

## 1. Program Overview

CleanBC commits the Province to ambitious greenhouse gas (GHG) reduction goals, while simultaneously supporting a vibrant economy across British Columbia. The B.C. building sector plays an important role in achieving these goals.

Achieving CleanBC goals requires innovation in energy efficient and low-carbon building products. The CleanBC Building Innovation Fund (CBBIF) was developed to support industry to accelerate the availability and affordability of these solutions in support of broad market transformation in the B.C. building industry.

Funding to invest in innovation will help businesses impacted by COVID-19 keep operations going, maintain jobs and offset revenue loss. At the same time, the CBBIF program (the “Program”) will help maintain and increase jobs in the future as new energy efficient and low-carbon product lines and sales opportunities are developed.

This document serves as the Program Guide for the second intake of the CBBIF. It provides prospective applicants with information on eligibility, funding streams, and directions on how to apply. **The application intake will begin on November 12, 2020, and close at 11:59 PM PST on Sunday, January 10, 2021.** Applicants that submit their **full** application before December 15 will have the opportunity to receive feedback and revise their application prior to the final deadline.

## 2. Funding Streams

The CBBIF provides funding to promote building sector innovation in building designs, construction practices, systems, materials, products, and technologies that currently have a technology readiness level (TRL) of 6 or higher<sup>1</sup> and:

- are energy efficient,
- reduce carbon emissions from building operations, and/or
- have low embodied carbon.

Funding is provided through four different streams:

Funding Stream	Funding per Applicant	Details <sup>2</sup>
Material, Component and System Manufacturing	\$300,000- \$1,000,000 (up to 60% of total eligible costs)	Funding to support investment in manufacturing facilities to diversify and expand existing product lines or commercialize new product lines. May include purchase or production of manufacturing equipment and tools, process controls, robotics, production line modifications, engineering services and operator training related to new product lines.

<sup>1</sup> Definitions for technology readiness levels can be found here:

<https://www.ic.gc.ca/eic/site/080.nsf/eng/00002.html>

<sup>2</sup> Further details about specific industry sectors and associated projects can be found in Section 4 of this Guide.

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		All applications for the manufacturing stream must be submitted by or partnered with an existing manufacturer.
Digital technology Solutions	\$200,000-\$500,000 (up to 60% of total eligible costs)	Funding for technology development for new or improved digital solutions.
Demonstration Projects	Up to \$250,000 (up to 80% of eligible <u>incremental</u> costs)	<p>Funding for demonstration projects. Awards will help offset the incremental capital or operational costs of projects relative to industry standards. Does not include laboratory testing of products.</p> <p>Demonstration projects are those that involve the construction or renovation of a discrete building and the demonstration of innovative technologies/materials within that building.</p> <p>Demonstration projects must include robust plans for documentation, case studies, and public dissemination of information.</p> <p>Preference will be given to projects with multiple novel technologies or applications (e.g. a building with passive house windows, mass timber, <i>and</i> low-carbon heating systems).</p>
Open Call for Innovations	\$250,000 - \$500,000 (up to 60% eligible of total costs)	An open call for other types of activities not covered by other funding streams, including but not limited to development, testing and certification. Preference will be given to projects that include innovative applications for currently commercialized technologies or lead to near-term commercialization of technology and/or new building products/materials.

### 3. Eligibility Criteria

#### 3.1 Eligible Applicants

Eligible applicants include:

- For-profit organizations registered in British Columbia (e.g. builders, developers and manufacturers).
- Not-for-profit organizations that have offices and/or are active in British Columbia (e.g. industry associations, universities and societies).
- British Columbia local governments, including municipalities and regional districts.
- First Nations governments and organizations.

Applicants are permitted to partner with other organizations to complete their project. Applications should provide clear details regarding the role each partner will play in the project. Project partners can be any of the above listed entities, in addition to out-of-Province organizations. Any partners listed in the application are required to provide a letter confirming their role and commitment to the project.

### 3.2 First Nations participation

The Province is committed to implementing the *Declaration on the Rights of Indigenous Peoples Act*, and as such may prioritize projects that are led by or in partnership with First Nations. The CBBIF complements other provincial programs such as the Indigenous Forest Bioeconomy Program (IFBP), that considers innovative ways of using wood fibre to produce bioproducts that support broader industry transformation.

For specific questions about First Nations involvement related to bio-based products (wood biomass), please contact the Innovation, Bioeconomy and Indigenous Opportunities Branch at [IBIO.Mail@gov.bc.ca](mailto:IBIO.Mail@gov.bc.ca)

For general inquiries about the CBBIF application process, please contact the Energy Efficiency Branch at [building.innovation@gov.bc.ca](mailto:building.innovation@gov.bc.ca)

### 3.3 Project Eligibility

#### **Eligible Projects:**

Eligible projects are located in BC and advance innovation<sup>3</sup> in building designs, construction practices, systems, materials, products, or technologies that currently have a technology readiness level (TRL) of 6 or higher<sup>4</sup> and:

- are energy efficient,
- reduce carbon emissions from building operations, and/or
- have low embodied carbon.

These may be for retrofit or new construction applications, including any building type. They must exceed current BC Building Code, federal *Energy Efficiency Act* and provincial *Energy Efficiency Act* requirements, if any, as well as standard industry practice.

Funding applications must be within the minimum and maximum funding range specified for each stream. Proposals that are under or over the range will not be considered.

Projects may be programs, which for the purposes of this Program Guide are defined as initiatives in which the applicant will further distribute funding received by the Province to a broader set of participants based on a set of criteria separate from, but informed by, the CBBIF. Programs are typically administered by industry associations or non-government organizations. Applicants must demonstrate

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<sup>3</sup> Innovation includes market-based innovation and design-based innovation where products are improved using commercially available components and technologies.

<sup>4</sup> Definitions for technology readiness levels can be found here: <https://www.ic.gc.ca/eic/site/080.nsf/eng/00002.html>

their ability to distribute funding to program participants within the 2021 calendar year. Applications for programs must include an overview of potential participants and program structure, an expected participation rate and an indication of market need. **Note that preference will be given to projects that are not programs.**

**Ineligible Projects:**

Ineligible projects are those that are focused on routine building/equipment maintenance or repair, investments associated with minimum performance benchmarks or code minimum technologies or products, those projects in which construction has already begun on a given building, or those that otherwise do not meet the mandatory criteria as outlined in this Program Guide.

**3.4 Eligible Costs**

Eligible costs are defined as all direct costs properly and reasonably incurred and paid solely and specifically in relation to the project. Eligible cost categories are outlined in the table below. Only those costs itemized in the Budget, and subsequently approved by the Province will be funded.

Eligible Costs	Ineligible Costs
<ul style="list-style-type: none"> <li>➤ Energy performance modelling, design, testing, analysis and engineering services</li> <li>➤ Product certification and regulatory costs</li> <li>➤ Development of high-performance building components, materials and technologies (TRL 6 or higher)</li> <li>➤ Development of digital tools including software</li> <li>➤ Consulting services related to project management</li> <li>➤ Professional and technical costs required to plan and conduct project activities</li> <li>➤ Capital costs for related equipment, components, machinery or retooling</li> <li>➤ Training of personnel on related equipment or processes</li> <li>➤ Costs related to development of documentation, case studies, and public dissemination of information</li> <li>➤ In the case of a program, incentive disbursements for the above noted eligible costs</li> <li>➤ Existing staff costs within the applicant’s organization that are related to project implementation</li> </ul>	<ul style="list-style-type: none"> <li>➤ PST and GST</li> <li>➤ Organizational overhead and administration costs that are un-related to project delivery)</li> <li>➤ Costs incurred prior to the signing of a definitive agreement in the form of a Shared Cost Arrangement (SCA) with the Province</li> <li>➤ Existing staff costs within the applicant’s organization that are unrelated to project implementation</li> <li>➤ Land and building acquisition</li> <li>➤ Legal costs</li> </ul>

<ul style="list-style-type: none"> <li>➤ Organizational overhead and administration costs that are related to project delivery</li> <li>➤ In the case of a program, a maximum of 10% of total eligible project costs may be incurred by the applicant and its partners for administration of the program.</li> </ul>	
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Eligible costs for Demonstration projects are limited to the incremental costs of the innovative energy efficient/low-carbon aspect of the project, relative to industry standards. For example, in a demonstration project that involves the construction of a commercial building with an innovative HVAC technology, eligible costs would be the difference between the innovative HVAC system costs and the costs of a standard HVAC system. This may include costs for design, capital, installation, operation (e.g. energy, maintenance), demonstration, monitoring, and developing case studies.

### 3.5 Stacking of Funds

If the applicant is a for-profit organization, a minimum of 20% of the total project eligible costs must be provided by the applicant and their partner(s). Preference will be given to projects that have a higher proportion of total project eligible costs covered by the applicant and their partner(s). Applicant and partner contributions may be in-kind.

Demonstration projects may concurrently receive funding from programs administered by Forestry Innovation Investment (BCFII)<sup>5</sup>. However, if funding is received from BCFII for components with low-embodied carbon, then CBBIF funding must be applied to a different element of the project, which must include operational energy savings or GHG reduction. For example, in a mass timber passive house project, the BCFII program funding might go towards the mass timber structural elements of a project (e.g. beams and floor panels), while the CBBIF funding may go towards innovative building envelope technologies leading to passive house-level energy savings.

If the project is a program, the CBBIF applicant must specify in their program application criteria a minimum applicant contribution of 20% of eligible project costs for any for-profit organizations.

### 3.6 In-Kind Contributions

In-kind contributions towards the project’s eligible costs must meet the following criteria:

- The contributed asset must be an eligible cost (see section 3.4);
- The contribution must be essential to a project’s success and would otherwise have to be purchased by the applicant;
- Its value must be determinable and verifiable.
- In-kind contributions of staff time must include a time estimate (including a breakdown of tasks and assigned hours) and hourly cost where staff cost is based on direct salary (not on consulting charge-out rates); and

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<sup>5</sup> See [www.bcfii.ca](http://www.bcfii.ca).

- The contribution's valuation must be confirmed by CBBIF staff before or during the application evaluation stage.

## 4. Product-Specific Guidance

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The CBBIF is open to a wide variety of innovations. The following section provides guidance based on product/technology types.

### 4.1 Mass Timber and Advanced Materials

Investments in manufacturing facilities to expand product lines which may include, among other things, investments in affiliated software (e.g. robotics software), should go through the Material, Component and System Manufacturing stream. Manufacturing facilities can include assembly plants. Applications which relate exclusively to software solutions should apply through the Digital Technology Solutions stream. Applications which relate to product development, testing and certification but exclude investments in manufacturing equipment should apply to the Open Call for Innovation. Demonstration projects, such as buildings showcasing novel applications for mass timber, should apply through the Demonstration Projects stream. See section 3.3 for restrictions placed on funding to applicants also receiving funding from the BC Forestry Innovation Investment.

Examples products include but are not limited to:

- Mass timber, such as CLT, DLT & Glulam;
- High efficiency and low-carbon wood fibre insulation board;
- High energy efficiency or low-carbon pre-fabricated building solutions;
- Well-insulated pre-fabricated wall assemblies for retrofit applications; and
- Innovative air sealing and insulation solutions.

### 4.2 Heating and Ventilation

Investments in manufacturing facilities to expand product lines, which may include among other things investments in affiliated software (e.g. robotics software), should go through the Material, Component and System Manufacturing stream. Applications which relate to product development, testing and certification but exclude investments in manufacturing equipment should apply to the Open Call for Innovation. Demonstration projects should apply through the Demonstration Projects stream.

Example products include but are not limited to:

- High efficiency ventilation systems;
- Heat recovery ventilators (HRV) with integrated MERV 13+ filtration;
- Heat pumps;
- Heat pump-HRV integration;
- Combination space-and-water-heating heat pumps; and
- Refrigerants with low global warming potential.

### 4.3 Fenestration

Investments in manufacturing facilities to expand or retool product lines, which may include among other things investments in affiliated software (e.g. smart glass controls), should go through the Material, Component and System Manufacturing stream. Applications which relate exclusively to software solutions should apply through the Digital Technology Solutions stream. Applications which relate to product development, testing and certification but exclude investments in manufacturing equipment should apply to the Open Call for Innovation. Demonstration projects should apply through the Demonstration Projects stream.

Example individual projects may include (but not be limited to) development of fenestration products with:

- Highly insulated commercial framing;
- Thin-Triples insulating glass;
- Low-embodied carbon window frames;
- Vacuum insulated glass; and
- Electrochromic smart glass.

Examples of programs could include an incentive program to support smaller investments in retooling, certification and development of high-performance products with commercially available components (e.g. Passive frames, composite reinforcement, etc.).

#### **4.4 Hearth Products**

Investments in manufacturing facilities to expand product lines should go through the Material, Component and System Manufacturing stream. Applications which relate to product development, testing and certification but exclude investments in manufacturing equipment should apply to the Open Call for Innovation. Demonstration projects should apply through the Demonstration Projects stream.

Example products may include (but not be limited to):

- Low-emission high-efficiency wood stoves, inserts, or fireplaces;
- Low-emission decorative appliances (patio & hearth products);
- Hybrid wood stove/heat pumps;
- Combined heat and power wood stoves; and
- Combined heat and hot water wood stoves.

Examples of programs could include support for smaller investments in capital, certification and development of high-performance products with commercially available components.

#### **4.5 Digital Technology Solutions**

Businesses offering digital technology solutions, including software, services or hardware, should apply to the Digital Technology Solutions stream. Projects related to a digital solution specific to a manufacturing plant should apply to the Material, Component and Systems Manufacturing stream. Projects demonstrating digital solutions should apply to the Demonstration project stream.

Examples of digital technology solutions include (but are not limited to):

- Construction management software;

- Decision assistance tools;
- Manufacturing plant software;
- Energy management systems;
- Energy auditing systems;
- Building information management systems;
- Distributed energy resource management software;
- Renewable integration; and
- Smart grid software.

#### 4.6 Low Global Warming Potential (GWP) Refrigerants

Projects that advanced the use of low GWP refrigerants are eligible for funding. Projects that manufacture heat pumps that use low GWP refrigerants should apply to the Material, Component and System Manufacturing stream. Demonstration projects for residential or commercial heat pumps that use low GWP refrigerants should apply to the Demonstration stream. Funding programs to support product certification or training programs should go through the Open Call for Innovations.

Example projects may include (but are not limited to):

- An incentive program for certification of low GWP residential or commercial heat pumps to CSA C22 No.60335-2-40 3rd Edition and/or CSA C656-14;
- An incentive program for development and implementation of training courses on the safe storage, handling, installation and operation of AL2 refrigerants in residential heat pumps;
- A residential demonstration project which showcases the successful use of new-to-market low GWP residential heat pumps in a neighborhood or low-rise residential complex; and
- A commercial demonstration project showcasing an engineering safety assessment and regulatory variance for a new-to-market low GWP heat pumps.

#### 4.7 All other products and technologies

Products that meet eligibility criteria set out in section 3.3 should apply to funding streams based on descriptions of funding streams provided in the table in section 2. Program staff may be contacted for further guidance.

## 5. Application Process

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***IMPORTANT***

***Applications for the second intake of the CBBIF will be accepted starting November 12, 2020 with a deadline of 11:59PM PST on Sunday January 10, 2021.***

**Each applicant can submit up to two applications (with no overlapping scope) per intake.**

#### 5.1 How to Apply

Applicants must complete and submit a completed CBBIF application form (the “Application”), along with supporting documentation to [building.innovation@gov.bc.ca](mailto:building.innovation@gov.bc.ca) before the identified deadline. The

CBBIF application form is available at: <https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/energy-efficiency-conservation/programs/cleanbc-building-innovation-fund>

- The Application is a fillable PDF form and must be completed electronically. Please note that the response areas beside each question will accommodate additional space.
- Once complete, please save the Application with the following file name format: Applicant Name, Program intake (e.g. *ApplicantName\_CBBIF2*)
- It is the applicant's responsibility to ensure their application is submitted with full and accurate information. Applications with incomplete mandatory fields will not be considered for funding.

## 5.2 Supporting Documents

In addition to the Application, applicants should submit supporting documents to provide further context and information about the project. These could include:

- Quotes received from project contractors or vendors;
- If applicable, letters with project partners outlining roles and responsibilities (mandatory);
- Other project-related materials to better explain project outcomes and goals (e.g. strategic plans, research reports, project budgets, market calculations of project economics including NPV and incremental capital costs); and
- Evidence of alignment with government's equity and reconciliation goals (e.g. plans for employment in communities in regions hardest-hit by COVID or for hardest hit populations or vulnerable or marginalized communities; evidence of support for reconciliation with Indigenous peoples).

A separate project budget outlining costs and funding sources is mandatory.

## 5.3 Application Evaluation

Applications will be evaluated and ranked by a selection committee comprised of Provincial staff. Eligible applicants may be contacted by Program staff during the evaluation process to provide more information or clarify certain aspects of their application. Applicants that submit their full application before December 15 will have the opportunity to receive feedback from program staff and revise their application prior to the final deadline of January 10, 2021. Successful applicants will be notified within two months of the application deadline. While all funding decisions are final, the Province may, subject to availability, offer a debriefing to unsuccessful applicants, upon request and at a mutually agreed upon time.

This call for applications must not be construed as an agreement to purchase goods or services or as an approval of any activity or development contemplated in any application that requires any approval, permit or license pursuant to any federal, provincial, regional district or municipal statute. The Province is not bound to enter into an agreement with any applicant. The Program is subject to change at the Province's discretion, including amendments to the total allocation of funding disbursed.

The selection committee will evaluate, and score applications for each stream based on the following criteria and scoring system:

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Evaluation Criteria		
Alignment with CleanBC Strategy and the Wood First 3-Year Strategy	Does the project advance the availability, acceptance and affordability of energy efficient and low-carbon building solutions, in alignment with the provincial strategies related to greenhouse gas emission reduction and advancement of BC wood products (which have low embodied carbon)?	40 possible points (minimum 25 points to pass)
Economic Development, Equity, and Reconciliation	Does the project create or restore good long-term jobs, economic development opportunities, and other benefits to British Columbians, particularly for those hit hardest by COVID-19, vulnerable or marginalized communities, and Indigenous peoples?	40 possible points
Organizational Capacity	Is the applicant able to complete the proposed work?	20 possible points (minimum 10 points to pass)

After scoring, the selection committee will apply the following two lenses before making the final application selection:

- The need for diversity of product/technology types; and
- The need for geographic representation (i.e projects located in different regions of the Province).

For more details on meeting evaluation criteria, see Section 7.

### 5.4 Ownership of Responses

All documents, including any application or information submitted to the Province becomes the property of the Province. They will be received and held in confidence by the Province, subject to the provisions of the *Freedom of Information and Protection of Privacy Act*.

## 6. Funding Agreements

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### 6.1 Shared Cost Arrangements

It is anticipated that successful applicants will be notified about approved project funding within two months of the application deadline. Once notified, successful applicants will enter into a Shared Cost Arrangement (SCA) with Her Majesty the Queen in right of the Province of British Columbia, as represented by the Minister of Energy, Mines and Petroleum Resources (the “Province”). The SCA will outline the terms and conditions of funding, including the maximum funding amount, required deliverables, and reporting requirements. A template of the SCA can be found on the CCBIF website. Applicants should be prepared to enter into the SCA with no changes to the standard terms and conditions.

As per the terms and conditions of the SCA, funding will be disbursed in two installments, following the completion of the identified deliverables. It is anticipated that all funding will be disbursed before March 31, 2021. Failure to meet the terms and conditions of the SCA may result in a requirement for repayment of funding to the Program.

### 6.2 Communications

As per the conditions in the SCA, successful applicants will be required to:

- Inform the Province about promotional activities related to the project, and provide written notice before any public materials are distributed, or events are held;
- Acknowledge the Province, through the Ministry of Energy, Mines and Petroleum Resources, unless otherwise requested, in any project communications, events, or signage;
- Consent to the Province publishing project outcomes in the form of publicly available case studies.

All reasonable efforts will be made to ensure applicants are able to retain sensitive intellectual property (IP). Please contact Program staff to discuss any IP concerns prior to applying.

## 7. Application Guidance

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This section is designed to help applicants prepare and submit their application. Guidance is provided for each section and question in the Application Form.

### 1. Project Description

Use this section to describe your project. Successful applications will clearly illustrate *why* they are undertaking a project, *what* the expected outcomes of the project are, and *how* the project will achieve those outcomes. Where possible, applicants should strive to provide concrete details about the project rather than describing the project in the abstract.

#### *Question 1.1 Select a Market Sector*

Refer to Section 4 of the Program Guide for guidance on what each market sector represents. Projects may belong to more than one market sector. For example, a Demonstration project may contain elements of mass timber as well as innovative HVAC equipment.

*Question 1.2 Select a Funding Stream*

Refer to Section 2 and Section 4 above for guidance.

*Question 1.3 Funding Amount Requested*

This should represent the amount requested by the CBBIF. Please ensure this is within the minimums and maximums set out for the applicable stream in Section 2. Ensure that the costs requested are for items that are eligible as listed in Section 3.4.

*Question 1.4: Provide a High-Level Description of Project in 2-3 sentences. (250 words max)*

Use this section to succinctly describe your project in 2-3 sentences. This should capture the high-level characteristics of the project and key outcomes.

*Question 1.5: Provide a detailed description of the project, including the rationale for undertaking, expected outcomes, and key steps and deliverables. (2000 words max)*

Use this question to expand on the above description in greater detail. Some questions to consider:

1. What problem or market barrier is the project trying to overcome? Describe the hurdles faced in your sector. Hurdles may be technology challenges or market hurdles such as product certification, manufacturing feasibility, or incremental product cost.
2. What does success look like at the end of this project? Describe the project outcomes. For example, a successful manufacturing project may result in a commissioned production line for a new low carbon building solution or a new line of more efficient products. A successful demonstration project may show that a high-efficiency building with low embodied carbon has a similar capital and operating cost to a building that used conventional construction.
3. How is this project incremental to what you were already doing? Provide quantitative information if possible, e.g. dollars previously spent on product development vs dollars spent if CCBIF funding is granted.
4. What are the expected actions you will be taking and what evidence can you provide when these have been completed? Describe the key actions that will be completed during the project. For example, evidence of completion may be the certification for a new product, the commissioning of a new production line, or the launch of a new digital solution.
5. Describe how your project will improve the availability, acceptability, affordability, awareness and accessibility of energy efficient and low carbon building solutions. For example, manufacturing based projects typically improve availability, accessibility or affordability, while demonstration projects typically increase awareness or acceptability.

*Question 1.6: Outline the project timeline and key milestones. (500 words max)*

Use this question to provide details on the project timeline. What are the specific dates and associated deliverables of the project? Successful applications will have well organized timelines that are both realistic and logical.

*Question 1.7: Describe whether the project could be awarded a smaller amount than the amount requested, and if so, how your scope, deliverables, and timeline would be affected.*

Given the limit on total funding dollars, the Selection Committee may choose to award a smaller amount than requested. Please specify if there is a threshold below which a project may not be viable. You are not required to provide the full details on an alternative downscaled project, only a general indication of the impact on scope, deliverables, and timeline.

## 2. Alignment with CleanBC Strategy and the Wood First 3-Year Strategy

Use this section to speak to how the project will advance market transformation within the context of the Province's strategic goals, as articulated in the CleanBC and Wood First strategies.

CleanBC ([www.cleanbc.gov.bc.ca](http://www.cleanbc.gov.bc.ca)) is the Province's greenhouse gas (GHG) reduction strategy, with an additional emphasis on economic development. For the building industry this includes:

- increasingly stringent energy efficiency requirements in building codes so that every new building constructed in BC will be net-zero-energy ready by 2032;
- increased focus on low-carbon energy efficiency retrofits in existing buildings;
- a broad shift away from reliance on fossil fuels towards clean energy, particularly grid electricity, renewable natural gas, and hydrogen;
- a rapid increase in the number of heat pumps being used;
- higher energy efficiency requirements for space heaters, water heaters, and windows; and
- exploration of energy rating requirements for homes and buildings.

The Province's Wood First Strategy (<https://www.bcfii.ca/sites/default/files/FII-Wood-First-3-Year-Strategy-2020-2023.pdf>) seeks to establish British Columbia as a leader in the use of innovative forest products and building systems. The three-year plan lays out five objectives and focus areas supporting this goal:

1. Grow the culture of living and building with wood in B.C. and beyond.
2. Maximize the appropriate use of wood in public and private projects.
3. Accelerate the adoption of existing and new innovative wood-based products and building systems.
4. Strengthen B.C.'s capability to produce competitive wood-based products and building systems that create and respond to market demand and are aligned with future raw material supply.
5. Position B.C. as a world leader in sustainable and innovative wood-based products and building systems in design, production, and application.

In support of this strategic context, the CBBIF is focused on supporting building solutions that will viably lead to market transformation in B.C., particularly those that are easily replicable throughout the industry, that are competitive with existing materials and technologies, and that are supported by a strong information sharing dissemination strategy. Preference will be given to projects that support *both* CleanBC and the Wood First strategies. If your project has elements of both (e.g. a demonstration project that reduces GHGs through operational energy efficiency *and* includes innovative wood products with low-embodied carbon), be sure to mention these.

Further guidance on each Application question is provided below:

*Question 2.1: Describe the project's incremental improvement (with respect to energy and emissions including embodied carbon) over baseline technologies and/or standards. (500 words max)*

How does the project's technology/practices/solutions exceed applicable codes and standards or current industry practice? For example, a new product line of windows may offer increased U-values ( $W/[m^2 \cdot K]$ ) over conventional fenestration solutions. Where possible, use specific technical indicators to illustrate the incremental improvement over the baseline case (e.g. COP, net building emissions in  $Kg-CO_2e/m^2$ , fenestration U-value, TEDI/TEUI, refrigerant global warming potential (GWP), , environmental product declarations (EPD)). Where specific indicators are not available, use the standard industry practice as a baseline. Projects claiming low embodied carbon are strongly encouraged to describe the improvement using results from a life cycle analysis (LCA) tool such as Athena.

*Question 2.2: Describe the competitiveness of the proposed solution(s) compared to existing processes and technologies as well as to other alternative solutions. (500 words max)*

Is the project's innovative solution(s) cost-competitive with existing industry practices or does it have the potential to become cost-competitive through successful completion of the project? For example, development of a more streamlined manufacturing process may reduce cost per unit to be comparable to a competing lower-performance product. Cost competitiveness can be both measured through the lens of capital costs, operating costs, operational efficiencies/benefits, or other factors.

*Question 2.3: Describe the potential for replicability within the market (e.g. does the project advance currently available building technologies, materials, and processes in novel ways?). (500 words max)*

Does your proposed solution have the potential to proliferate in the market? What are the steps that are required for that to happen? For example, a building design software may have high potential for replicability due to a combination of strong demand, readily available supply, and cost competitiveness.

*Question 2.4: Describe the proposed information sharing and dissemination strategy. (500 words max)*

A key aspect of successful market transformation is the sharing of knowledge to the wider building industry. Use this question to describe the project's information sharing and dissemination strategy by detailing any case studies, presentations or other actions that will take place after project completion. Case studies that include tracking of quantitative information (e.g. construction costs, energy savings) are preferred over those that are qualitative only. Applicants who are concerned about the sharing of proprietary information should list those concerns here.

*Question 2.5: If applicable, describe how your project supports the Wood First Strategy objectives to strengthen BC's capability to produce competitive wood-based products and building systems that create and respond to market demand and are aligned with future raw*

*material supply, and to position BC as a world leader in sustainable and innovative wood-based products and building systems in design, production, and application. (500 words max)*

If applicable, link your project's goals and outcomes to the strategic goals of B.C. Wood First Strategy. For example, does your project create new product lines or reduce costs for existing product lines that use readily available BC raw materials? Are you helping to create new demand for these BC products through demonstration, or development of new systems in which they might be integrated in BC and worldwide?

*Question 2.6: If applicable, quantify the project's direct GHG reductions (both operational and embodied). (500 words max)*

Does your project result in direct GHG reductions (e.g. the installation of a heat pump, the use of low carbon materials in building construction)? When calculating GHG reductions, applicants should refer to the [BC Best Practice Methodology for Quantifying GHG Emissions](#). Projects claiming low embodied carbon are strongly encouraged to quantify GHG reductions using a life cycle analysis (LCA) tool such as Athena. Only fill out this question if it is applicable to your project (e.g. demonstration project).

*Question 2.7: Describe the project's broader potential for GHG reduction impacts (including if the product or material has low embodied carbon). (500 words max)*

Describe how your project will have a broader impact that will result in industry-wide GHG reductions. The total impact will be some factor of the GHG reduction impact of a given measure (e.g. an energy efficiency window or a low-carbon wall assembly), and the overall potential market size (e.g. all ground-oriented dwellings in coastal climates in North America).

### 3. Economic Development, Equity, and Reconciliation

The Program will prioritize projects that foster economic development, equity, reconciliation with Indigenous peoples, and other societal benefits.

*Question 3.1: List the number of jobs directly created or retained by this project. (500 words max)*

Use this question to detail any jobs that will be created (or retained) directly due to the project. Applicants should strive to provide as many details as possible about the employment impacts of a project, including the rationale for additional hiring, the length and nature of the jobs being created, and the qualifications needed to fill the role. Please list both the number of jobs incrementally impacted and the full-time equivalent (e.g. two half-time jobs = 1 full-time-equivalent).

*Question 3.2: Will the project result in any indirect jobs? If so, please describe in detail the employment opportunities created by the project. (500 words max)*

Use this question to detail any jobs that will be created (or retained) indirectly due to the project. In other words, are you creating new jobs within the supply chain, upstream (e.g. in the forestry sector) or downstream (e.g. product distribution)? If possible, please estimate the number of full-time equivalent jobs, the length and nature of the jobs, and the necessary qualifications to fill these types of jobs.

*Question 3.3: Describe how your project will support economic development in the province, region, or community in which it takes place. (500 words max)*

Use this question to speak to the general economic impacts your project will have. Provide details on the economic benefits that will be realized on a provincial, regional, and community level, and in the mid and the long term. What is the market potential and the scale of planned and potential product sales revenues, and on what timeline? What are the export opportunities? For example, are you creating new products that will generate export revenue and create long-term employment opportunities?

*Question 3.4: Does the project create or restore jobs outside of urban centres, in regions or populations hardest-hit by COVID-19, or in regions facing economic challenges? (500 words max)*

If applicable, provide details on the unique issues facing the communities, regions, or populations affected by your project, such as the amount of jobs lost as a result of COVID-19, or the significant economic hardship due to the closure of a mill or mine. Does your project result in any benefits that address these challenges? For example, the expansion of a mass timber manufacturing facility may provide an alternate economic base in a community facing a mill closure.

*Question 3.5: Does the project create jobs for vulnerable or marginalized populations, including youth, underemployed, indigenous individuals, persons with disabilities, visible minorities, persons living with substance use or mental health issues, and women? What strategies are in place to promote this outcome? (500 words max)*

Estimate how many jobs will be created or retained for vulnerable or marginalized populations. Describe any hiring strategy or job requirements that will make this possible. Applicants should refer to the Province's resources on Gender Based Analysis + (GBA+) for more information (<https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/services-policies-for-government/gender-equity/factsheet-gba.pdf>).

*Question 3.6: Does the project support reconciliation with Indigenous peoples? What strategies are in place to promote this outcome? (500 words max)*

For example, will your project provide employment to Indigenous peoples (please describe any hiring strategy that will make this possible, and the estimated jobs)? Will it support Indigenous procurement? Are Indigenous peoples the project proponent or a project partner? Will your project provide direct benefits to Indigenous peoples or communities (please provide details including quantification)?

*Question 3.7: Does the project provide any additional health, societal or environmental benefits?*

Use this question to detail any additional benefits that will result from the project. For example, will the realization of the project result in improved air quality, reduced landfill waste, reduction of ozone-depletion substances, greater climate resilience, or increased housing and education opportunities? Where possible, use quantitative metrics when describing project benefits.

#### 4. Organizational Capacity

This section is meant to capture the applicant's ability to deliver their project as described in the application. Successful applications will be able to illustrate evidence of strong project planning and management and should strive to link the details in this section to the identified actions and deliverables described in previous sections.

*Question 4.1: Identify the project team, clearly outlining their roles and responsibilities on the project, and describe relevant experience and qualifications. If applicable, list all partners, identifying their role and contributions. (750 words max)*

Use this section to list project team members. Describe individual roles and responsibilities on the project and list all relevant qualifications. Feel free to append CVs. List all partners that will be involved. Provide details on the partner's role in the project, including any financial contribution if applicable. Any partners listed in the application are required to provide a letter confirming their role and commitment to the project.

*Question 4.2: Outline any anticipated risks to the successful completion of the project. Describe risk mitigation measures that are in place to ensure project success. (500 words max)*

Use this section to describe any risks that you anticipate your project may encounter. Risks could include unforeseen market events, supply chain disruptions, human resources challenges, or competitive challenges. If your project budget includes on other unconfirmed external funding sources, include this in your risk assessment and outline mitigation strategies if you are not successful.

Successful applications will show evidence of risk management planning which includes identifying risks, estimating their impact, and defining applicable risk mitigation measures.

*Question 4.3: List all sources of funding and all estimated project costs. Applicants must also attach a separate budget document. (500 words max)*

Use this section to provide a detailed accounting of the project's finances. Successful applications will have budgets that are well-researched, realistic, and cost-effective. Projects in an early stage of planning should provide as much detail as possible to give reviewers a sense of the project scope. Applicants must attach a separate budget document to their applications.

Applicants are required to detail all sources of funding and borrowing (including contributing organization and amount, and whether these are confirmed or not). A minimum of 20% of the total funding must be provided by the applicant and their partners, if the applicant is a *for-profit* organization. Preference will be given to applications that have a higher proportion of the total eligible costs covered by the applicant and their partners.

Budgets should also detail projects costs, including amount and the cost category, which should include (if applicable):

- Energy performance modelling, design, testing, analysis and engineering services

- Product certification and regulatory costs
- Development of high-performance building components, materials and technologies (TRL 6 or higher)
- Development of digital tools including software
- Capital costs for related equipment, components, machinery or retooling
- Consulting services related to project management
- Professional and technical costs required to plan and conduct project activities
- Existing staff costs within the applicant’s organization that are related to project implementation
- Training of personnel on related equipment or processes
- Costs related to development of documentation, case studies, and public dissemination of information
- In the case of a program, incentive disbursements
- Organizational overhead and administration costs that are related to project delivery
- In the case of a program, a maximum of 10% of total eligible project costs may be incurred by the applicant and its partners for administration of the program
- In the case of a demonstration project, any incremental costs associated with the innovative technology including costs for design, capital, installation, operation (e.g. energy, maintenance), demonstration, and monitoring.

Your primary budget should only include eligible costs. Note this means that all costs should not include GST or PST, as taxes are ineligible for CBBIF funding. Ineligible costs may be listed in a separate table if desired. Eligible and ineligible costs can be found in Section 3.4 of the Program Guide.

If you are providing in-kind contributions, your budget should include a separate table listing the specific in-kind contributions towards the project’s total eligible costs (e.g. staff time, physical assets). Values for in-kind contributions that appear to be inflated will be detrimental to the applicant’s scoring. For more information on in-kind contributions, see section 3.6.

## 8. Application Support

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If you have any questions about your application that are not covered in the Program Guide, please contact Program staff:

**CleanBC Building Innovation Fund**

Email: [building.innovation@gov.bc.ca](mailto:building.innovation@gov.bc.ca)

Phone: 778-974-3048

Applicants that submit their full application before December 15 will have the opportunity to receive feedback from Program staff and revise their application prior to the final deadline of 11:59 PM PST on Sunday, January 10, 2021.

***This document was last updated: 2020-11-12.***