AUPRF 101

2025 - 2026

PTAC

Alberta Upstream Petroleum

Research Fund

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PETROLEUM TECHNOLOGY

ALLIANCE CANADA

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Alberta Upstream Petroleum Research Fund

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History & **Purpose**

The Alberta Upstream Petroleum Research Fund (AUPRF) was launched in 2006 as an **industry-led program** that advances technology development and best practices for **Alberta's upstream oil and gas industry.**

- AUPRF exists to help oil and gas producers in Alberta to collectively solve competitiveness and environmental challenges that no single company can tackle alone.
- Alberta's oil and gas producers come together, through the AUPRF committees, to chart a collaborative course in **5 Focus Areas** that reflect the full lifecycle of upstream operations:

PTAC serves as Alberta's oil and gas research arm and **third-party project manager**, facilitating collaborative, industry-led innovation. **Supported by CAPP, EPAC**, and the **Government of Alberta**, PTAC manages AUPRF funds to deliver **practical**, **cost-effective solutions** to environmental and operational challenges.

Shared cost → Shared Evidence **→ Shared Benefits.**

AUPRF's **Impact**

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Funding Leverage Ratio **4:1**

300+ Producers contribute to fund **applied research** & tech development

544+ Projects launched and **$38M+** in **industry funding**, **leveraging** over **$190M** in total research spending

Tens of Millions in annual industry savings through **methane reduction**, **remediation** efficiencies, and **species-at-risk management**

14 Policy & Regulatory revisions informed by AUPRF-technical recommendations and **science-based evidence**. Examples include:

✓ Remote Green Zone Limits (F2-F3)
✓ Development of Subsoil Salinity Tool
✓ Weeds management

"AUPRF is where innovation meets practicality.
By pooling resources, producers are advancing technologies and developing best practices that help reduce costs, improve operational efficiency, and inform regulatory and policy development to accelerate technology adoption."

– James Agate, Canadian Natural
Chair, AUPRF Oversight Committee

Tools Developed for Industry

AUPRF projects have developed several tools to boost efficiency and cut costs.

1. Alberta Water Tool for Improved Water Management

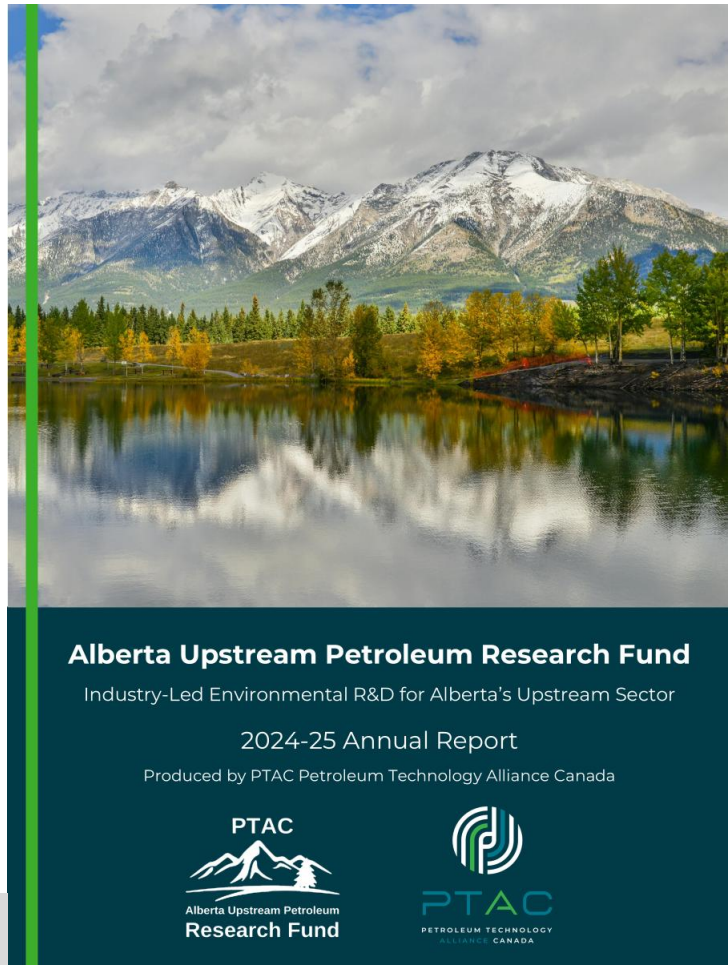
- Speeds up access to water data, reducing reliance on expert analysis.
- Intended to help streamline water-licensing processes, may reduce uncertainty, and support efficient, compliant water management.

2. Subsoil Salinity Tool (SST)

- Helps assess and manage salt-affected soils in collaboration with regulators, supporting more reliable soil characterization without added lab costs.
- Outcomes may help enable more efficient, data-informed remediation planning and contribute to reducing analytical, soil removal, and overall project costs.

3. Reclamation Decision Tools

- Support AER in land-use and reclamation decisions under EPEA



Learn about other Tools and AUPRF's Impact in the **2024-25 AUPRF Annual Report**

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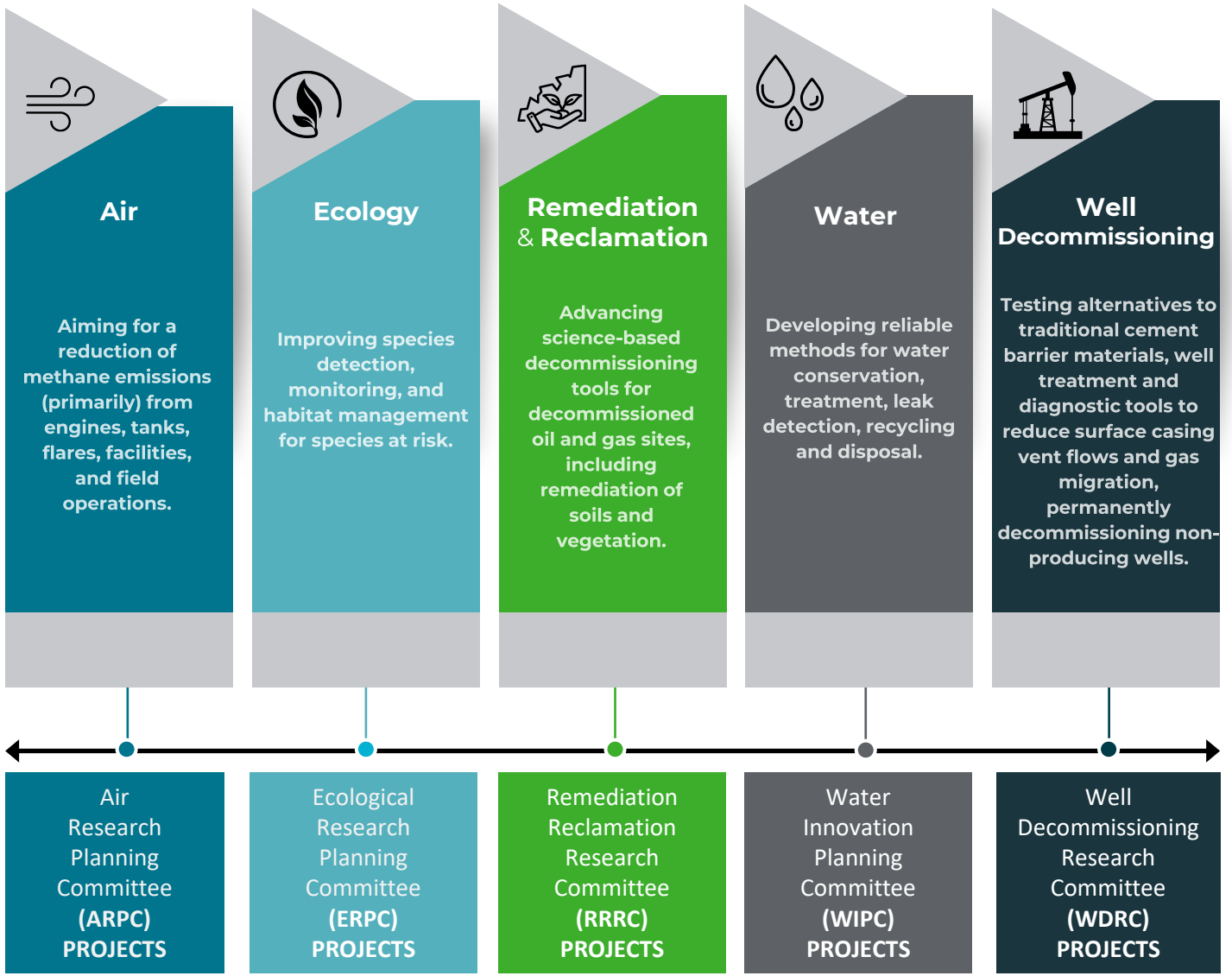
Projects Highlights Menu



& **Testimonials**

ARPC Project Highlights

Management Practices for Methane Emissions in Stationary Engines

- Project assessed 110 stationary engines (mainly Caterpillar and Waukesha) for their emissions parameters in field conditions. Best management practices and design changes were developed, as well as adjustments to the MSAPR database used by ECCC.

New Technology to Reduce Methane Emissions from Stationary Engines

- Successfully tested an Oxiperator technology designed to eliminate uncombusted methane emissions in stationary engines.

Alberta Methane Field Challenge

- Collaborative field trials to assess real-world performance of new methane sensing technologies to speed up adoption by the regulator.

Testimonial

The AUPRF program plays a critical role in helping industry address air-related environmental challenges through science-based, practical solutions. As Chair of the PTAC Air Research Planning Committee, I've seen firsthand how AUPRF-funded projects provide high-value data, prove innovative technologies, and cost-effective approaches that support regulatory compliance, improve environmental performance, and inform policy. The collaborative nature of the program ensures that research is targeted, relevant, and aligned with industry needs.

– Sean Hiebert, Cenovus

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ERPC Project Highlights

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Caribou Range Restoration Project

- Studies of the best approaches to caribou habitat restoration to reduce predation

Evaluation of Grizzly Bear Populations

- Evaluated decades of management practices aimed at improving grizzly bear population health, identified future monitoring approaches, and contributed to the species' status being upgraded from endangered to near threatened

Remote Sensing to Reduce Impacts on Pileated Woodpeckers

- Assessment of Pileated woodpecker nests to reduce the exclusion period for resource development

Testimonial

The AUPRF Ecological Research Planning Committee is committed to advancing science-based solutions that support responsible energy development while protecting Alberta's diverse ecosystems. Through strategic collaboration and targeted research, we aim to address key knowledge gaps and inform best practices across the industry.

– Mark Boulton, Suncor

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RRRC Project Highlights

F2 & F3 Petroleum Hydrocarbon Management Limits

- Management limits for petroleum hydrocarbon (PHC) fractions were developed to flag concentrations where non-toxic risks, such as aesthetics and petroleum buildup, may arise. This project aims to identify concentration levels below which environmental impacts are minimal

Subsoil Salinity Tool

- Industry stakeholders use the tool to manage soil salinity on affected sites, helping reduce both the cost and time required for site closure

Passive Management of Noxious Weeds

- Assesses the effectiveness of passive noxious weed management in reducing control costs and accelerating well site closure by minimizing the use of herbicides and other active weed control methods

Testimonial

As Chair of the RRRC, I'm proud to support the impactful projects currently underway. Our work focuses on advancing leading science and field practices to ensure remediation and reclamation efforts are carried out as cost-effectively and efficiently as possible. Many RRRC initiatives deliver practical tools, streamlined processes, and measurable cost savings—while also generating the data and evidence needed to inform sound regulatory and policy development that benefits both industry and regulators.

– Jason Desilets, Cenovus

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WIPC Project Highlights

Alberta Water Tool

- Offers easy access to water supply, demand, and environmental flow data across 200,000+ km², delivering reliable reports to support water supply planning

Barriers to Water Recycling

- Assessed the challenges Alberta producers face in recycling water for hydraulic fracturing and compared these barriers to higher recycling rates in British Columbia

Leak Detection Technologies for Water Surface Pipelines

- Will identify remote leak detection technologies for water pipelines to replace manual monitoring, cutting costs and improving efficiency

Testimonial

Collaboration and innovation are at the heart of the AUPRF Water Innovation Planning Committee's work. By aligning research with real-world challenges in the oil and gas sector, we drive practical solutions for managing water across the entire lifecycle supporting responsible development across Alberta.

– Scott Hillier, Cenovus

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WCRC Project Highlights

Decommissioning Barrier Materials

- Testing six barrier materials for well plugging and decommissioning, showing a need for better tools and procedures to reduce the number of interventions required to stop surface casing vent flows

Replacement of Class G Cement

- Testing alternative Portland cement mixes to replace Class G cement in Canadian oil and gas wells, following its discontinuation by a major supplier

Plug and Abandon Strategies for Oil & Gas Wells

- Will evaluate sealing cement methods to eliminate surface casing vent flows and guide producers on effective treatment options

Testimonials

The WCRC undertakes projects aimed at significantly enhancing best practices in well decommissioning. These projects cover a broad range of strategies, including innovative investigation methods, the use of alternative materials, and the creation of models for risk management.

– Shawn Forster, Cenovus

The WCRC is dedicated to supporting research that addresses knowledge gaps within the well closure space related to cement placement, alternative product development and developing science based best practices. This is achieved through collaboration between industry members, research experts and industry regulators.

– Leah Davies, Imperial Oil

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Testimonials

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"**We are justly proud of the history of achievement of the AUPRF program**, and its sustaining collaboration between the industry, government, and regulators. We are also proud of the **collegial spirit of our five technical committees** and our oversight committee. These productive working relationships further the development of **effective and reasonably priced solutions for the sector**."

Scott Volk

Director of Emissions & Innovation, Tourmaline Oil Corp

Former Chair
AUPRF Oversight Committee

"**There is significant value that industry gains through their involvement and funding**. Properly designed regulations that reflect scientific and engineering facts improve all parties' credibility. This can avoid processes that increase transactional timelines, lead to unwanted delays and potentially adversarial hearings."

Randy Dobko

Alberta Environment and Protected Areas (AEPA)

Gov. Co-Chair Air Research Planning Committee

Environmental Management **Structure**

AUPRF delivers technology development and innovation that reflects the priorities of Alberta's upstream oil and gas producers. **Producers choose projects through a transparent and collaborative process**, ensuring relevance and practicality.

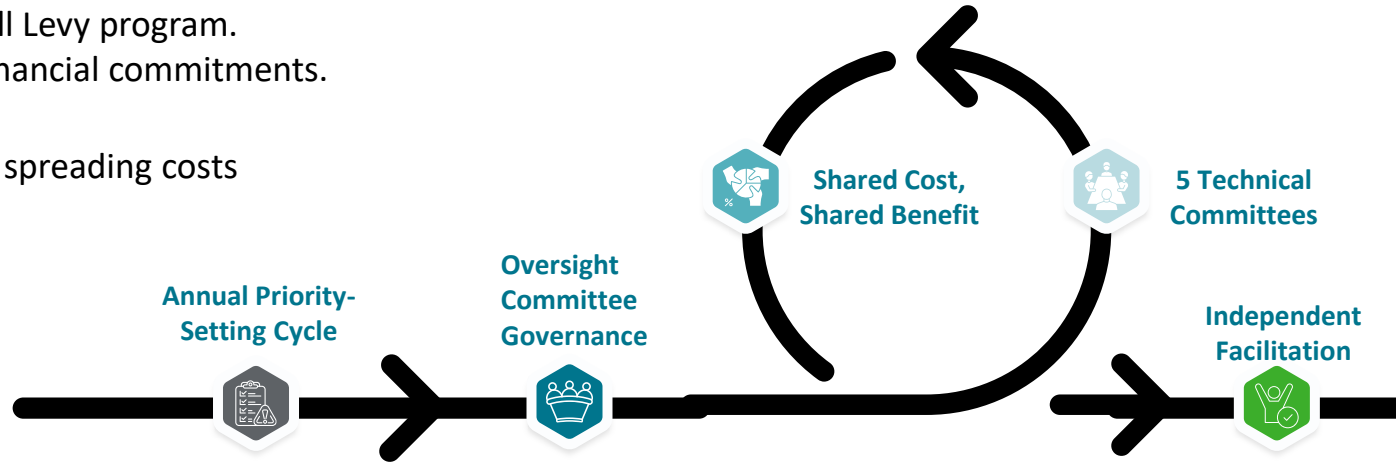
Annual Priority-Setting Cycle – Producers propose and vote on technology development themes via a structured call and review process.

Oversight Committee Governance – The AUPRF Oversight Committee (AOC) is comprised of 6 voting members (four Producers representatives from **CAPP** and two from **EPAC**) and observers from the **Alberta Government and the Alberta Energy Regulator**. The AOC approves funding decisions and ensures accountability.

5 Technical Committees – Air, Water, Ecology, Remediation & Reclamation, and Well Decommissioning
Composed of representatives from the producer funders of the Well Levy program.
As this is an industry-funded program, only industry reps vote on financial commitments.

Shared Cost, Shared Benefit – Producers pool contributions, spreading costs across the sector and gaining collective access to results.

Independent Facilitation – PTAC manages and facilitates the process but does not control priorities. Final decisions rest solely with industry.



Funding Through Voluntary Well Levy

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AUPRF is funded voluntarily by Alberta's Oil and Gas Operators

Annual well levy is issued by the **AER**, supported by **CAPP**, **EPAC**, **Alberta Energy and Minerals, and Alberta Environment and Protected Areas**

Joint annual support letter highlights the program's value and encourages industry contributions

300+ Producers Voluntarily Fund
Applied Research & Tech Development

Average Collection Rate of 60%
Over the Past 3 Years

+50 Projects
Ongoing In a Given Year

AUPRF is not just a fund – it's a platform for shaping the future of competitive and sustainable oil and gas development in Alberta. Producers, regulators and governments work collaboratively on technical committees to help drive innovation and advance the oil and gas sector to a more efficient future.

2025-2026 **Representation**

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AUPRF Oversight Committee

CAPP
EPAC
Canadian Natural
cenovus ENERGY
Imperial
Ovintiv
TOURMALINE
Alberta Energy Regulator
Alberta Environment and Protected Areas

Air Research Planning Committee

Canadian Natural
cenovus ENERGY
TOURMALINE
WHITECAP RESOURCES INC
CAPP
EPAC
Alberta Environment and Protected Areas
Environment and Climate Change Canada / Environnement et Changement climatique Canada
Natural Resources Canada / Ressources naturelles Canada
Alberta Energy Regulator
BCER BRITISH COLUMBIA ENERGY REGULATOR
Saskatchewan

Ecological Research Planning Committee

Canadian Natural
cenovus ENERGY
Imperial
Ovintiv
SUNCOR ENERGY
CAPP
Alberta Energy Regulator
cosia avec l'Alliance nouvelles voies
Alberta Environment and Protected Areas

Remediation and Reclamation Research Committee

CAPP
EPAC
Canadian Natural
cenovus ENERGY
Imperial
veren
WHITECAP RESOURCES INC
Alberta Energy Regulator
Alberta Environment and Protected Areas
BCER BRITISH COLUMBIA ENERGY REGULATOR
Orphan Well Association

Water Innovation Planning Committee

Canadian Natural
cenovus ENERGY
MEG ENERGY
MURPHY OIL CORPORATION
Ovintiv
TOURMALINE
CAPP
EPAC
Alberta Energy Regulator
Alberta Environment and Protected Areas

Well Decommissioning Research Committee

Canadian Natural
cenovus ENERGY
Imperial
veren
WHITECAP RESOURCES INC
CAPP
EPAC
Alberta Energy Regulator

Research Collaborators

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ABMI

Biodiversity Pathways

Carleton University

InnoTech ALBERTA
A SUBSIDIARY OF ALBERTA INNOVATES

LGL

Matrix Solutions Inc.
ENVIRONMENT & ENGINEERING

McGill

MILLENNIUM
EMS Solutions Ltd.

MONTROSE ENVIRONMENTAL

NAIT

silvacom

SLR

SRC SASKATCHEWAN RESEARCH COUNCIL

statVIS Trust Through Data

UNIVERSITY OF ALBERTA

UBC THE UNIVERSITY OF BRITISH COLUMBIA

University of Windsor

A Hazen Company
waterSMART
Water Management Solutions

VERTEX

worley
DELIVERING SUSTAINABLE CHANGE

& many more!

Understanding the Distinction – PTAC and AUPRF

PTAC

+65 Projects and initiatives launched, completed, or active across PTAC's coordinated networks

+170 Member Companies in 2025-26 across Oil & Gas Producers |Midstream & Transport |Service & Supply Companies | Government Agencies |SMEs | R&D Organizations| Academic Institutions & more

$20+ million in cash and in-kind in 2024-25

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21 projects launched in 2024-25 with direct input from CAPP and EPAC members, including 16 Projects with Field Trials, and 38 Projects in total

59 industry member volunteers & **30 government & regulatory** members on volunteer committees

~14 Policy & Regulatory Revisions informed by PTAC-facilitated AUPRF-technical recommendations and science-based evidence

Why Both Matter

PTAC provides agile, customized innovation support and cross-sector collaboration.
AUPRF delivers coordinated research impact at scale, governed by producers.

While **AUPRF** tackles shared, sector-wide challenges, **PTAC** supports more nimble, targeted opportunities.

Together, PTAC and AUPRF ensure producers' investments support both immediate needs and long-term strategic advantages.

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Call to Action

AUPRF relies on active producer participation, including:

1. Committee involvement,
2. Contributions to the well levy,
3. Hosting sites for field trials, and
4. Sharing operational data to validate technologies.

This collaborative approach ensures that technology development remains relevant, practical, and widely adopted.

"**AUPRF's potential can be even greater. Today, about 60% of producers participate in the program**. Broader engagement will amplify our collective impact—more producers involved in our discussions, more contributors to our funding pool, and more champions of collaborative innovation."

– Scott Volk, Tourmaline Oil Corp

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Together, we can ensure industry leads the path forward through collaboration, ensuring that technology development findings translate into actionable recommendations for Alberta's upstream oil and gas industry.

PETROLEUM TECHNOLOGY ALLIANCE CANADA

Need More Information?

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