

Memorandum of Understanding (MOU)

Establishment of a Collaborative and Strategic Working Relationship

Between

Geoscience BC

and

Petroleum Technology Alliance Canada, Alberta, Canada (“PTAC”)

(together referred to as the “Signatories” or individually as a “Signatory”)

Background

Geoscience BC is an independent, not-for-profit society incorporated under the British Columbia Societies Act. Geoscience BC’s mission is to generate and publicly share high quality and unbiased earth science research and data relating to minerals, oil and gas, and water resources in British Columbia that:

- improves the collective level of geoscience knowledge;
- informs responsible natural resource development decisions;
- catalyzes investment and socio-economic opportunities; and
- stimulates innovation and geoscience technologies.

PTAC Petroleum Technology Alliance Canada was established in 1996 as a not-for-profit association to act as a neutral facilitator to help Canada become a hydrocarbon energy technology leader through innovation, technology development, demonstration, and deployment. PTAC’s objective is to improve the industry’s financial, environmental and safety performance through technology innovation.

PTAC has approximately 200 member organizations, including oil and gas producers, who account for the majority of Canadian conventional oil and gas production, service and supply companies, transportation companies, research providers, learning institutions, government, and venture capital firms. Over 150 of PTAC members are small and medium enterprises, allowing PTAC to be a bridge between small and medium enterprises and the petroleum industry.

Purpose of Cooperation

The purpose of this MOU is to establish a framework for a collaborative and strategic working relationship between Signatories to share research, advance development, commercialization, and deployment of oil and gas clean technologies.

Scope and Framework for Cooperation

The Signatories will promote cooperation in all spheres of activity defined by this MOU in order to derive mutually beneficial and complementary outcomes for the Geoscience BC and PTAC.

Vision and Mission

The parties agree to work toward the common Vision and Mission, as follows:

Vision: Canada is a global leader in producing sustainable clean energy from its world class oil and gas resources.

Mission: Canada's leadership will be achieved through innovation, collaborative applied research and technology development, demonstration, deployment and technology commercialization for a responsible petroleum industry.

Collaboration Principles

The parties will strengthen innovation and accelerate the delivery of the Vision by demonstrating collaboration and exploring new opportunities.

Proposed Actions

The parties will undertake the following actions:

- Work together to share research and information
- Identify resource development challenges
- Develop and execute a plan to procure solution options for the identified challenges; and
- Secure funding for the procurement of such solutions.

Measures of Success

Success of the collaboration envisioned by this MOU will be evaluated by the following performance measures:

- Technology innovations efforts are optimized between the parties.
- A well managed portfolio of technology innovation projects is provided.
- The number of joint industry projects has increased.
- Collaborative workshops have been launched.

Areas of Cooperation

The parties will continue to operate according to the mandate given to them in their respective articles of incorporation or charter and by their governing board of directors or committee. However, the parties will provide support to each other in areas where they have notable experience, expertise and infrastructure in place, as indicated in the following table.

The Signatories agree to work together to:

- Put in place and / or share the infrastructure required for research collaboration and for sharing results;
- Identify BC-specific energy sector challenges that require applied research and technological solutions;
- Support requests for mutually beneficial research funding; and
- Develop further project-specific agreements as required.

Work Plan (High Level)

- Identification of key challenges (issues) facing oil and gas, where we can find clean tech solutions. It is suggested that PTAC host a session to create a short-list of challenges (i.e., comprising the Top 3).
- Networking workshop hosted jointly by ACTIA (Alberta Clean Technology Industry Alliance), Geoscience BC and PTAC for the purpose of introducing Top 3 challenges
- Develop funding structure (ACTIA, Geoscience BC and PTAC)
- Implement Call for Proposals - Review submissions and award of funding (ACTIA with assistance from PTAC, and Geoscience BC as required)

Funding and Resources

The cooperative activities carried out under this MOU will be subject to the availability of funds and resources of Geoscience BC and PTAC. For those activities carried out under this MOU, unless jointly decided, each Signatory will provide resources adequate to carry out its own commitments in relation to those activities.

Commencement and Termination

This MOU will come into effect on the date of its signature. It will remain in effect for a period of three (3) years thereafter unless terminated by either Signatory giving three (3) months prior notice in writing to the other Signatory.

Notwithstanding termination of this MOU, activities being undertaken pursuant to this MOU before its termination will continue to be governed by this MOU, or other respective agreements as the case may be, until their completion, unless the Signatories mutually agree otherwise.

Confidential Information

Neither Signatory will disclose or distribute any information that is supplied and marked, or stated to be "Commercial-in-Confidence" by the originating Signatory, except as, and to the extent authorized by the originating Signatory.

Each Signatory will respect the strict confidentiality of any information which is provided to it in confidence by the other Signatory and without limiting the generality of the information, will not publish, copy or distribute that information to others.

Designated Representatives

Each Signatory will appoint a representative to be responsible for the management and coordination of the relationship and for facilitating the cooperation and effective exchange of information.

The representatives of the Signatories, or their designated coordinators, will consult with each other through the channel specified by the Signatories, to define engagement activities, timelines and other related matters.

Review and Amendments

This MOU may be amended by mutual written consent of the Signatories at the request of either Signatory.

IN WITNESS WHEREOF, the Signatories have hereunto affixed their signatures on the dates indicated below:

Signed on the 1st day of June 2020



Per: -----

Gavin C. Dirom, President & CEO
Geoscience BC



Per: -----

Dr. Soheil Asgarpour, President
PTAC