

## Advance Contract Award Notice (ACAN)

### ACAN #22-58070

#### Lifecycle Inventory (LCI) database for Canadian construction materials.

##### Requirement:

The National Research Council of Canada (NRC)'s Low Carbon Assets Through Lifecycle Assessment (LCA)<sup>2</sup> Initiative is working to establish a regionalized Lifecycle Inventory (LCI) database for Canadian construction materials.

The NRC requires life cycle inventory data related to wood products produced in Canada. This data will be used to populate the Canadian LCI database for construction materials, and establish regionalized carbon intensity baselines for cement and concrete.

##### Background:

The development of a Canadian Lifecycle Inventory (LCI) database for construction materials is a necessary component of efforts within government and the private sector to adopt robust, transparent, fair and accurate lifecycle approaches to reducing GHGs associated with the construction, operation and end of life of buildings and infrastructure.

Wood products are a commonly consumed construction material in Canada, and as such, wood products have been chosen to be a construction material to be included in the database. NRC has conducted an assessment of existing LCI datasets for wood products, and a number of data gaps have been identified, which include the following:

- Existing wood product data is outdated.
- Current data is not at a sufficient resolution at a regional or facility specific level.
- Current data does not establish reasonable carbon intensity baselines.

Industry average Environmental Product Declarations (EPD) for wood products are available for the North American market, but these are not representative enough to support regionally accurate embodied carbon benchmarks for wood products.

##### Scope of work:

The use of an ACAN to enter into a contract with Canadian Wood Council (CWC) will permit the most expeditious development of LCI data and LCA reports for Canadian wood industry products. CWC will survey its members to develop a statistically representative LCI data set for the Canadian wood products.

The geographic representativeness of the LCAs report and datasets will be Canadian. The best available geographic representation will be reported, in principle according to the following hierarchy: Provincial → Regional → National. The geographic representativeness will be structured to protect confidentiality of the industry and be agreed upon by the CWC and the NRC. The table below details which wood products and their level of regionalization that will have LCI data and LCA reports developed.

| Wood Products                       | Level of Regionalization          |
|-------------------------------------|-----------------------------------|
| Softwood Lumber                     | Provincial → Regional* → National |
| Oriented Strandboard (OSB)          | Regional* → National              |
| Softwood Plywood                    | Regional* → National              |
| Wood I-joist**                      | Regional* → National              |
| Metal Plate Connected Wood Truss*** | Regional* → National              |
| Forest harvesting operations        | Provincial → Regional* → National |

\*The preliminary production regions identified are British Columbia, Prairies, Ontario, and Quebec/Maritimes; these are subject to change based on data availability and representativeness for each type of wood product.

\*\*Laminated veneer lumber (LVL) is an input to the production of some wood I-joists, there is potential for a stand-alone LCI template and LCA report for LVL; to be determined based on data availability and representativeness.

\*\*\* To be determined based on data availability and representativeness.

The LCA report will be developed in accordance with the international standard for LCA (ISO 14044:2006/AMD 2:2020 [1]) and Type III environmental product declarations (EPDs) (ISO 14025:2006), the international core product category rules (PCR) for construction products (ISO 21930:2017), and the sub-category PCR applicable to wood products (Product Category Rules for Part B: Structural and Architectural Wood Products EPD Requirements v1.1, UL Environment, 2020).

The system boundary will be cradle-to-gate (information modules A1-A3); if required by the PCR or common practice, other modules may be considered. The foreground LCIs will be reported; in principle at the gate-gate level, with metadata required for interoperable database implementation.

The reported environmental indicator (i.e., LCA) results will be evaluated based on the best available or most appropriate background data. This is to be confirmed and agreed upon with the NRC.

The CWC will complete the NRC's templates for both the LCA report and LCI datasets to help ensure standardization of reporting across different construction materials. The NRC will review, and provide comments and feedback on all aspects of the report and data template. The final reports and LCI data will be verified by a 3<sup>rd</sup> party that is agreed upon by CWC and the NRC. The NRC retains the right to be able to have access to the survey data for internal use only.

### **Mandatory Criteria for assessment of the Statement of Capabilities (Minimum Essential Requirements)**

Any interested supplier must demonstrate by way of a statement of capabilities that it meets all of the following mandatory requirements:

- Established relationships with national, provincial, and regional wood product associations in Canada.
- Established relationships with wood product producers.
- The LCI data developed must be used as the base data to develop industry average EPDs for the Canadian Wood Council.

### **Applicability of the trade agreement(s) to the procurement**

**This procurement is subject to the following trade agreements:**

World Trade Organization Agreement on Government Procurement (WTO GPA)

Canada-Panama Free Trade Agreement

Canada-Korea Free Trade Agreement (CKFTA)

Canada-Honduras Free Trade Agreement

Canadian Free Trade Agreement (CFTA)

Canada-Chile Free Trade Agreement (CCFTA)

Canada-Colombia Free Trade Agreement

Canada-Peru Free Trade Agreement (CPFTA)

Comprehensive Economic and Trade Agreement (CETA)

Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)

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

Founded in 1959, the Canadian Wood Council (CWC) is Canada's unifying voice for the wood products industry representing hundreds of manufacturers across the country through its well established members.

Canadian Wood Council is, for technical reasons, the sole association authorized to, and capable of, facilitating work on behalf of all wood product associations and producers in Canada and to make final decisions on how LCI data on wood products is developed and made publicly available.

#### **Exclusions and/or Limited Tendering Reasons**

The following exception(s) to the Government Contracts Regulations is invoked for this procurement under subsection:

Part 1, Section 6 (d) as only one known person or firm that is capable of performing the contract;

- due to an absence of competition for technical reasons;

#### **Period of the proposed contract**

NRC is expecting the work to start on November 2022 and be completed by March 31, 2023.

#### **Cost estimate of the proposed contract**

Phase 1: \$320,000 plus applicable taxes, subject to negotiation. NRC may engage the services of the Canadian Wood Council for further work including a possible phase and other related work for 2 additional years ending March 31, 2025. The potential cost estimate on an annual basis is \$80,000, CAD plus applicable taxes, depending on the requirements.

#### **Name and address of the pre-identified supplier**

Canadian Wood Council  
99 Bank Street, Suite 400  
Ottawa, ON, K1P 6B9

***“Suppliers who consider themselves fully qualified and available to provide the services/goods described herein, may submit a statement of capabilities in writing to the contact person identified in this Notice on or before the closing date of this Notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.”***

The closing date for a submission of a statement of capabilities. Include the time of day as well as the Day, Month and Year for the closing date for accepting statements of capabilities, i.e. fifteen calendar day period.