

# CLEAN RESOURCES

## ADVANCED HYDROCARBONS

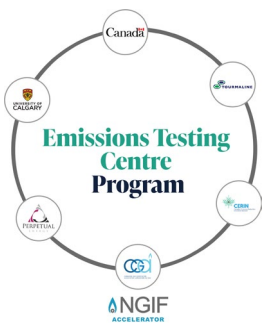
CLEANER HYDROCARBON PRODUCTION – METHANE EMISSIONS REDUCTION

### FUNDING DETAILS

## Accelerating Methane Emissions Management Technology Development - NGIF Accelerator Emissions Testing Center Program

The NGIF Emissions Testing Center (ETC) Program, is a collaborative effort among industry, government, and academia. It provides a space for the development, testing, and validation of technologies aimed at measuring, monitoring, and reducing methane emissions. This “free-to-user” access to both lab facilities at the University of Calgary and field trial sites, including the West Wolf Lake Gas Plant and other Tourmaline locations across Alberta.

The focus is on four priority areas: methane detection, methane mitigation, methane slip and commercialization readiness support, along with methane quantification and mitigation. This project provides technology providers and operators with actionable data to inform emissions reduction strategies.



**RECIPIENT:**  
NGIF Accelerator



**PARTNERS:**  
Tourmaline  
University of Calgary



**TOTAL BUDGET:**  
\$2,250,000



**AI FUNDING:**  
\$750,000



**PROJECT DATES:**  
MAR 2024 –  
MAR 2025



**PROJECT TRL:**  
Start: 4  
End: 6

## APPLICATION

The ETC Program field testing operational hub is the West Wolf Lake Gas Plant which is a heavily instrumented facility that will enable cleantech vendors access to test data at a live gas plant operation. The program also offers a controlled release vent site that simulates releases next to live operations. Additionally, a Continuous Emissions Monitoring System (CEMS) mobile trailer, which quantifies methane slip from natural gas engines, will also enable methane emissions validation. The ETC Lab provides environments for testing cleantech technologies under controlled conditions.

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### CLEANER HYDROCARBON PRODUCTION – METHANE EMISSIONS REDUCTION

## PROJECT GOALS

Project consists of 4 sub-projects:

### Methane Monitoring:

- Test technology for monitoring, localizing, and quantifying methane emissions.

### Methane Mitigation:

- Explore the potential for emissions reduction through technologies designed to reduce or eliminate known emissions sources.

### Methane Slip:

- Evaluate technology designed to either quantify or mitigate methane emissions from a natural gas engine.

### Technology Commercialization:

- Conduct testing at the ETC Lab at the University of Calgary working with technology vendors to de-risk and assess their technologies under temperature and chemical conditions.

## BENEFITS TO ALBERTA

- Program is expected to yield significant benefits in terms of job creation, revenue generation, and the fostering of new commercial opportunities.
- The deployment and commercialization of new methane management technologies are poised to spur the development of new economic sectors within Alberta.
- Training of new generation of highly quality personnel (HQP) in methane management and emission reduction, technology development, rapid testing, and modelling.



1 Publication



1 Student Trained



3 Field Pilots



4 Knowledge  
Mobilizations



\$10-100K Client's  
Domestic Sales



8 Collaborators



2 Innovation  
Ecosystem



4 Investment in Core  
Strategic  
Technology Areas

## CURRENT STATUS

### MAY 2024

Project kick-off initiated and a shortlist of companies has been created for the projects. These companies are currently in the process of finalizing or have finalized a project scope, which indicates a high probability of deployment within the project timeframe. All of these projects will continue to progress as part of the program.