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Clean Fuels Program – Building New Domestic Production Capacity

Call for Project Proposals

Applicant's Guide

Clean Fuels Branch

June 2021

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CLEAN FUELS PROGRAM – BUILDING NEW DOMESTIC PRODUCTION CAPACITY

PURPOSE OF THIS GUIDE

This Guide was developed to assist applicants in their submissions to the Building New Domestic Production Capacity component of the Clean Fuels Program. It outlines requirements for the Call for Project Proposals, including eligibility criteria, mandatory documentation and detailed instructions on how to complete an on-line Application Form for funding consideration under the Program.

Please read this Guide carefully, including all definitions. All documents are required at time of submission. Incomplete applications will not be considered for review.

To access the on-line Application System, which is expected to be available by the end of July, register with Integro by following the instructions listed in Section 7 of this Guide.

SECTION 1: CLEAN FUELS FUND OVERVIEW

On December 11, 2020, the Prime Minister released Canada's Strengthened Climate Plan: *A Healthy Environment and a Healthy Economy* (the Climate Plan). The Climate Plan commits Canada to meet and exceed its current 2030 greenhouse gas (GHG) reduction target – 30% below 2005 levels by 2030– and achieve net-zero GHG emissions by 2050, while encouraging clean and inclusive growth. Subsequently, on April 22, 2021, the Government of Canada further increased its climate ambition, committing to reduce emissions by 40-45% below 2005 levels by 2030.

To meet our 2030 and 2050 net-zero goals, Canada's economy will need to be powered by two equally important energy sources – clean power and low-carbon fuels (also called "clean fuels" and typically consists of clean hydrogen, advanced biofuels, liquid synthetic fuels, and renewable natural gas). While electrification provides a near-term pathway for emissions reductions in both personal transport and the built environment, clean fuels are expected to play a critical role in 'hard-to-decarbonize' sectors such as industry and medium- and heavy-duty freight. Even in a scenario with ambitious electrification, it is estimated that 60% or more of national energy demand in 2050 could be met with clean fuels to meet a net-zero goal. Today, low-carbon fuels make up less than 5% of total energy supply in Canada.

Recognizing the essential role in for clean fuels, Canada's Strengthened Climate plan includes economy wide policies, such as the proposed Clean Fuel Regulations (CFR), increases to the federal pollution pricing, the *Hydrogen Strategy for Canada* and a $1.5 billion investment to grow the clean fuels market.

Budget 2021 re-affirmed the investment of $1.5B to establish a Clean Fuels Fund, to de-risk the capital costs required to build new or expand existing clean fuel production facilities (including facility conversions). Support is also available for feasibility and front-end engineering and design (FEED) studies, and the establishment of biomass supply chains to improve logistics for the collection, supply, and distribution of biomass materials (e.g., forest residues, municipal solid waste, and agriculture crop residues) as a feedstock in clean fuel production facilities. The Fund would also provide resources to address gaps and misalignment in codes, standards and regulations related to the production, distribution and end-use of clean fuels.

Contributions made under the Government of Canada's new Clean Fuels Fund, will enable:

- Increased domestic clean fuel production capacity, supporting jobs in Canada and reducing reliance on imports;
- Increased utilization of sustainable Canadian biomass feedstocks;
- Increased competitiveness of Canadian clean fuel and biomass feedstock suppliers;
- Greenhouse gas reductions;
- Increased compliance flexibility for regulated parties under federal regulations (e.g. Output-Based Carbon Pricing System Regulations, Clean Fuel Regulations); and,
- Delivery of early actions outlined in the *Hydrogen Strategy for Canada*.

The Fund will have three separate components:

1. Building New Domestic Production Capacity
    - $1.38B to support the build-out of new, and expansion of existing, clean fuel production capacity and facility conversions or associated feasibility, engineering and FEED studies
2. Establishing Biomass Supply Chains
    - $30.4M to support the establishment of biomass supply chains and associated feasibility assessments
3. Developing Enabling Codes and Standards
    - $19.4M to support the development of critical codes, standards, and regulations

Components 1 and 2 above will be delivered via the Clean Fuels Program "the Program" while the codes and standards component, is delivered separately.

This Guide is solely focused on the requirements for the Building New Domestic Production Capacity component. Information on the Establishing Biomass Supply Chains and Developing Enabling Codes and Standards will follow.

The Building New Domestic Production Capacity component includes two different project streams.

- Production Capacity Build-out Projects (Production Projects) – includes the expansion or conversion of existing facilities, and buildout of new facilities; and,

- Production Facility Feasibility Assessments/Studies (Feasibility Projects) – which include feasibility studies and front-end engineering design studies.

Each stream has separate mandatory and merit criteria, as well as different funding levels and repayability requirements.

SECTION 2: PROGRAM REQUIREMENTS

2.1 Eligible Recipients

To be considered for funding under the Program, applicants must be one of the following:

- Legal entities validly incorporated or registered in Canada including not-for-profit and for-profit organizations such as:
    - Electricity or gas utilities
    - Private sector companies
    - Industry associations
    - Research associations
    - Standards development organizations
    - Indigenous organizations and Indigenous communities
    - Canadian academic institutions
    - Provincial, territorial, regional or municipal governments or their departments or agencies where applicable

2.2 Project Eligibility

To be considered for funding under the Program, projects must satisfy all of the following:

- Meet all of the mandatory criteria listed throughout this Guide; and,
- Demonstrate that investments will be used to undertake projects in Canada.

In addition to the above, the Production Project and Feasibility Project streams have specific criteria that must be satisfied as outlined, below:

Production Projects:

Production projects must use fuel production technologies in advanced stages of technological readiness (TRL 9) and that are designed for commercial deployment, with the intent to operate the technology at commercial scale during its life cycle.

Eligible fuel types include, but are not limited to: hydrogen, ethanol, renewable diesel, co-processing of biocrude, sustainable aviation fuel, synthetic fuel, and renewable natural gas.

The eligibility of clean fuel types supported under this part of the program will depend on the fuel's life cycle carbon intensity. The Program defines an eligible clean fuel as follows:

- Carbon intensity of eligible liquid clean fuels must be equal to or below 50 gCO2e/MJ.
- Carbon intensity of eligible gaseous clean fuels must be equal to or below 36 gCO2e/MJ.

This Program targets commercial-scale projects in advanced states of technological readiness. As such, the Program has set a minimum production capacity threshold for liquid fuel facilities, renewable natural gas and hydrogen facilities eligible for both production and feasibility projects:

General Minimum Production Capacity Thresholds

- 30 million liters (ML) per year for liquid clean fuels;
- 50,000 gigajoules (GJ) per year for renewable natural gas;
- 50,000 gigajoules (GJ) per year for hydrogen from biomass gasification;
- 500,000 gigajoules (GJ) per year for hydrogen from natural gas, or petroleum, with carbon abatement; and,
- 10MW of installed capacity for hydrogen produced using electrolysers.

Minimum Production Capacity Thresholds for Projects in Atlantic Canada and Canada's North

- 15 million liters (ML) per year for liquid clean fuels;
- 30,000 gigajoules (GJ) per year for renewable natural gas;
- 30,000 gigajoules (GJ) per year for hydrogen from biomass gasification;
- 500,000 gigajoules (GJ) per year for hydrogen from natural gas, or petroleum, with carbon abatement; and,
- 1.5MW of installed capacity for hydrogen produced using electrolysers

The Program will provide up to 30% of total project costs. At the time of application, applicants must demonstrate that:

- A minimum of 30% of total project costs have been secured though firm financing.
- A maximum of 40% of total project costs may not yet be secured at time of application.
    - Funding not secured at the time of application must be secured through firm financing prior to signing of contribution agreements

Eligible projects must demonstrate separate feedstock supply and fuel off-take plans (and carbon dioxide off-take, if applicable) for a period of at least three-years. The supply and off-take plans can be supported through letters of intent, agreements, marketing service agreements, and/or other documentation. All documentation must include information on volumes (or appropriate measure) of supply or off-take, duration, frequency, risk mitigation strategies and names of partners (or potential partners).

Eligible projects must prove an Official Commissioning Date no later than March 31, 2026.

For projects producing more than one fuel type, the total combined production capacity must be equal to or greater than the greater minimum production capacity threshold of the fuel types produced at the facility.

Feasibility Projects

Eligible studies include feasibility studies, basic engineering studies and detailed front-end engineering studies for new facilities, facility expansions or facility conversions. In addition, due to the strong synergies between hydrogen and natural gas, feasibility studies to assess the techno-economic feasibility of blending hydrogen into natural gas systems would be eligible.

The Program will provide up to 50% of total project costs. At the time of application, applicants must demonstrate that:

- A minimum of 30% of total project costs have been secured though firm financing.
- A maximum of 20% of total project costs may not yet be secured at time of application.
    - Funding not secured at the time of application must be secured through firm financing prior to signing of contribution agreements

Eligible projects must be completed no later than March 31, 2026.

2.3 Call for Project Proposals

An eligible recipient must complete and submit the on-line Application Form and all required supporting documentation, during the Program's Call for Project Proposals (From June 21, 2021 to September 29, 2021). A separate Application Form must be submitted for each project being proposed for funding.

2.4 Funding Limits and Repayability

Production projects: The Program may provide eligible recipients with a maximum of 30% of total eligible project costs, up to a maximum of $150M, per project. The maximum amount of contributions to the project from all levels of government must not exceed the stacking limits, outlined in Section 2.6. Contributions will be conditionally repayable, as described in Section 6.

Feasibility projects: The Program may provide eligible recipients with up to 50% of total eligible project costs, up to a maximum of $5M, per project. The maximum amount of contributions to the project from all levels of government must not exceed stacking limits, outlined in Section 2.5. Contributions will be non-repayable, as described in Section 6.

2.5 Stacking Provisions

Total Canadian government (includes federal, provincial, territorial, and municipal governments) contributions may not exceed 75%, of total project costs, except in the case where the recipient is a provincial, territorial, regional, or municipal government or their department or agency, Indigenous Business or Community, or not-for-profit, in which case, the total Canadian government funding authorized will not exceed 100% of total project costs.

To ensure the stacking provisions are respected, prior to signing a Contribution Agreement, and for the duration of the agreement, Recipients will be required to disclose all anticipated Canadian and non-Canadian sources of funding for the proposed project, including, for example, those from other Canadian federal, provincial, territorial and municipal programs.

The stacking limit must be respected when assistance is provided. In the event that actual total government assistance to a Recipient exceeds the eligible expenditures, Natural Resources Canada will adjust its level of funding to ensure the stacking limit is not exceeded, and will seek reimbursement of funds if necessary.

Applicants must indicate all stackable funding in Appendix B of the on-line Application Form.

2.6 Eligible Expenditures

Natural Resources Canada will reimburse recipients for eligible expenses the recipient has incurred starting on the date of execution of the Contribution Agreement. Eligible expenditures are defined in the following categories:

- Salaries and benefits;
- Professional services (e.g. contracting; engineering; construction; installation, testing and commissioning of equipment; training; marketing; data collection; logistics; maintenance; printing; distribution)
- Reasonable travel costs, including transportation, meals and accommodation, at rates comparable to the Treasury Board travel guidelines;
- Capital expenses, including informatics and other equipment or infrastructure;
- Retrofitting and upgrading of existing capital assets;
- Rental fees or leasing costs;
- License fees and permits;
- Costs associated with Environmental Impact Assessments;

- GST, PST and HST net of any tax rebate to which the recipient is entitled; and
- Overhead expenses will be considered to a maximum of 15% of eligible expenditures.

2.7 Non-Eligible Expenditures

Non-eligible expenditures are expenditures that may be eligible for consideration of total project costs, but are not eligible for reimbursement from the Program, and include but are not limited to:

- Purchase of land;
- Fines and penalties;
- Lobbying activities for the purposes of obtaining contribution funding under the Program; and,
- Costs incurred outside of the eligible expenditure period.

In addition, in-kind contributions may be considered non-eligible expenditures. For more information on non-eligible expenditures, please contact the Program by email.

SECTION 3: APPLICATION INFORMATION

This section provides information on what is expected in the Application Form. All information is required for an application to be considered complete. Applications that are not complete will be given no further consideration.

The following tables outline what information is required and provides corresponding text providing specific details or considerations to take into account when providing answers. The tables also indicate whether the information is required for Production Projects and Feasibility Projects.

The information that the applicant is required to provide to the Program is grouped into two separate tables. One for mandatory criteria and the other for merit criteria.

Mandatory criteria will be assessed on a "pass/fail" basis. Only applications, which pass all mandatory criteria will be considered for funding. If the application passes all mandatory criteria, its merit criteria will be evaluated as described in Section 5. The Program will use some of the information used to evaluate mandatory criteria, to further evaluate merit criteria.

In addition to the information provided in the tables, below, Productions Projects are required to submit a Baseline Opportunities Assessment, as described in Section 4.

Information for Mandatory Criteria

Part 1: Business Information		Production Projects	Feasibility Projects
Legal Entity	Indicate the name of the applicant (organization or company). If the project is assessed and selected for funding, the applicant will be the Legal Entity that will enter into negotiations, and if successfully concluded, sign a Contribution Agreement with Natural Resources Canada. The Proof of Business Incorporation, Articles of Incorporation, or Registration must be provided as supporting documentation.	Required	Required
Corporate Business Address	Indicate the mailing address of the Canadian head office of the Legal Entity.	Required	Required
Organization Capacity	Indicate the current number of full-time equivalent employees under the Legal Entity. Full-time equivalents are people who work assigned hours and/or scheduled hours at a minimum of 35 hours per week.	Required	Required
Organizational Capacity Pre-COVID- 19	Indicate the number of full-time equivalent employees (as described above) that worked for Legal Entity during 2019.	Required	Required
Length of Time in Operation	Indicate the number of years the company has been in operation (i.e. since it has been incorporated or a registered legal entity in Canada). Indicate "1" year if the company has been in operation for 1 year or less.	Required	Required

Part 1: Business Information		Production Projects	Feasibility Projects
Main Contact for the Proposed Project	Indicate the full name, title, email address and telephone number of the main contact for the proposed project. The main contact does not need to be the signing authority for the Contribution Agreement.	Required	Required
Workforce Diversity and Inclusion Plan	As part of the application process, applicants will be required to develop and share a Workforce Gender and Diversity Plan for their organization. The Diversity and Inclusion Plan should describe the recipient's approach to improving gender balance and increasing diversity within their organizations. Select the status of the workforce gender and diversity plan at your organization: -A company-wide workforce gender and diversity plan is in place -The company is developing a workforce gender and diversity plan for this application Successful applicants will be required to share data on their workforce or the populations that benefit from the Program. This will include answering questions such as number and proportion of underrepresented groups (e.g., women, immigrants, visible minorities, youth, and Indigenous peoples) for the different positions (e.g., worker, management), job locations, and available training. This data, complemented with other sources (e.g., Census, Statistics Canada), will allow the Program to track progress with regard to increasing workforce diversity. A template outlining the information required for a diversity and inclusion plan is available in Appendix C of the Applicant's Form.	Required	Required

Part 2: Project Information		Production Projects	Feasibility Projects
Project Title	The title of the project. Note that if the proposal is approved for funding, the information provided as the project title will be disclosed publicly on the Government of Canada's website.	Required	Required

Part 2: Project Information		Production Projects	Feasibility Projects
Project Overview (non-confidential)	Provide an overview of the project, including the project title and location. Indicate which type of clean fuel will be produced, the type of feedstock to be used, and the total new production capacity expected to result from the project. Clearly state project objectives and the rationale for the project. Note that if the project is approved for funding under the Program, the information provided as the Project Overview will be disclosed publicly on the Government of Canada's website. The character limit for this section is set to 5,000 characters.	Required	Required
Project Summary	Describe the objectives, outputs and outcomes of the project. Please highlight any co-benefits of the project, including job creation, revenue generation, environmental benefits, fuel carbon intensity, production estimates, and competitiveness.	Required	Required
Project Location	Location of the facility where the work will be carried out. This information must be provided as supporting documentation in the Baseline Opportunities Assessment (Refer to Section 4).	Required	Required
Eligible Activity	Confirm that the primary objective of the project is to grow Canada's clean fuel production capacity through the buildout of new or expanded Canadian clean gaseous or liquid fuel production.	Required	Required
Dates of Planned Project	Indicate the start and commissioning date of the proposed project.	Required	Required
Business Plan	A complete and credible Business Plan must be submitted as a supporting documentation. See Section 7.2 for more information.	Required	Required
Company and Project Team Information	Provide an overview of the Project Management Team and Project Management Plan that will be implemented to ensure the success of the project. The Project Management Team will work with the Technical and Financial Team(s) to ensure that all critical decisions are made and all key milestones and deliverables are achieved. This could include details of the company's Engineering, Procurement and Construction partner, as appropriate. This information must be submitted as a supporting documentation, see Section 7.2 for more information.	Required	Required

Part 2: Project Information		Production Projects	Feasibility Projects
Key Milestones of the Project	Provide the key milestones (in a table or Gantt chart) and the project critical path. This information must be submitted as a supporting documentation, see Section 7.2 for more information.	Required	Required
Anticipated Fuel Carbon Intensity	Provide a brief description of the anticipated fuel carbon intensity, based on a life cycle assessment. For the purpose of this application, the life cycle assessment model that must be used to quantify the carbon intensity of fuels for applications is GHGenius, Version 5.01. Applicants must use 100-year time horizon Global Warming Potential values consistent with the *Intergovernmental Panel on Climate Change's 5th Assessment Report* (without feedback) and must specify changes to all non-default values within the calculation and the reason for change. A critical review of the life cycle assessment carbon intensity calculation must be conducted by a life cycle assessment expert in accordance with ISO Standard 14044 and 14071. For applicants who are selected for funding, ongoing reporting of carbon intensity will be done by using the new Government of Canada life cycle assessment model.	Required	Required
Risk Management	If not otherwise included in the Key Milestones of the Project or the Business Plan, please provide an overview of project risks and mitigation strategies. Please highlight technical risk, business risk, financial risk, project performance risk and other relevant risks.	Required	Required

Part 3: Project Budget		Production Projects	Feasibility Projects
Project Contributions	The Applicant must reflect all funding, including (requested) government contributions from all levels of government. Ensure that the "Total Contributions" in this section matches the "Total Project Costs" in the Detailed Cost Breakdown. A detailed contributions report must be provided in Appendix A of the Application Form.	Required	Required
Detailed Cost Breakdown	The project budget must include all expenditures on an annual basis, where each year starts April 1 and ends March 31. Overhead expenses directly related to the project will be considered to a maximum of 15% of Total Eligible Project Expenditures. Overhead expenses directly related to the project include: -Overhead expenditures are administrative expenditures of eligible recipients that are attributable to projects funded through Natural Resources Canada's contribution. - --- Administration overhead (administration expenses) are part of the general overhead of an organization that is incurred in carrying out its administrative activities. It includes general office salaries, stationery, telephones, etc.; -Overhead expenditures claimed by recipients are to be reimbursed only if they are attributable to the project; -All expenses claimed must be allowable under the Contribution Agreement and are to be supported by invoices, payroll records or other evidence acceptable to the Delegated Authority; -Where a Recipient submits a claim for reimbursement that includes a type of expenditure that is not allowable in the Contribution Agreement, or is specifically disallowed in the Contribution Agreement, the ineligible portion of the claim will not be reimbursed. A detailed project cost breakdown report must be provided in Appendix B of the Applicant's Form.	Required	Required

Part 4: Mandatory Documentation	Production Projects	Feasibility Projects
In addition to a completed online Application Form, documentation outlined in Section 7.2 is required.	Required	Required

Information for Merit Criteria

Part 1: Business Information		Production Projects	Feasibility Projects
Outstanding Legal Actions	Indicate whether there is any legal action currently underway or anticipated in the near future against the applicant, parent company(ies) or any partner(s), including any potential related financial loss.	Required	Required

Part 2: Project Information		Production Projects	Feasibility Projects
Co-Benefits and Socio-Economic Benefits	Indicate the co-benefits and socio-economic benefits of the proposed project, which may include: -Increased competitiveness; -Engagement/involvement of small and medium enterprises; -Engagement/Involvement of Indigenous groups; -Cost savings; and, -Revenue generation	Required	Required
Business Plan	A complete and credible Business Plan must be submitted as a supporting documentation. See Section 7.2 for more information.	Required	Required
Company and Project Team Information	Provide an overview of the Project Management Team and Project Management Plan that will be implemented to ensure the success of the project. The Project Management Team will work with the Technical and Financial Team(s) to ensure that all critical decisions are made and all key milestones and deliverables are achieved. This could include details of the company's Engineering, Procurement and Construction partner, as appropriate. This information must be submitted as a supporting documentation, see Section 7.2 for more information.	Required	Required
Anticipated Jobs Created from Project	Provide the new number of full-time equivalent and temporary (contractors, construction etc.) employees under the Legal Entity that are anticipated to result from this project. Include projected construction jobs and permanent positions after commissioning is completed. Full-time equivalents are people who work assigned hours and/or scheduled hours at a minimum of 35 hours per week.	Required	Required
Key Milestones of the Project	Provide the key milestones (in a table or Gantt chart) and the project critical path. This information must be submitted as a supporting documentation, see Section 7.2 for more information.	Required	Required

Part 2: Project Information		Production Projects	Feasibility Projects
Anticipated Fuel Carbon Intensity	Provide a brief description of the anticipated fuel carbon intensity, based on a life cycle assessment. For the purpose of this application, the life cycle assessment model that must be used to quantify the carbon intensity of fuels for applications is GHGenius, Version 5.01. Applicants must use 100-year time horizon Global Warming Potential values consistent with *Intergovernmental Panel on Climate Change's 5th Assessment Report* (without feedback) and must specify changes to all non-default values within the calculation and the reason for change. A critical review of the life cycle assessment carbon intensity calculation must be conducted by a life cycle assessment expert in accordance with ISO Standard 14044 and 14071. For applicants who are selected for funding, ongoing reporting of carbon intensity will be done using the new Government of Canada life cycle assessment model.	Required	Required
Risk Management	If not otherwise included in the Key Milestones of the Project or the Business Plan, please provide an overview of project risks and mitigation strategies. Please highlight technical risk, business risk, financial risk, project performance risk and other relevant risks.	Required	Required
Project Partnerships	Indicate all project partners and explain the nature of partnerships. A partner could be a large industry, small or medium sized enterprise, research institute, and/or various levels of government.	Required	Required

Part 3: Project Budget		Production Projects	Feasibility Projects
Project Contributions	The Applicant must reflect all funding, including (requested) government contributions from all levels of government. Ensure that the "Total Contributions" in this section matches the "Total Project Costs" in the Detailed Cost Breakdown. A detailed contributions report must be provided in Appendix A of the Application Form.	Required	Required

Part 3: Project Budget		Production Projects	Feasibility Projects
Detailed Cost Breakdown	The project budget must include all expenditures on an annual basis, where each year starts April 1 and ends March 31. Overhead expenses directly related to the project will be considered to a maximum of 15% of Total Eligible Project Expenditures. Overhead expenses directly related to the project include: -Overhead expenditures are administrative expenditures of eligible recipients that are attributable to projects funded through Natural Resources Canada's contribution. - ---Administration overhead (administration expenses) are part of the general overhead of an organization that is incurred in carrying out its administrative activities. It includes general office salaries, stationery, telephones, etc.; -Overhead expenditures claimed by recipients are to be reimbursed only if they are attributable to the project; -All expenses claimed must be allowable under the Contribution Agreement and are to be supported by invoices, payroll records or other evidence acceptable to the Delegated Authority; -Where a Recipient submits a claim for reimbursement that includes a type of expenditure that is not allowable in the Contribution Agreement, or is specifically disallowed in the Contribution Agreement, the ineligible portion of the claim will not be reimbursed. A detailed project cost breakdown report must be provided in Appendix B of the Applicant's Form.	Required	Required

SECTION 4: BASELINE OPPORTUNITY ASSESSMENT OR EQUIVALENT

The Business Opportunity Assessment is a mandatory document that outlines a detailed technical and economic description of the proposed project. The Program requires that a Baseline Opportunity Assessment, or equivalent, (certified by a professional engineer registered in Canada) be submitted for each production project.

The Baseline Opportunity Assessment must contain all the information below, which must be easily identified or highlighted within the document so that evaluators can easily locate the information:

1. The respective location and applicable facility identification number(s) or site location for the facility listed in the project proposal.

2. A detailed description of the method(s) to be used for the production of clean fuels as well as detailed information on the proposed clean fuel facility, including:
   - A detailed description of fuel production technology, and an evidence-based demonstration that production technology is in an advanced state of readiness and is suitable for commercial scale deployment (TRL9).
   - Facility process flow diagram, including facility unit operations and detailed information on all streams entering, within, and exiting the facility.

3. A detailed description of the method(s) used for determining the life cycle carbon intensity of the fuel, which could include:
   - Process simulation tools used and source(s) of information used to inform the simulation(s);
   - Predictive modeling tool(s) used and associated simplifying assumptions; and,
   - Estimation methodology(ies) used and the associated uncertainty(ies), including justification of the chosen clean fuel end-use that is inputted into the model (e.g. transportation/industrial sectors).

4. Demonstration of how project costs and milestones will be tracked, and how the applicant will ensure that established project timelines will be met.

5. A detailed facility economic assessment (over 5 years), which demonstrates the estimated costs of feedstock, energy and utilities flows, and finished fuel per unit of energy over the lifecycle of the project (on a yearly basis). Include a description of fuel production and cost accounting systems.

6. Demonstrate how the project will use existing provincial/federal regulatory frameworks and best practices to ensure feedstock sustainability (for projects using biomass feedstocks), and how biomass feedstocks will be grown and harvested in a sustainable manner.

7. Provide a detailed market analysis and assessment, which demonstrates how the project will integrate into previous and future operations, market strategy and impact of project, commercial risks, projected end-use markets, and projected growth.

8. Provide any relevant reports, studies and applications that may further substantiate the validity of the project, such as front-end engineering, feasibility and/or research studies, permitting, regulatory approvals, environmental assessments (or their status). While these documents are not mandatory, if provided as a part of the application they will be assessed as part of the merit criteria.

SECTION 5: ASSESSMENT AND DUE DILIGENCE

Applicants will be required to submit a standardized set of documentation. Each application will be assessed against mandatory criteria and, if all criteria are met, fully evaluated and rated against a comprehensive set of merit criteria by a multi-disciplinary committee composed of technical, financial and program experts from NRCan, other federal departments and possibly external third-parties to perform financial due diligence.

Merit criteria can be grouped into five categories: Technical Merit; Financial Feasibility; Project Timing and Readiness; Partnerships and Benefits to Canadians and Supply; and Off-take Agreements. Objective criteria for evaluating the merit criteria will be provided to the multi-disciplinary review committee prior to application evaluations commencing.

For Production Projects, the scoring of merit criteria in the five categories will be weighted, approximately, as follows:

- Technical Merit (22%)
- Financial Feasibility (24%)
- Supply and Off-take Agreements (10%)
- Project Timing and Readiness (22%)
- Partnerships and Benefits to Canadians (22%)

Due to different criteria being evaluated, the weighting for Feasibility Projects will be similar but not the same.

Both Production and Feasibility Projects must score a minimum 70% on merit criteria to be considered for funding. Only the highest rated projects will be recommended for funding (subject to available funding).

Projects recommended and approved for funding will receive Letters of Conditional Approval and the recipient will be invited to initiate the negotiation of a Contribution Agreement. Until a written Contribution Agreement is signed by both parties, no commitment or obligation exists on the part of Natural Resources Canada to make a financial contribution to any project.

Once a successful applicant has entered into a Contribution Agreement with Natural Resources Canada, the applicant will be referred to as a proponent. The findings from the due diligence assessment could determine risk mitigation strategies that will be included in the Contribution Agreement (for example monthly progress reports or percentage of risk holdback). Additionally, the monitoring strategies applied during the conduct of the project could be defined by the risk level identified. In this case, the Program would inform the recipient in writing.

SECTION 6: CONTRIBUTION REPAYMENT

6.1 Conditionally Repayable and Non-repayable Contributions

The Program will offer two types of contributions, depending on the type of project to be funded:

1. Conditionally repayable contributions; and,
2. Non-repayable contributions.

Production projects are eligible for conditionally repayable contributions. These contributions are similar to an interest-free loan, and, for a period of up to 10 years after the Official Commissioning Date, repayment will be required once the project starts to generate profits. The recipient's repayment amount will be based on the annual profit generated by the project during the ten-year repayment period.

For repayable contributions, the requirements that may trigger repayments will be detailed in the Contribution Agreement along with the repayment process. Following the Project Completion date, Proponents will be required to provide an annual repayability report, using generally accepted accounting principles or international financial reporting standards, on the profitability of their Project. If Profit is generated in any given year, the amount to be repaid will be: During the repayment period, the recipient's Audited Financial Statements and a project repayment report will be required

Annual Profit X % of NRCan funding = repayment (up to maximum NRCan contribution)

*The Program reserves the right to assess profitability during the course of repayable contribution agreements. If it is determined that there is no likelihood for the Project to generate profit, the Program, at its own discretion, may decide to revise the requirement for annual repayability reports on the profitability of the Project.

Feasibility projects are eligible for non-repayable contributions. These contributions are similar to a grant and are not required to be repaid by the recipient.

6.2 Government Credits

The value of credits generated through offsets and other regulations from all levels of government will be considered in project profits and financial projections.

For credits forecasted to be generated under the *Clean Fuel Regulations* projected to be published in late 2021, applicants may assume an appropriate credit price, however the credit clearing price ($300) set under the regulations should be used a baseline. Applicants that assume a credit price higher than the credit clearing price must explicitly identify the risks associated with their assumption.

SECTION 7: HOW TO APPLY

Applications to the Program are invited through a national Call for Project Proposals. The call will be open from June 21, 2021 until September 29, 2021. All applications are accepted electronically through Integro, which will be available for use by the end of July. The Integro system is a secure environment, residing on Government of Canada servers. The data collected here will be treated confidentially. Submission of a completed application does not guarantee applicants will receive funding under the Program.

The on-line Application Form consists of four sections, including the attachment of all the mandatory documents listed under Section 7.2.

7.1 Registration with Integro

1. Go to the Program website.
2. Select Register for Integro [https://eservices.nrcan-rncan.gc.ca].
3. Continue to GC Key.
4. Login with an existing GC Key; Create a GC Key; or login to "Sign-in Partner".
5. On the Welcome Page, click "Continue".
6. On the Natural Resources Canada eServices page, select "Integro" if you already have an account. If you don't have an Integro account, select "Register".
7. Create a Client Profile – you must have a Client Profile to continue. If you already have a Client Profile, select an option from the Menu:

a.	Welcome	Welcome
b.	Client Profile	Edit and/or Register a Client Profile
c.	My Submission	View existing submissions or start a new submission
d.	Service Request	Request an amendment or report a technical problem
e.	User Information	Update your user information (i.e. email address)
f.	Help	View help topics related to Integro
g.	Logout	Logout of Integro

When completing the Application Form, please consider the following:

- Ensure you "save" your work by clicking the "next" button (all fields are mandatory).
- Please ensure to attach the mandatory documents and the additional applicable attachments.
- You can save a section and go back to the Application at a later date to complete it. The Application must be complete before you can submit.
- Should you need to make changes after the Application is submitted, you will need to request an amendment from the Program within the open RFP period. The Program will release the Application back to you for amendment.

For helpful information, visit Integro – Help, and for all other Integro questions, email the Program.

7.2 Mandatory Documentation Checklist

The following documentation must be included in order for an Application to be deemed complete.

Mandatory Documents	Production Projects	Feasibility Projects
Engineer certified Baseline Opportunity Assessment or equivalent (Refer Section 4);	✓	✗
Proof of Business Incorporation, Articles of Incorporation or Registration;	✓	✓
For Production Projects a Business Plan must include: • Detailed technical description of the project; • Financial indicators; • Financial forecasting or analysis that includes anticipated earnings (or cost savings) resulting from the projects; • Cost estimate that meets or exceeds a Class-3 level as per the American Association of Cost Engineers Cost Estimate Classification System; • Applicant's goals; • Problems and solutions the project proposal aims to address; • External and internal project risks and mitigation; and, • Other items relevant to the project (e.g. scalability, vertical/horizontal integration) For Feasibility Projects a Business Plan must include: • Detailed technical description of the project; • Financial indicators; • Applicant's goals; • Problems and solutions the project proposal aims to address; and, • Other items relevant to the project (e.g. scalability, vertical/horizontal integration) Note that for Production Projects the Business Plan is required in addition to the BOA.	✓	✓
For an applicant incorporated for three or more years, include the last three years of Audited or Reviewed Financial Statements. If incorporated for less than three years, submit any available Audited or Reviewed Financial Statements. In the event that the company does not have Audited or Reviewed Financial Statements (e.g., newly incorporated), please submit statements certified by the Corporation's Chief Financial Officer. For all applicants, if available, submit the most recent interim financial statements if the Audited or Reviewed Financial Statements are more than six months old.	✓	✓
Feedstock Supply and Fuel & CO_2 (if applicable) Offtake plans, this can include: • Supply or off-take letters of intent; • Supply or off-take agreements; • Marketing service agreements; • Supply or offtake plans. All documentation must be applicable for a minimum period of one year, and must include information on volumes of supply or off-take, duration, frequency, risk mitigation strategies and names of partners (or potential partners).	✓	✗
Applicant's Operating Budget and Cash Flow Forecast for the next two fiscal years. Please include analysis of the potential risks impacting the financial performance anticipated and major assumptions used to prepare the Budgets and Cash Flow Forecast.	✓	✗
Completed Appendix A and B of the Applicant's Form.	✓	✓
Project Financial Projections for 10 Years starting the year of project commissioning to include the major assumptions used for the projections. The Repayment Amount defined in Section 6.2 should be included in the projections.	✓	✗

Mandatory Documents	Production Projects	Feasibility Projects
Background information about the company, this may include a brief history of the company, a description of the services and expertise offered by the company, as well as the mission and vision.	✓	✓
A Workplace Diversity & Inclusion Plan as described in Section 3	✓	✓
Completed Section 5 of the Application Form: Applicant Attestations	✓	✓
Provide the key milestones (in a table or Gantt chart) and the critical path for each proposed project. Ensure to include the following: - Project title; -Location of the project; - Key milestones in a logical sequence; and - Start and end dates. Examples of key milestones could include: Engineering, Procuring and Construction/Commissioning in place; Required permits and licenses; and Access to Land Agreements. For each milestone, identify all and any potential risks, as well as proposed mitigation measures. Key milestones should be specific, measurable, realistic and relevant to the project objective(s). List all key milestones and associated activities in a logical sequence, including the timelines and/or duration of each, as well as descriptions. All project activities must be completed, including commissioning for construction projects, by March 31, 2026.	✓	✓
Provide any relevant reports, studies and relevant applications that may further substantiate the validity of the project, such as front-end engineering, feasibility and/or research studies, permitting, regulatory approvals, environmental assessments (or their status), etc. These documents are not mandatory for the project application, but will be assessed in the merit criteria.	✓	✓

SECTION 8: CONTRIBUTION AGREEMENTS

This section contains information that will be relevant only to applicants who are selected to receive funding under the Program.

8.1 Basis of Payments

The Government of Canada's fiscal year is the period beginning on April 1 of any year and ending March 31 in the following year. Multi-year agreements will establish a funding amount per fiscal year adding up to the total contribution under the agreement.

The payments schedule will be developed based on key project milestones and stipulated in the Contribution Agreement.

Contribution Agreements will also provide details regarding documentation that is required when submitting a claim for payment. The Contribution Agreement will also stipulate the start date and end date ofeligible costs for each project.

8.2 Reporting Requirements

Recipient reporting will be required at the project level and will be stipulated in the Contribution Agreement. Reporting will include, but is not limited to, periodic progress status reports to support claims for payments as well as post-project reports to confirm activities performed match those that were supported under the contribution financial statements. Post-project reports will include annual Audited Financial Statements and project repayment reports for the duration of the repayment period.

Upon project completion, recipients will provide a comprehensive final report that details all project expenditures, with a declaration as to the total amount of contributions or payments received from other sources inrespect of the Project. Recipients will also provide a final narrative report to describe how project activities have contributed to the achievement of the objectives of the project and a final assessment of performance indicators to report on short term, intermediate term, and long term outcomes of the project.

Contribution Agreements may include reporting requirements that extend beyond the repayment period, which is up to 10 years (e.g., production level, carbon intensity of fuels produced).

8.3 Impact Assessment Considerations

The *Canadian Environmental Assessment Act*, *2012* and the *Impact Assessment Act* are the legal basis for the federal environmental assessment (EA) process for most projects in Canada, except for projects in the Mackenzie Valley, the Yukon and in Nunavut, where other processes and legislation may apply. The Acts outline the responsibilities, requirements and procedures for the EA of Projects and establishes a process for assessing the potential environmental effects of "projects" in which the Government of Canada has a decision-making responsibility.

Applicants should clearly indicate in their Project proposal if a federal EA is required, as additional information may be requested by the Program. Applicants are required to submit any additional and relevant information regarding Impact Assessment at the application stage.

8.4 Duty to Consult

The Government of Canada has a legal duty to consult with Indigenous groups, and where appropriate to accommodate, when Canada is contemplating funding a project that may have an adverse impact on existing or potential Aboriginal or treaty rights. This is true whether those Aboriginal rightshave been established (proven in court or agreed to in treaties) or whether there is potential for rights to exist.

NRCan is responsible for understanding how and when project funding could have an adverse impact on Aboriginal and treaty rights, and consultation should occur prior to NRCan providing funding to the recipient.

To that end, for each project proposal that is approved for funding consideration, program officers will reviewthe application to determine if the proposed project is likely to result in an adverse impact on established, claimed or potential Aboriginal or treaty rights. Where appropriate, a meaningful and adequate consultationprocess, commensurate with the severity of adverse impact and strength of the claims, will be undertaken.

Eligible recipients' consultation with Indigenous groups is not required under the Program as part of the application process. However, applicants are encourage to report if they have already conducted consultation or engagement activities in elation to the project proposal or as part of the applicant's ongoing operations/corporate commitments. Applicants are asked to identify Indigenous groups they have interacted with and describe the type and frequency of activities undertaken.

8.5 Confidentiality and Security of Information

The Access to Information Act (the "Act"), governs the protection and disclosure of information, confidential or otherwise, supplied to a federal government institution.

Paragraph 20(1) (b) of the Act sets out two mandatory criteria in order to protect Applicant's confidential information supplied to Natural Resource Canada from disclosure. First, the Applicant's document supplied to Natural Resource Canada must contain financial, commercial, scientific or technical information. Second, the Applicant must consistently treat such information in a confidential manner. In other words, Natural Resources Canada, will protect the Applicant's confidential information in its possession as much as the applicant protects said confidential information in its own establishment.

For more information on this subject, a careful reading of the entire Section 20 of the *Access to Information Act* is encouraged.

DEFINITIONS

"Applicant" is the person/organization who has submitted or is going to submit a proposal to the Clean Fuels Program.

"Atlantic Canada" are the provinces of Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick

"Call for Project Proposals" means the period of time during which applications can be accepted through the online portal.

"Canada's North" refers to the territories of Nunavut, the Northwest Territories and the Yukon.

"Carbon Intensity" in relation to a type of fuel, means the quantity of CO_2e emissions that are emitted during the activities undertaken over the fuel's lifecycle to the point the fuel is produced. This includes all emissions associated with the extraction or the cultivation, as the case may be, of raw material used to produce the fuel, with processing, refining or upgrading that raw material to produce the fuel, and with the transportation or distribution of that raw material. Units are expressed in grams of CO_2e emitted, per megajoule of energy produced.

"Commissioning" is defined for the purposes of the Clean Fuels Program, as the process, certified and supported with documentation from a professional Engineer registered in Canada, during which the production facility is operational and has been fully assessed at the nameplate production capacity for a minimum period of three consecutive days, and said Engineer has attested that the fuel meets industry established quality specifications. The Program reserves the right to provide further details pertaining to acceptable industry established quality specifications in contribution agreements.

"Conditional Financing" means all project financing that is not firm financing and may be subject various conditions.

"Facility Conversion" is the retrofitting of an existing production facility to produce clean fuels.

"Facility Expansion" is the installation of additional clean fuel production capacity at an existing production facility.

"Firm Financing" means financing that is committed and documented at the time of application and verifiable by NRCan.

"GHGenius" means the spreadsheet model of that name designed for analyzing the components attributable to the stages of the life cycles of fuels for the purpose of determining all greenhouse gases resulting from the production and use of those fuels for transportation purposes. (For the purpose of the Clean Fuels Program application, GHGenius model version 5.01 will be used).

"In-kind" means a contribution from a Proponent and/or its partners which is not a cash contribution, but which is verifiable and is directly attributable to the Project. In-kind contributions must be documented at fair market value.

"New Build" is the construction of a production facility that is not a part of a facility conversion, or a facility expansion

"Official Commissioning Date" is the date on which the professional Engineer, registered in Canada, has attested that Commissioning of the project is complete.

"Production Facility" means any facility in Canada at which fuel is produced, and is located at the address listed in the project proposal.

"Profit" means net income as determined by Generally Accepted Accounting Principles derived directly from the Project (e.g. net income from operations of a clean fuels production facility supported by the Program).

"Project" means an eligible activity, as defined by the Program, namely the expansion or repurposing of existing facilities, and buildout of new facilities (Production Projects) and feasibility studies and front-end engineering design studies (Feasibility Projects)

"Project proposal" or "Application" means a completed proposal, and all required supporting documentation, submitted to the Clean Fuels Program, "The Program".

"Renewable Natural Gas" means gas that meets the standard for injection into the closest natural gas pipeline and that is either synthetic natural gas from biomass or derived from processing biogas.

"Total Project Costs" means the Contribution and other verifiable cash or in-kind contributions either received or contributed by the Proponent and directly attributable to the Project.

"TRL" means the Technical Readiness Level as specified by Innovation, Science and Economic Development Canada (https://www.ic.gc.ca/eic/site/080.nsf/eng/00002.html).