ptrc
Sustainable Energy

OUR SUSTAINABLE FUTURE

ANNUAL REPORT 2024-2025

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LETTER FROM THE CEO

This was a significant year for growth and expanded opportunities at the PTRC – reflected, in particular, by the number of announcements hosted in our building, the development of exciting new collaborations, our expanded commitment to Indigenous engagement, and our ongoing R&D projects that have led to recognition and awards.

The Government of Saskatchewan and our main funding partner, Innovation Saskatchewan, chose to utilize the PTRC's building to make major funding and program announcements that garnered significant media attention over the past fiscal year. In late April 2024 the Honourable Jim Reiter, Minister of Energy and Resources, announced a major incentive program for the advancement of multi-stage lateral wells in the province.

This initiative, which will greatly improve the efficiency and productivity of reservoirs, while simultaneously reducing the environmental impacts of drilling and water use, will help the province reach its stated goal of increasing oil production to 600,000 barrels per day by 2030. From the PTRC's perspective, the announcement has provided impetus in 2024-25 to develop a R&D program aligned with improving multi-lateral technologies.

Following on from this April announcement PTRC announced the establishment of its new Energy Innovation Hub (EIH) in September 2024, with a media event where the Minister Responsible for Innovation Saskatchewan, the Honourable Jeremy Harrison, provided details on the new funding ($1.5 million to the PTRC). See the section on EIH in this annual report for more details of this expansion to PTRC's ability to increase energy research and production in the province.

Funding for the EIH was further increased by $1 million from the Government of Canada, and the federal Minister Responsible for Prairies Economic Development, the Honourable Terry Dugid, traveled to Regina to announce those funds in the PTRC's building and to tour our new lab facilities.

In March 2025, PTRC welcomed 24 Metis and Indigenous high school students and their chaperons from the Northern Village of Pinehouse for three days of learning about energy and science. The sessions – including trips to the Saskatchewan Science Centre and fun activities organized by the University of Regina's engineering and science students, helped to increase energy literacy among First Nations and Metis youth.

Other important initiatives, successes, awards and milestones are provided in the pages that follow. This includes new research on polymers in EOR through the EIH, geothermal studies for multiple clients, and feasibility work on Compressed Air Energy Storage (CAES) in Saskatchewan.

It's notable that, in my history of writing these annual report letters, I have found this fiscal year I could go on for pages with all the changes and initiatives that have occured. I will let the sections that follow provide more of the key details.

Once again, I would like to thank my dedicated staff, now expanded to 13 with additional researchers and technologies for the EIH, for its ongoing commitment to PTRC. And thanks to our Board of Directors for guiding us through this period of growth. Onward to 2025-26!

Ranjith Narayanasamy
CEO and President
PTRC Sustainable Energy

LETTER FROM THE CHAIR

2024-2025 marked a year of exciting growth at the PTRC. In September 2024, after the development of a business plan and funding from the PTRC's main funder – Innovation Saskatchewan – the launch of the PTRC Energy Innovation Hub (EIH) was announced at a major media event in the PTRC's lobby.

The Honourable Jeremy Harrison, Minister Responsible for Innovation Saskatchewan announced the new facility, enthusiastically noting the PTRC's long-time commitment to the development of sustainable energy in the province.

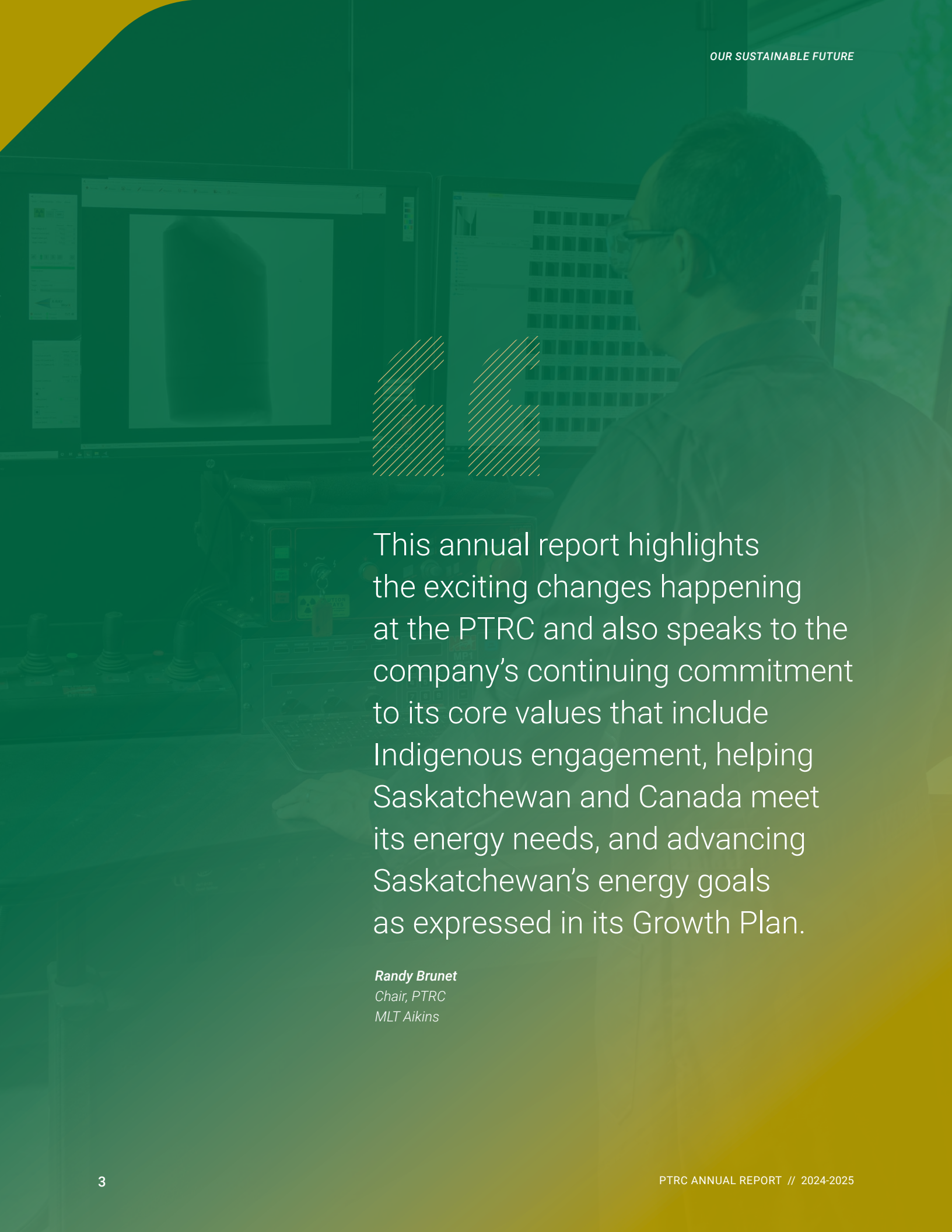
The PTRC has always been a leader in enhanced oil recovery (EOR) and CO_2 storage R&D, managing important programs over the last two decades like the Weyburn-Midale CO_2 Monitoring and Storage Project (2000-2015), the ongoing Aquistore CO_2 Storage Project, and important field trials of new EOR technologies like vapour extraction. The commitment of new funds for the EIH is an acknowledgment of not just this past work, but bold new initiatives from the past few years such as the geothermal feasibility study for the City of Regina for the new Lawson Aquatic Centre project. That study led to the city receiving $29 million from the federal ICIP program to develop a geothermal heating system for the complex.

The EIH began operations in the fall of 2024 by using its industrial-scale CT scanner to examine rock core samples from the Canadian Geological Survey and a western Canadian hydro company interested in the stability of rock formations around dam sites. This demonstrated the diversity of skills at the PTRC to develop R&D that addresses a wide array of energy production. Plans for the EIH by the end of 2024-2025 included a new polymer and surfactant research consortium to look at improving oil production in the Viking region of Saskatchewan.

This annual report highlights the exciting changes happening at the PTRC and also speaks to the company's continuing commitment to its core values that include Indigenous engagement, helping Saskatchewan and Canada meet its energy needs, and advancing Saskatchewan's energy goals as expressed in its Growth Plan.

I would like to thank my fellow Board members for their ongoing commitment to the PTRC, and for helping to guide the company during its current period of growth. I would also like to commend the company's CEO, Ranjith Narayanasamy, and his dedicated staff for the excellent work over the past year.

Randy Brunet
Chair, PTRC
MLT Aikins



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Randy Brunet
Chair, PTRC
MLT Aikins

WHO WE ARE

PTRC Sustainable Energy is a not-for-profit research, development and demonstration (RD&D) company, founded in 1998 to facilitate projects that reduce the carbon footprint and increase the production of subsurface energy. This includes enhanced oil recovery, CO_2 utilization and storage, geothermal energy, compressed air energy storage (CAES) and other kinds of energy production.

PTRC brings together private and public sector funding to develop projects that help companies and research groups meet their environmental, social and governance (ESG) needs, while assuring that Saskatchewan and Canada maintain their leadership in energy innovation. The company seeks to train and retain the next generation of highly qualified personnel in energy RD&D.

VISION

Be the leader in research and innovation to develop sustainable and environmentally responsible energy

MISSION

Be the incubator, accelerator and developer of research and innovation to reduce the carbon footprint and increase the production of subsurface energy

New Energy Innovation Hub Staff

This year four new staff members joined the PTRC as it established the new Energy Innovation Hub. These skilled staff will see the lab facilities of the EIH become some of the most sought after in Canada.

Peng Luo
Chief Scientist and Engineer

Bart Schnell
Principal Technologist

Zafar Iqbal
Senior Technologist

Jayvee Florendo
Technologist

THE ENERGY INNOVATION HUB

An Exciting New Initiative

On September 9th, the PTRC announced the establishment of the Energy Innovation Hub (EIH). The announcement of $1.5 million in funding was made in our lobby by the Hon. Jeremy Harrison, Saskatchewan Minister Responsible for Innovation Saskatchewan.

This provincial funding announcement was followed, in January of 2025, with PrairiesCan's announcement of $1 million in funding for the EIH. The Government of Canada's Minister Responsible for Prairies Economic Development, The Hon. Terry Duguid, made the announcement in the PTRC's lobby at a separate press conference.

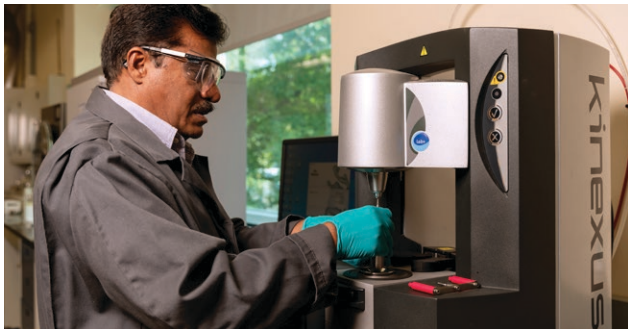
The EIH is a new centre advancing sustainable energy research and development in Canada. Situated in the PTRC's building at Innovation Place in Regina, the EIH will provide industry, governments and research scientists with access to resources, advanced equipment and personnel to foster the growth of different energy resources in support of Saskatchewan's Prairie Resilience Plan.

The EIH's new Director, Matt Nasehi, and four employees hired in this fiscal year will allow the PTRC to continue its focus on improving energy efficiency, reducing emission, and lessening the surface impacts from enhanced oil recovery, while also encouraging collaboration with researchers, municipalities and industry partners involved in other kinds of subsurface energy production to improve existing operations or investigate new options.

Matt Nasehi, Innovation Saskatchewan's CEO Kari Harvey, Ran Narayanasamy, and Minister Jeremy Harrison cut the ribbon on the new EIH

In the first six months of operation the EIH has seen work conducted for a Canadian power company – characterizing rock samples around hydroelectric dam sites – and both the Saskatchewan and Canadian Geological Surveys. A joint investment project (JIP) looking at the use of polymers and surfactants in oil fields in southern Saskatchewan has also been initiated with four industry partners.

It is expected the EIH facilities will be accessed by existing PTRC-funded research at universities conducted through the HORNET program. PTRC produced a short video of the new EIH, which is up on our YouTube page: https://www.youtube.com/watch?v=vuP6bfL_kyw



The EIH includes equipment such as rheometers.

The industrial scale CT-scanner at the EIH.

HORNET PROGRAM

This year the Heavy Oil Research Program (HORNET) began to transform from a program largely about enhanced oil recovery – a focus that saw major successes in the development of technologies like chemical flooding, mathematical modeling, wormhole characterization, and foamy oil production – into a more broadly based R&D program examining technologies that impact a wide array of subsurface energy production.

Eleven projects were approved early in the fiscal year, totaling some $1.26 million from the PTRC (and matched with an additional $755 thousand in funds from the Mitacs program). The PTRC's EOR research continues to be focused on helping the Province of Saskatchewan reach its stated goal of increasing daily oil production to 600,000 bbl/day by 2030.

HORNET is expected to transition in 2025-26 into a more broadly based research program with a continued focus on EOR technologies that reduce the environmental impacts of energy production, but which also allows for collaborative work in other kinds of energy through the new Energy Innovation Hub. Stay tuned for more in the next fiscal year on changes to HORNET.

PTRC's CEO Ran Narayanasamy welcome sponsors and researchers to the semin-annual HORNET meeting in Calgary.

INDIGENOUS ENGAGEMENT

This year PTRC moved into its third year of qualification for Partnership Accreditation in Indigenous Business through the CCIB (Canadian Council for Indigenous Business), in the hope of achieving our "Bronze" status in 2026.

The company continued to work with the First Nations Power Authority on its Clean Energy Awareness program, hiring through Mitacs two Indigenous interns to work on the development of materials and workshops at the FNPA. The awareness program is focused on identifying for First Nations communities the best energy options to reduce dependence on fossil fuels.

PTRC joined the "Reconciliation Action and Accountability Network" through our human resources manager Michelle Brooks (a member of the Cowessess First Nation). The members of the framework meet monthly to review strategies for fostering meaningful Indigenous engagement.

The company also moved forward with several consultative projects related to geothermal energy production for Indigenous communities, assisting different First Nations in applications for possible federal funding.

The PTRC's Director of Communications was also engaged by Tribal Council Ventures Inc. (TCVI) in Edmonton to present to its annual meeting about carbon capture and storage. TCVI is made up of six different First Nations, most of which are located in or near the proposed Pathways Alliance CCS project. This meeting was followed by a presentation at the head offices of the Cold Lake First Nation, also about CCS.

Indigenous and Metis Students from Northern Village of Pinehouse

On September 11th to 13th, PTRC hosted Indigenous and Metis students from the Northern Village of Pinehouse for a three-day energy literacy workshop. The workshop, covering different aspects of energy, included field trips to the Saskatchewan Science Centre, the core laboratory at the Geological Survey of Saskatchewan and fun/educational activities hosted by University of Regina students.

Photos: *Students from the Northern Village of Pinehouse pose for a group photo in the PTRC's office, and visited various scientific venues on their three day visit.* ▶

AQUISTORE UPDATE

As of the end of March 2025, the amount of CO_2 stored at the Aquistore site reached 620,000 tonnes.

Ongoing MMV conducted during 2024-25 included passive seismic monitoring, which continues to be analyzed monthly at the site by Dr. Igor Morozov from the University of Saskatchewan. These passive seismic reports have indicated there has been no induced seismicity related to CO_2 injection detected at the site. Maintenance on broadband stations was conducted on all five monitoring stations during the fiscal year to ensure their optimal functionality.

In order to understand concentrations and properties of the soil and groundwater at the site, physical and chemical data are collected from a network of 49 soil gas monitoring wells and 21 groundwater wells to ensure no injected CO_2 is making its way to the surface. The soil gas sampling campaign for the fiscal year was conducted by researchers from St. Francis Xavier University in both June and December of 2024. To date there are no indications of injection affecting groundwater and soil gas.

The Aquistore Annual General Meeting took place in October 1st and 2nd 2024 in Edmonton at the University of Alberta. The event brought together project consortium members, researchers, and members of the Science and Engineering

The Aquistore AGM was hosted in Edmonton this fiscal year and included more than 50 attendees.

Research Committee (SERC) from across Canada and internationally. A tour of the Shell Quest CCS facility was held on October 2nd where the AGM attendees had a chance to visit the Quest CCS facility. An information session by Quest management was held at the Scotford upgrader site. The AGM provided an excellent opportunity to review the results of work completed for the project in 2024. An in-person SERC meeting was held the afternoon of October 2nd where members discussed plans for expanding Aquistore as well as potential new research projects.

Canadian Natural Resources (CNRL) representing the Pathways Alliance project joined Aquistore for three years until 2026. CNRL will have access to data and results from the yearly work conducted at the Aquistore site. A CNRL representative has joined the Science and Engineering Research Committee that oversees the project. PTRC will also provide site access to CNRL for testing different MMV technologies. Involvement with Aquistore helps CNRL and members of Pathways Alliance de-risk their CCS initiatives.

PTRC will be moving forward with the drilling of an additional observation well at the Aquistore site – directly into the CO_2 plume – to better understand how the reservoir has been responding to long-term CO_2 saturation. The new well is expected to examine rock matrices, caprock, and reservoir fluids as part of the new well project that will begin in 2025-2026.

IMPACTS

PTRC's Matt Nasehi is Named Chair of the ISO TC-265

The Director of the EIH, Matt Nasehi, was named Chair of the International Organization for Standardization's Technical Committee 265, which is the group setting standards around the world for all aspects of CCUS – from capture, to transport, to storage, to utilization and beyond. This is a recognition of PTRC's exceptional status, internationally, in the world of CCUS.

City of Regina's Lawson Aquatic Centre

PTRC helped the City of Regina develop its RFP for the building of the geothermal component of the new downtown Lawson Aquatic Centre and signed a consultative agreement with the City to act as project owner's engineer, to review progress as the project develops. The City plans to be drilling the two geothermal wells near the existing Lawson building in early 2026.

Greenhouse Gas Technologies Conference: GHGT-17

PTRC's impact globally on CCS was solidified when staff provided a major presence at the GHGT-17 international conference in Calgary, Oct. 20-24th 2025. In addition to presentations by the PTRC's Aquistore Project Manager, Zeinab Movahedzadeh on the Aquistore project, and by the Director of Communications Norm Sacuta on public engagement and outreach for CCS, additional technical papers were delivered by individuals conducting research for the project. In addition, Marziyeh Kamali – the PTRC's Project Engineer – provided a poster on the modeling of CO_2 storage at various locations in Saskatchewan.

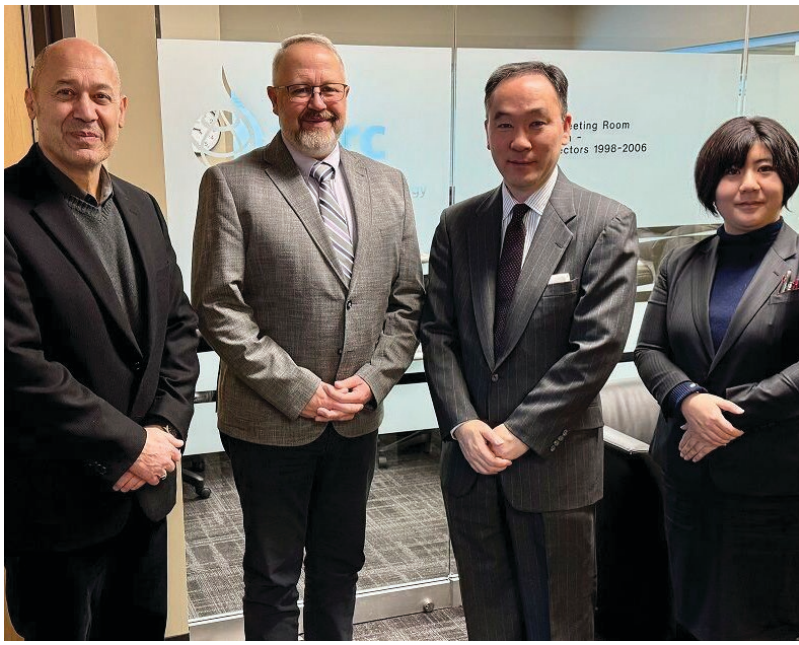
Zeinab Movahedzadeh speaks at GHGT-17 in Calgary.

MEETINGS, TOURS AND AWARDS

This may have been a record year for visits to the PTRC – both from local and international researchers and companies.

Visitors to PTRC – often with the assistance of our partners at Trade and Export Development Saskatchewan or through business offices at Canadian high commissions overseas – arrived from locations as far away as southeast Asia, United Arab Emirates, India, and Japan. Companies included Taiwan-based TGCarbon, the Siam Cement Public Company, and Japan's largest power generation company JERA Corp. All these companies hoped to learn more about PTRC's CCS and EOR work and tour our newly established Energy Innovation Hub.

Other local visitors included Economic Development Regina, Saskatchewan Trade and Investment, PrairiesCan senior executives, and the Consuls General from Jordan, Japan and India.



Takehiko Wajima, Consul for Japan in Calgary, visits the PTRC.

CEO Ranjith Narayanasamy

Awards

PTRC was a finalist in the Saskatchewan Chamber of Commerce's ABEX awards, hosted in September, 2024 in Saskatoon. ABEX awards are presented to Saskatchewan companies that drive, innovate and create impacts in the economy. PTRC was a finalist for the "Not-for-Profit Impact Award".

CEO Ran Narayanasamy was identified as one of the "accomplished alumni" at the University of Regina's Faculty of Engineering 50th Anniversary Dinner in October.

INDEPENDENT AUDITORS' REPORT

VIRTUS GROUP
Chartered Professional Accountants & Business Advisors LLP

To the Members,
Petroleum Technology Research Centre Inc.

Opinion // The summary financial statements, which comprise the summary statement of financial position as at March 31, 2025, the summary statements of operations, net assets and cash flows for the year then ended, and related notes, are derived from the audited financial statements of **Petroleum Technology Research Centre Inc.** for the year ended March 31, 2025.

In our opinion, the accompanying summary financial statements are a fair summary of the audited financial statements, which were prepared in accordance with Canadian accounting standards for not-for-profit organizations.

Summary Financial Statements // The summary financial statements do not contain all the disclosures required by Canadian accounting standards for not-for-profit organizations. Reading the summary financial statements and the auditor's report thereon, therefore, is not a substitute for reading the audited financial statements and the auditor's report thereon.

The Audited Financial Statements and Our Report Thereon // We expressed an unmodified audit opinion on the audited financial statements in our report dated August 12, 2025.

Management's Responsibility for the Summary Financial Statements // Management is responsible for the preparation of the summary financial statements based on the audited financial statements prepared in accordance with Canadian accounting standards for not-for-profit organizations.

Auditor's Responsibility // Our responsibility is to express an opinion on whether the summary financial statements are a fair summary of the audited financial statements based on our procedures, which were conducted in accordance with Canadian Auditing Standard (CAS) 810, *Engagements to Report on Summary Financial Statements*.

August 12, 2025
Regina, Saskatchewan

FINANCIAL REPORT

SUMMARY STATEMENT OF FINANCIAL POSITION, CONSOLIDATED

For the year ended March 31, 2025

(C$000s)	2025	2024
Assets		
Cash	881	947
Investments	2,928	2,812
Other assets	3,027	190
Total assets	6,836	3,949
Liabilities		
Deferred revenue	1,579	1,536
Deferred capital contributions	1,639	–
Other liabilities	1,027	696
Total liabilities	4,245	2,232
Net assets	2,591	1,717
Total liabilities and net assets	6,836	3,949

SUMMARY STATEMENT OF OPERATIONS, CONSOLIDATED

For the year ended March 31, 2025

(C$000s)	2025	2024
Revenue recognized		
Funding revenue	5,056	4,105
Grant revenue	15	–
Unrealized gain (loss) on investments	116	115
Other	891	432
Total revenue recognized	6,078	4,652
Expenses		
Projects	2,836	2,756
Operations	2,368	1,819
Total expenses	5,204	4,575
Excess of revenue over expenses	874	77

SUMMARY STATEMENT OF NET ASSETS, CONSOLIDATED

For the year ended March 31, 2025

(C$000s)	Internally restricted net assets	Unrestricted net assets	2025	2024
Opening balance	900	817	1,717	1,640
Excess of revenue over expenses	–	874	874	77
Ending balance	900	1,691	2,591	1,717

SUMMARY STATEMENT OF CASH FLOWS, CONSOLIDATED

For the year ended March 31, 2025

(C$000s)	2025	2024
Net cash from operating activities	2,113	793
Net cash used in investing activities	(2,179)	(915)
Increase (decrease) in cash resources	(66)	(123)
Cash, beginning of year	947	1,070
Cash, end of year	881	947

SUMMARY FINANCIAL STATEMENTS

The summary financial statements are derived from the audited financial statements, prepared in accordance with Canadian accounting standards for not-for-profit organizations, as at March 31, 2025 and for the year then ended.

The preparation of these summary financial statements requires management to determine the information that needs to be reflected in them so that they are consistent in all material respects with, or represent a fair summary of, the audited financial statements.

Management prepared these summary financial statements using the following criteria:

(a) The summary financial statements include a statement for each statement included in the audited financial statements;

(b) Information in the summary financial statements agrees with the related information in the audited financial statements;

(c) Major subtotals, totals and comparative information from the audited financial statements are included; and

(d) The summary financial statements contain the information from the audited financial statements dealing with matters having a pervasive or otherwise significant effect on the summary financial statements.

The audited financial statements of Petroleum Technology Research Centre Inc. are available upon request by contacting the organization.

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