Financial Report
2011 - 2012

ptrc
Petroleum Technology
Research Centre

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Description of the PTRC

About the PTRC

The Petroleum Technology Research Centre (PTRC) is a not-for-profit corporation founded in 1998 by the University of Regina, the Saskatchewan Research Council, the Government of Saskatchewan, and Natural Resources Canada. It is located in the Innovation Place Research Park in Regina, Saskatchewan, adjacent to the University of Regina campus. Its diverse portfolio of research projects is funded through ongoing contributions from several federal, provincial and private sector partners, including direct funding from:

- Government of Canada: Western Economic Diversification, Sustainable Development Technology Canada, Networks of Centres of Excellence, and Natural Resources Canada.
- Saskatchewan Government: Ministry of the Economy, Ministry of Environment, Enterprise Saskatchewan.
- Private sector: Canadian and internationally based oil and gas companies, utilities and technology providers.

In addition, in-kind research support is provided by the University of Regina's Petroleum Systems Engineering faculty and the Energy Division of the Saskatchewan Research Council – both of which are housed in the PTRC building. Additional research partners include organizations and universities from across Canada, the United States and the World.

The PTRC is governed by a Board of Directors comprising representatives of the founding partners and of industry leaders operating in western Canada. Its laboratory and modeling (physical and numerical) facilities in Regina, shared with the University of Regina and Saskatchewan Research Council, are among the most advanced and complete in North America.

Mission and Goals

The mission of the PTRC is to develop world-leading technologies and processes to ensure that the recovery of Canadian hydrocarbon resources is environmentally and economically sustainable for the benefit of stakeholders. The company's goals include:

1. To enhance oil recovery through innovative research and demonstration.
2. To ensure the broad deployment opportunities for technologies are identified to the value of the industry.
3. To conduct R&D on geological containment and process integrity technologies that contribute towards sustainable enhanced oil recovery.
4. To provide evidence-based, value added services to our stakeholders
5. To support federal and provincial policy makers in developing regulations and policies.

Projects

The PTRC's projects in 2011-2012 included:

- The IEAGHG Weyburn-Midale CO2 Monitoring and Storage Project, looking at the storage of carbon dioxide in two depleted oil reservoirs in southeastern Saskatchewan.
- Aquistore, a integrated carbon capture and storage project near Estevan, Saskatchewan, examining the injection of CO2 into a deep saline formation.
- Sustainable Technologies for Energy Production Systems (STEPS), a Business-Led Network of Centres of Excellence in enhanced oil recovery, with over 60 active projects looking at ways to improve the recovery and environmental impacts of hydrocarbon production.
- The Saskatchewan Phanerozoic Fluids and Petroleum Systems project , looking at how hydrocarbons are generated and where they migrate to in the subsurface of the province.

Message from the Chair

This past fiscal year the province of Saskatchewan continued to lead the country both in economic outlook and growth, in no small part owing to the strength of natural resources – including the oil and gas industry. The continued expansion of oil production from the Bakken formation in southeast Saskatchewan, and the on-going development of new technologies for the province's tried and true deposits in medium and heavy crudes, have both contributed to making Saskatchewan one of the economic engines of the country.

The PTRC has played no small role in that economic success. In its 14 year history, the PTRC has managed field trials in important new recovery methods in the oil patch that both increased production and also reduced environmental impacts such as greenhouse gases. The IEAGHG Weyburn-Midale CO2 Monitoring and Storage Project has seen the sequestration of over 22 million tonnes of CO2 in the Weyburn and Midale oil fields while at the same time tripling oil production. Solvent vapour trials have showed promise in heavy oil fields along the Alberta border, and the STEPS Business-Led Network of Centres of Excellence continues to develop new enhanced oil recovery technologies that are primed for moving to field application.

PTRC's expanding partnerships with small-to-medium technology providers in 2011-12 did not go unnoticed by Western Economic Diversification, which provided some $880,000 to begin taking innovative water treatment technologies to oil fields. And the rising reputation of the PTRC globally led to a partnership with INCAS^3, a Dutch not-for-profit research and development company in possession of innovative microsensor technology that could prove important in characterizing oil reservoirs throughout Canada.

And finally, Aquistore moved forward with site selection for the drilling of its CO2 injection and observations wells located near SaskPower's Boundary Dam Integrated Carbon Capture and Storage (CCS) facility. SaskPower will begin providing CO2 to the site in 2014, and the wealth of knowledge to be gained from the wells – as well as from the capture and transportation of the CO2 – will be vital to the future of CCS globally.

I am pleased to be the Chair for a company full of such committed employees, and which is responsible for employing and fostering the next generation of researchers in enhanced oil recovery and carbon storage. In 2011-12 the PTRC saw some 105 students and postgraduates working on its enhanced oil recovery projects, and countless dozens more in its other funded research. I offer congratulation to the company, and to our committed Board members, for their continued dedication.

Michael Monea

Message from the CEO

2011-12 marked a year of transition for the PTRC.

With research in our most famous program effectively coming to a close – the IEAGHG Weyburn-Midale CO2 Monitoring and Storage Project – we turned our 12 years of research towards the production of a Best Practices Manual for the long term geological storage of CO2. Writing began late in the fiscal year and editing has continued into 2012-13, with the book planned for release in November 2012.

In some ways managing the Weyburn-Midale Project forever broadened the direction of research at the PTRC. Founded in 1998 to help develop a capacity for conducting enhanced oil recovery (EOR) research in Saskatchewan, the PTRC has always had a research focus on getting more oil out of the province's difficult-to-access reserves.

CO2 geological storage has an obvious overlap with oilfield research. The measurement and monitoring technologies in carbon capture and storage (CCS) projects have direct application to EOR. With this in mind, our second CCS project – Aquistore – readied itself for the drilling of injection and observation wells this past fiscal year. We are expecting both wells to be completed early in fiscal year 2012-13 in anticipation of receiving captured CO2 from SaskPower's Boundary Dam in 2014. A fixed seismic array to help monitor the CO2 was completed around the planned well site, and this information along with core samples from the wells once the drilling is complete will help clients and government officials better understand the geology of the province.

In 2011-12, Sustainable Technologies for Energy Production Systems (STEPS) – our Business-Led Network of Centres of Excellence in enhanced oil recovery – successfully funded over 60 research projects at five different universities and the Saskatchewan Research Council. After three years of laboratory and simulation research, some of the new STEPS technologies are seeing application, with the start of field trials in solvent vapour extraction and microsensors for characterizations of reservoirs. Funding was also secured from the Western Economic Partnership Agreement to support field deployment of new technologies that reduce the production of water during oil extraction and improve water quality prior to disposal.

PTRC also entered the final year of our Phanerozoic Fluids research project, which is completing a subsurface map showing the potential location and movement of fluids right across the province of Saskatchewan. A final report on the project should be issued in the next fiscal year.

I would like to personally thank the staff of the PTRC for their ongoing fine work and management of our projects, and our Board of Directors for their dedication and support of our research goals.

Dr. Malcolm Wilson

Governance & Accountability

Organizational Chart

2011-2012 Board of Directors

Michael Monea *(Chair)*, President, Carbon Capture and Storage Initiatives, SaskPower

Brian Watt *(Vice Chair)*, EOR Planning and Land Manager, Heavy Oil and Gas Business Unit, Husky Energy Inc.

Hal Sanders, Assistant Deputy Minister, Saskatchewan Ministry of the Economy (Minerals, Lands and Resource Policy)

Dennis Fitzpatrick, Vice President, Research, University of Regina

W.A. (Bill) Jackson, Independent Director

Patrick Jamieson, Independent Director

Ernie Pappas, Vice President, Energy, Saskatchewan Research Council

David Payne, Vice President, Exploitation – East, Canadian Natural Resources Limited

Dan Schiller, Vice President- Eastern Oil Business Unit, Cenovus Energy Inc.

Randy Brunet, Partner, MacPherson, Leslie and Tyerman (MLT)

Robert Scammell, Senior Exploitation Manager, North Central Plains and B.C., Apache Canada Ltd.

Chantal Abou Debs *(non-voting observer)*, Senior Program Manager, Business-Led Networks of Centres of Excellence

Geoff Munro *(non-voting observer)*, Chief Scientist and Assistant Deputy Minister, Innovation and Energy Technology Sector, Natural Resources Canada

Auditor's Report

To the Members of Petroleum Technology Research Centre Inc.,

The accompanying summarized financial statements, which comprise the summarized statement of financial position as at March 31, 2012, and summarized statements of operations and cash flow for the year then ended, are derived from the audited financial statements of Petroleum Technology Research Centre Inc. for the year ended March 31, 2012. We expressed an unmodified audit opinion on those financial statements in our report dated July 10, 2012.

The summarized financial statements do not contain all the disclosures required by Canadian generally accepted accounting principles. Reading the summarized financial statements, therefore, is not a substitute for reading the audited financial statements of Petroleum Technology Research Centre Inc.

Management's Responsibility for the Summarized Financial Statements

Management is responsible for the preparation of a summary of the audited financial statements in accordance with Canadian generally accepted accounting principles.

Auditor's Responsibility

Our responsibility is to express an opinion on the summarized financial statements based on our procedures, which were conducted in accordance with Canadian Auditing Standards.

Opinion

In our opinion, the summarized financial statements derived from the audited financial statements of Petroleum Technology Research Centre Inc. for the year ended March 31, 2012 are a fair summary of those financial statements, in accordance with Canadian generally accepted accounting principles.

July 10, 2012
REGINA, Saskatchewan

Virtus Group LLP
Chartered Accountants

Condensed Financial Statements

Condensed Statement of Financial Position

For the year ended March 31, 2012

(C$000s)	2012	2011
Assets		
Cash	$8,079	$18,867
Other Assets	16,407	3,580
Total Assets	$24,486	$22,447
Liabilities and Net Assets		
Deferred Revenue	23,189	19,468
Other Liabilities	596	2,649
Total Liabilities	23,785	22,117
Net Assets	701	330
Total Liabilities and Net Assets	$24,486	$22,447

Condensed Statement of Operations and Unrestricted Net Assets

For the year ended March 31, 2012

(C$000s)	2012	2011
Revenue		
Government of Canada Funding	$6,776	$5,370
Government of Saskatchewan Funding	3,580	3,842
Industry Funding	2,148	3,745
Other Funding	1,049	1,083
Total Revenue	13,553	14,040
Expenses		
Projects	11,137	12,677
Operations	2,045	1,363
Total Expenses	13,182	14,040
Excess of Revenue (Expenses)	371	-
Unrestricted Net Assets, Beginning of Year	330	330
Unrestricted Net Assets, End of Year	$701	$330

Condensed Financial Statements

Condensed Statement of Cash Flows

For the year ended March 31, 2012

(C$000s)	2012	2011
Cash		
Net cash from (used in) operating activities	$(10,787)	$1,568
Net cash used in investing activities	(1)	(18)
Increase (Decrease) in Cash	(10,788)	1,550
Cash, Beginning of Year	18,867	17,317
Cash, End of Year	$8,079	$18,867

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