplier support.</p>

### Goal 3: An effective, environmentally responsible organization known for its industry expertise.

This third goal is designed to motivate employees in developing an organization built on sound business practices that incorporates fiscally as well as environmentally responsible behaviour and builds a wide breadth of knowledge capable of supporting industry innovation and growth.

The goal has identified three important characteristics that help to describe the type of corporation it aspires to become: effectively managing public sector resources as outlined in the SLE, environmentally responsible - a value that models the corporation's reason for existence, and industry expertise – a particularly important asset for development of a new, complex industry.

#### ***Objective 3.1: Develop the corporate capacity and infrastructure to support operations.***

##### **Strategies:**

- Streamline business processes to improve operational efficiencies and service for clients and suppliers
- Promote PCT as a centre of offset expertise. Encourage staff development and build industry relationships to develop expertise across the sector.
- Build a team of high performing professionals by developing shared values to guide decisions, opportunities for professional growth, and performance rewards
- Continue working towards becoming a leader in low-carbon business practices, supported by the corporate Carbon Neutral Action Plan to reduce greenhouse gas emissions.
- Continue building the corporate infrastructure and governance structures to enable effective operations.
- Be transparent and accountable. Monitor and report on financial and corporate performance, as well as retirement of offsets.

#### ***Objective 3.2: Analyse emerging GHG regulations and carbon markets to help BC take advantage of expanding market opportunities.***

- Monitor and analyse emerging carbon markets to identify implications for BC and Pacific Carbon Trust and identify opportunities to build upon and open new carbon markets.

PERFORMANCE MEASURES		TARGETS		
	09/10 Forecast	2010/11	2011/12	2012/13
Administration expense as a % of sales	NA <sup>1</sup>	Set baseline	TBD	TBD
Lower than average organizational carbon footprint (tonnes CO <sub>2</sub> e per FTE)	Lower <sup>2</sup>	Lower than core government average	Lower than core government average	Lower than core government average

1. PCT will establish a baseline for this performance measure in 2010/11, when it reaches full operations and reflects a more accurate baseline for sales revenue.
2. PCT is expected to average 1.8 tonnes of CO<sub>2</sub>e per FTE in 2009, based on estimated total emissions of 16.7 tonnes of CO<sub>2</sub>e. This compares to core government's average for 2008 of 2.8 tonnes of CO<sub>2</sub>e / FTE (2009 data NA).

## Description and Rationale for Performance Measures and Targets:

Description of Measure	Rationale/Benchmarks
<p><b>Performance Measure: Administration expense as a % of sales.</b> <i>This measures the administration expenses or cost of corporate services of the company that do not relate directly to procuring or selling offsets</i></p> <p><b>Target:</b> Targets will be set in the coming year as more reliable industry information is obtained.</p> <p><b>Data:</b> This information is available from PCT financial accounting information.</p>	<p>This measure was chosen to help monitor the efficiency of the company. Companies use this measure to help determine the appropriate level of administration expenses to support the firm's ability to meet its mandate or compete with competitors.</p> <p>At the publication date, no industry benchmarks for this measure were found in the literature reviewed with respect to offsetting companies.</p>
<p><b>Performance Measure: Lower-than-average organizational carbon footprint</b> This measure will monitor the organization's level of greenhouse gas emissions per Full-Time Equivalent.</p> <p><b>Target:</b> PCT has selected a target for a level of corporate greenhouse gas emissions to be lower than the average in core government.</p> <p><b>Data:</b> PCT collects information on GHG emissions using Smarttool and compares with core government results reported out through requirements under the Public Sector Carbon Neutral Program.</p>	<p>The last measure is important in demonstrating PCT's leadership in reducing its own carbon footprint.</p> <p>The target of a lower average carbon footprint than core government was selected to demonstrate PCT's leadership in this area. Also, more information will be available about core government operations as they are the first public sector group to report out under the <i>Greenhouse Gas Reduction Targets Act</i>.</p>



## 4. Summary Financial Outlook

### Financial Outlook \*

\$ 000's	2008/09 Actual	2009/10 Forecast	2010/11 Budget	2011/12 Budget	2012/13 Budget
<b>Revenues</b>					
Operating Grant from Province of BC	5,000	5,000	5,000	0	0
Offset Revenue		1,524	25,103	25,224	29,186
Interest on Investments	206	71	94	107	115
Total Revenues	5,206	6,595	30,197	25,332	29,301
<b>Expenses</b>					
Procurement and Offset Delivery	297	1,726	23,764	22,347	23,958
Client and Business Relations	46	854	1,363	1,348	1,386
Strategy and Operations	311	641	1,022	1,011	1,039
Total Expenses	654	3,221	26,149	24,707	26,383
<b>Net Income</b>	<b>4,552</b>	<b>3,374</b>	<b>4,048</b>	<b>625</b>	<b>2,917</b>
<b>Retained Earnings</b>	13,554	16,928	20,976	21,601	24,518
<b>Capital Expenditures</b>	84	75	435	150	150

\*The above financial information, including forecast information, was prepared based on current Canadian Generally Accepted Accounting Principles.

### Key Assumptions

#### Revenue

- PCT will receive a \$5 million operating grant in 2010/11.
- Offset revenues are based on a transaction price of \$25/tonne of CO<sub>2</sub>e and on the estimated annual delivery of offsets. The forecast for 2009/10 includes revenue from offsets delivered to government in June 2009 to satisfy government's carbon neutral commitments for 2008, as well as estimates of offsets to be delivered to government and other private organizations. The substantial increase in revenue in 2010/11 is due largely to the additional requirements of the broader public sector, who are required to become carbon neutral by 2010.

#### Expenses

- Procurement and Offset Delivery includes relevant expenses for this core business area (e.g. staff and professional services, and related overhead and office expenses) and all offset purchase expenses.
- Client and Business Relations includes relevant expenses for this core business area (e.g. staff and professional services, and related overhead and office expenses) as well as the cost of

increasing outreach and educational activities (e.g. workshops, conferences, marketing materials).

- Strategy and Operations includes relevant expenses for this core business area (e.g. staff and professional services, and related overhead and office expenses), and administration costs such as bank charges.

### ***Equity and Debt***

- PCT is expected to have \$21.0 million in equity by 2010/11, an accumulation of operating grants and net income. PCT has no outstanding long-term debt.

### ***Capital Expenditures***

- Capital expenditures represent the cost of implementing corporate IT applications and infrastructure, as well as tenant improvements related to moving to a new location.

## **Future Outlook**

2010/11 represents significant growth for Pacific Carbon Trust where after a two-year phase-in period, BC's core government and broader public sector are required to become fully carbon neutral. At the same time, PCT will be taking on more clients from the private sector. This increase is reflected in Pacific Carbon Trust's financial outlook as revenues and expenses are to grow substantially.

Starting in 2010/11, PCT expects to sell approximately 1 million offsets yearly. The majority of PCT's expenses are related to offset purchases as it builds up its inventory of quality offsets – to meet demand and build reserves to manage the risk of non-delivery. These expenditures are dependent on the actual volume of tonnes delivered.

As outlined in the Risk Management Strategy, there are a number of supply risks that would affect the expenditures for offset purchases. The recent economic downturn, for example, increases the risk of fewer tonnes delivered. The emerging North American carbon market structures also present uncertainties related to offset rules, supply and price. For example, a \$1.00 increase in the price paid for 1 million tonnes of offsets will increase expenditures by \$1 million. In this nascent carbon market, a competitive, stable price for offsets has not yet been established so expenditure projections are subject to many market variables. While the budget presented provides a well considered three-year forecast, it is subject to many assumptions and industry changes that could significantly impact the projections made. PCT will continue to monitor these issues, including regulatory developments in North America, and their implications for the corporation.

The most recent Shareholder's Letter of Expectations builds on earlier direction for the corporation to support growth of the offset industry in BC's carbon market. As a result, the corporation is currently assessing opportunities to make strategic investments to accelerate GHG reductions and support clean technologies to grow the low-carbon economy. The accumulated equity will be used to fund these and other future operations.

*Pacific Carbon Trust*

British Columbia

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