

**ADVANCE CONTRACT AWARD NOTICE (ACAN)****1. Definition**

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

**2. Definition of Requirements****TITLE**

Lifecycle GHG Emissions for Low-Carbon Fuels in Canada.

**BACKGROUND**

Natural Resources Canada's Office of Energy Efficiency (OEE) (<http://oee.nrcan.gc.ca/>) promotes energy conservation, undertaking and supporting initiatives designed to reduce fuel use and greenhouse gas (GHG) emissions in Canada, and supporting the transition towards a lower carbon transportation sector.

The transportation sector is the second largest source of carbon emissions in Canada and contributed approximately 23% of total GHG emissions in 2014. The GHGenius lifecycle air emissions model, developed for Natural Resources Canada, is capable of analyzing the emissions for existing and potential transportation fuels.

The OEE is seeking to gather facts and evidence on low carbon transportation fuels in Canada, including the lifecycle greenhouse gas emissions profiles of various biofuels, natural gas, propane, hydrogen and Canada's national and provincial electricity mix. This will assist with the further analysis of the possible barriers that hamper the deployment of low carbon fuels and technologies.

**OBJECTIVES**

The objective is to clearly describe and quantify the full lifecycle GHG emissions reported by the most up-to-date version of the Canadian GHGenius model, in each Canadian province and nationally, from each process from the well to the pump, including extraction, production, refining and delivery of fuels for the following fuels: gasoline, diesel, ethanol, cellulosic ethanol, biodiesel, renewable diesel, natural gas, compressed natural gas, liquefied natural gas, renewable natural gas, propane, hydrogen (renewable and non-renewable), bio-jet and Canada's national and provincial electricity mix. Key processes, modeling assumptions, carbon sinks, and emissions displaced by coproducts will be clearly explained with supporting examples.

Vehicle tailpipe GHG emissions will also be reported for vehicles that are designed to operate on the following fuels: gasoline, diesel, E10, E85, B5, B20, B100, CNG (RNG), LNG, Propane, Hydrogen, and Electricity (BEV and Plug-in hybrids) and for the following vehicle classes: cars, light trucks, and heavy and medium duty vehicles in classes 3, 4, 5, 6, 7, and 8.

The expected outcome is a report that will effectively present, communicate, and explain the key assumptions, as well as the differences in results compared to other similar modelling tools.

### **3. Criteria for Assessment of the Statement of Capabilities**

Any interested supplier must demonstrate by way of a statement of capabilities that its product/equipment/system meets the following requirements:

- Must have demonstrable experience and insight into the development of the GHGenius model. This includes recent experience incorporating analysis based on various pathways and scenarios for industry and/or government.
- Must be able to use most recent GHGenius model, including updates up to and including 2016 data. Recent inputs for the model must be obtained through first-hand industry data gathering, including but not limited to: biomass crop yields, vehicular energy usage, electrical grid emissions, biofuel yields and production methods, and natural gas production and distribution.
- Must have extensive knowledge of key model assumptions (including sources and their validity/elements of uncertainty).
- Must have experience communicating key model assumptions (including sources and their validity/elements of uncertainty).

### **4. Trade Agreements**

Trade Agreements are not applicable.

### **5. Justification for the Pre-Identified Supplier**

We intend to deal directly with the supplier mentioned in section 10 below as, it is the only known supplier that meets the mandatory criteria set out in section 3 above.

Should Canada receive a statement of capabilities from a supplier that contains sufficient information to indicate that it meets the requirements set forth in this ACAN, a competitive process will be triggered with a technical and financial evaluation methodology of the bids proposed by the potential bidders.

### **6. Exception to the Government Contracts Regulations and applicable trade agreements**

In accordance with the Government Contract Regulations (GCR) exception, Part 1, Section 6, (d) only one person or firm is capable of performing the contract.

The suggested supplier, S&T Squared Consultants Inc., is the developer of the GHGenius model that analyzes the lifecycle emissions of various fuels across Canada. This model was developed for NRCan, and is available online to the public. S&T Squared Consultants Inc. also has the unique and detailed background knowledge surrounding how the model was created and the complexities regarding its operation.

The suggested supplier, S&T Squared Consultants, has extensive experience working with different industrial partners and provinces to understand current fuel pathways used in Canada. Since 2013, they have made over 70 updates to the model that are not yet reflected in the online,

public version; therefore they are currently the only source that is capable of running the model with these updates to reflect current conditions.

**7. Title to Intellectual Property**

Canada intends to retain ownership of any Foreground Intellectual Property arising out of the proposed contract on the basis that the main purpose of the contract is to generate knowledge and information for public dissemination.

**8. Contract Period**

From award of contract to March 31, 2017.

**9. Estimated Cost**

Estimated cost is \$50,000.00 including taxes.

**10. Name and Address of the Proposed Contractor**

S&T Squared Consultants Inc.  
11657 Summit Crescent  
Delta, BC

**11. Suppliers' right to submit a statement of capabilities**

Suppliers who consider themselves fully qualified and available to provide the services/goods described herein, may submit a Statement of Capabilities in writing, preferably by e-mail, to the contact person identified in this Notice on or before the closing date and time of this Notice. The Statement of Capabilities must clearly demonstrate how the supplier meets the advertised requirements.

**12. Closing Date**

January 6<sup>th</sup>, 2017 at 2:00 P.M. Eastern Standard Time (EDST).

**13. Contract Authority**

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Natural Resources Canada  
Contracting Officer  
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