### LOW-CARBON INNOVATION FUND (LCIF) 2017-18 Submission Guidelines

The Low-Carbon Innovation Fund (LCIF) is a grant program administered by the Ministry of Research, Innovation and Science that focuses on emerging, innovative technologies that will play a significant role in assisting the Government of Ontario in meeting its Greenhouse Gas (GHG) reduction goals as part of the Climate Change Action Plan.

For more details on LCIF including program objectives and eligibility, please refer to the LCIF Program Guidelines.

#### **Submission Process**

To be considered for a grant, Applicants must:

- Complete an online Self-Assessment to confirm their eligibility and readiness for the LCIF program;
- Submit a completed online LCIF Expression of Interest (EOI);
- If invited after EOIs have been evaluated, submit an online LCIF Business Case; and,
- If invited after Business Case evaluations, enter into a funding agreement (grant) with the Ministry. The funding agreement will require a commitment to provide quarterly progress reports during the timeline of the Project, as well as performance information relating to commercialization results achieved for up to 3 years following Project completion.

The following provides an overview of the LCIF Self-Assessment, EOI and Business Case, and Progress / Performance Reporting indicating the nature of the information that will be required.

#### 1. LCIF Online Self-Assessment

The LCIF Online Self-Assessment is designed to help potential Applicants determine their eligibility and readiness for the LCIF program. Information provided in an Applicant's Self-Assessment will not be available to nor will it be reviewed by Ministry staff, and is used solely to generate feedback to potential Applicants in the form of a Self-Assessment Report.

The Self-Assessment covers the following topics:

**Mandatory Requirements:** These are requirements that must be met before a LCIF Business Case may be submitted. Applicants are required to assert that if invited to submit a Business Case after EOI review, they will be able to meet

these requirements. These requirements are specified in the Program Guidelines.

**Segmentation Information**: Information about the organization type, technology, application(s) of the technology, and funding that will be requested if the Applicant carries on to the EOI phase.

**Project Information**: Project data relating to costs, funding, and potential benefits.

**Market and Commercialization Information**: Estimates relating to future potential GHG reductions and other social, economic and employment benefits that could be achieved following commercialization.

### 2. LCIF Online Self-Assessment Report

On completion of a LCIF Self-Assessment, Applicants will be able to view a report that summarizes their inputs and provides feedback on eligibility and readiness to participate in the LCIF program. This report will not be available to Ministry staff and is solely for the benefit of prospective Applicants to help them decide whether to proceed to the EOI stage.

To assist the Ministry in its operation and evaluation of the program, some selected data from Parts 2, 3 and 4 will be summarized in anonymized, aggregate form to provide insights into the number of potential EOIs that may be submitted, the related technologies, applications, and potential funding requests, as well as potential future GHG reductions.

# 3. LCIF Online Expression of Interest

After participating in the LCIF Online Self-Assessment, Applicants may, at their discretion, choose to proceed to the EOI stage.

The LCIF EOI gathers high-level information about the applicant, project, technology, market and commercialization strategy, prospective sector and other environmental, societal / stakeholder, economic, and employment benefits and impacts as outlined below. While the EOI gathers similar information to the Business Case, much of this data will be high-level (i.e. drop-down menus, data ranges etc), allowing for a thorough but expedited submission process.

A LCIF Online EOI will require the following information:

**Mandatory Requirements:** These are requirements that must be met before a LCIF Business Case may be submitted. Applicants are required to assert that if invited to submit a Business Case after EOI review, they will be able to meet these requirements. These requirements are specified in the Program Guidelines.

**Identification, Contact and Segmentation Information:** This part identifies the Project and the Applicant, collects contact information, as well as information about the organization type, technology, application(s) of the technology, and funding sought from the LCIF program.

**Project Information:** This part collects information about the Project, Project plan and timeline, Project team, demonstration partner(s), Project costs, Project financing, Project risks, anticipated GHG reductions to be achieved over the Project timeline, and other potential societal / stakeholder, economic, and employment benefits.

**Technology Information**: This part collects information about the technology to be validated or demonstrated in the Project, the anticipated role of the Project technology in helping Ontario achieve GHG reduction goals, development and IP status, uniqueness of the technology, complexity of scale-up to commercial deployment, and technology-related risks.

**Market and Commercialization Information**: This part collects information about the market and market segments, competitors, the commercialization strategy for achieving competitive advantage, resources required to achieve commercialization goals, and summary information about GHG reductions as well as information about other environmental benefits, societal / stakeholder benefits, and economic and employment impacts.

**Applicant Perspectives on Decision Criteria**: Applicants will be able to view the decision criteria that will be used to assess the EOIs, and self-evaluate their prospective submission relative to those criteria. This self-evaluation data and related rationale will be reviewed as part of the EOI evaluation process.

#### 4. Evaluation of LCIF EOIs

EOI submissions will be evaluated by a team consisting of Ministry staff and other experts with relevant knowledge and experience. The evaluation process will rank the EOIs relative to the LCIF mandatory requirements, decision criteria, the level of claimed GHG reductions taking into consideration requested Project funding, and other LCIF policy objectives. Based on this evaluation, selected Applicants will be invited to participate in the Business Case stage.

Expert reviewers for both the EOI and Business case will use the following criteria for evaluating the LCIF EOIs and Business Cases. Please note, at the Business Case stage, some of these categories may have more than one underlying question to support the decision process:

A. Project	B. Technology	C. Market and Commercialization	D. Outcomes
A1: Need for Project	B1: Technology potential to reduce Ontario GHG	C1: Market potential	D1: Short-term GHG reductions (by 2020)
A2: Project plan	B2: Technology readiness for development/ or deployment	C2: Commercialization strategy and competitive advantage	D2: Medium / longer-term GHG reductions
A3: Organization capacity to complete Project	B3: Technology uniqueness and differentiation	C3: Organization and financial capacity for successful commercialization	D3: Other environmental impacts
A4: Financial capacity to complete Project	B4: Technology scale-up risk and risk management	C4: Market and commercialization risk and risk management	D4: Societal / stakeholder impacts
A5: Strategic partner(s)			D5: Economic impacts
A6: Project risk and risk management			D6: Employment impacts

#### 5. LCIF Online Business Case

The LCIF Online Business Case builds on the information submitted in the EOI, but requires additional detailed information that will enable Ministry staff and external experts to validate the claims made in the EOI and Business Case.

**Mandatory Requirements:** These are requirements that must be met before a LCIF Business Case may be submitted. Applicants are required to assert that they meet these requirements prior to Business Case submission. These requirements are specified in the Program Guidelines.

**Identification, Contact and Segmentation Information:** Information in this part is identical to the EOI stage and can be updated by the Applicant as required. This part identifies the Project and the Applicant, collects contact information, as well as information about the organization type, technology, application(s) of the technology, and funding sought from the LCIF program.

**Project Information:** Information in this part includes all information previously submitted in the EOI stage and can be updated by the Applicant as required. The Business Case requires additional detailed data on the Project plan, resumes of key Project personnel, commitment letters from strategic partners, detailed cost and funding analysis, and an indication of the performance metrics that will be used to evaluate progress throughout the Project timeline to ensure it is on track and anticipated GHG reductions and other benefits / impacts are being achieved.

**Technology Information**: Information in this part includes all information previously submitted in the EOI stage and can be updated by the Applicant as required. The Business Case will require some additional detailed information for the purpose of validating Business Case claims.

**Market and Commercialization Information**: Information in this part includes all information previously submitted in the EOI stage and can be updated by the Applicant as required. The Business Case will require some additional detailed information for the purpose of validating Business Case claims.

Quantification of Outcomes including Estimated GHG Reductions and ROI: Detailed information collected in this part is used to generate high-level models that calculate cumulative GHG reductions during the Project and following commercialization. This is based on quantitative estimates of annual GHG reductions for a typical deployment of the technologies at commercial scale (per unit or installation), and roll-out or replication scenarios for the technologies. The models will also estimate ROI based on provided data relating to acquisition costs to adopters, annual operating costs, and anticipated financial benefits to adopters (revenues or cost-savings).

**Applicant Perspectives on Decision Criteria**: Applicants will be able to update their self-evaluation data and rationales as provided in the EOI. This self-evaluation data and related rationale will be reviewed as part of the Business Case evaluation process.

**Document uploads**: A number of uploads in PDF format will be required in support of the Business Case submission. This information should include audited financial statements.

#### 6. Evaluation of LCIF Business Cases

Following the deadline for submission of Business Cases, the Business Case submissions will be evaluated by a team consisting of Ministry (MRIS and MOECC) staff, additional OPS experts with relevant knowledge and experience, and external experts (technical and financial). The evaluation process will rank the EOIs relative to the LCIF mandatory requirements, decision criteria, the level of claimed GHG reductions taking into consideration requested Project funding, and other LCIF policy objectives.

Based on this evaluation, with final decisions resting with the Minister, selected Applicants will be invited to participate in discussions leading to a funding agreement.

## 7. Contracting and Final Approvals

Subject to any required verification or due diligence procedures, discussions will take place with successful Business Case Applicants to agree on funding terms and conditions. Upon satisfactory conclusion of these discussions initial round results will be publically announced.

**8. Project and Medium / longer-term Performance Monitoring**Successful Applicants will be required to participate in an ongoing performance monitoring process involving quarterly online submissions that will enable tracking Project performance against the claims and estimates made in the EOI and Business Case submissions for a period of up to three (3) years. In addition, funded Applicants will be obligated to provide annual summary information on commercialization progress and related GHG reductions and other benefits / impacts.

#### CONFIDENTIALITY

Please note that the Ministry of Research, Innovation and Science is subject to the Freedom of Information and Protection of Privacy Act. Any information submitted in confidence should be clearly marked. Third party information that meets the test set out in Section 17 of the Act will not be disclosed without notice to the Company. The following excerpt outlines the requirements:

#### Third party information - Section 17.1:

A head shall refuse to disclose a record that reveals a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence implicitly or explicitly, where the disclosure could reasonably be expected to:

- (a) prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization;
- (b) result in similar information no longer being supplied to the institution where it is in the public interest that similar information continue to be so supplied;
- (c) result in undue loss or gain to any person, group, committee or financial institution or agency; or
- (d) reveal information supplied to or the report of a conciliation officer, mediator, labour relations officer or other person appointed to resolve a labour relations dispute. R.S.O. 1990, c. F.31, s. 17 (1); 2002, c. 18, Sched. K, s. 6.

For further assistance regarding the LCIF please contact the Ministry of Research, Innovation and Science.

### CONTACT

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