

Alberta



February 17, 2023

To: 2023 AER Oil & Gas Administration Fees Recipients

Re: Industry Support for the Alberta Upstream Petroleum Research Fund

On behalf of the Canadian Association of Petroleum Producers, the Explorers and Producers' Association of Canada, Alberta Energy, and Alberta Environment and Protected Areas, we encourage your company's contribution to support the Petroleum Technology Alliance Canada (PTAC) Alberta Upstream Petroleum Research Fund (AUPRF).

We recognize the significant value the PTAC AUPRF applied research program provides the oil and gas industry, and believe that through innovation and collaborative R&D, we can minimize the environmental impact of our industry's activities and contribute to value added opportunities and operational cost minimization.

The 2023 budget necessary to implement this research program is \$5,288,000. Your contribution is voluntary. However, we urge you to carefully consider the benefits of this program to the oil and gas sector in Alberta and make your contribution. Our collective ability to demonstrate proactive work in dealing with pressing environmental management issues, including the reduction in GHGs, well closures and land remediation will significantly benefit the industry and the economy of Alberta. Your contribution will assist with the development of new clean technologies and business processes. In addition, the unique collaboration between industry and government affords the ability to develop smart regulations.

AUPRF Performance Highlights

Through the AUPRF program, industry collaborates with policymakers and regulators to identify and prioritize research needs. Industry funds are leveraged by government, institutional, and other stakeholder support, often at a rate of five to one, or more. Some key highlights of the program to date include:

- Over 450 projects launched to date.
- Over \$33 Million in funding from the oil and gas sector through AUPRF leveraging a total research spending of over \$190 Million.

- Enhanced governance through a newly established AUPRF oversight committee of Alberta Oil and Gas producers
- Notable projects:
 - Methods for estimating methane emissions from on-site storage tanks.
 - Algar Caribou habitat restoration.
 - GHG monitoring for Well repair of sweet Natural Gas Wells.
 - Drilling practices to optimize Well integrity with primary cementing.

What's in store for 2023

In 2023, the program will continue to focus on the priorities of industry including projects such as:

Methane Slip is an emerging issue. Methane slip is the term associated with unburned methane that passes through the combustion process in stationary engines. According to the AER, stationary engines are suspected to contribute 4.9 MT CO₂e per year from unburned methane emissions in Alberta. This project is anticipated to provide an opportunity to significantly reduce methane emissions through the development of best management practices for optimizing engine efficiency while providing data and science to support smart regulatory development.

Understanding Tank Vent Emissions, this project will help to better understand the magnitude of tank vent rates, the temporal nature of tank vents, the root cause of tank venting, the difference between actual vent rates and reported vent rates, and the viability of emerging technologies to detect and quantify tank vent rates.

Inventory of Non-Operating Sites, as industry moves to satellite and aerial surveys, we are seeing non-operating sites that may be pressurized. This is a new source of methane and this project is looking to conduct an inventory to understand the size of source.

The Background Soil Quality System (Alberta and Saskatchewan) are developing regional databases of background metals and salinity parameters for the purpose of decreasing the cost and time required to identify and remediate valid contaminants of potential concern on contaminated sites. Project will result in reduced costs and increased efficiency with respect to closure of oil and gas sites and is expected to result in more sites being brought forward to closure.

Assessing Weeds on Reclaimed Sites for Streamlining Certifications aims to determine if undesirable weed species on reclaimed well sites can be eliminated over time by native forest vegetation. The desired outcome is the reduction of needless spraying of herbicide chemicals on remote forested sites while at the same time providing guidance and standardization to weed justifications. Study will help provide guidance and clarity to the meaning of weed control on forested well sites as it relates to effects on forest recovery and equivalent land capability. As a result, a more consistent and streamlined process will be developed, resulting in faster well site certification.

For more information on the AUPRF program, please visit: <https://auprf.ptac.org/>

As a funder, your organization is entitled to access electronic copies of all final reports from AUPRF projects including background information and details not available to other stakeholders. There is also a vast catalogue of best management practices developed to improve operational efficiencies and cost effectiveness. Your staff can get involved in the decision-making process to set priorities for the research. The AUPRF program is driven by the pragmatic perspective of oil and gas producers. Your organization will also be recognized publicly as a financial contributor to this program. Presentations and potential training activities may also be arranged, as requested.

We thank you for your cooperation, and hope that you will join our efforts in supporting the substantial value to industry generated by the Alberta Upstream Petroleum Research Fund.

For additional information on specific AUPRF projects, please contact: Tannis Such at Petroleum Technology Alliance Canada: 403-218-7703 or tsuch@ptac.org.

For information on how your portion of the AUPRF funding was calculated, please contact: Anila Kaceli at the AER: 403-297-6985 or anila.kaceli@aer.ca.

Sincerely,



Grant Sprague
Deputy Minister, Alberta Energy



Katarzyna Piquette
Deputy Minister, Alberta Environment and
Protected Areas



Lisa Baiton
President and CEO, CAPP



Tristan Goodman
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