



IGNITE PROGRAM GUIDELINES

Last Updated: April 2022

Innovate BC is a Crown Agency of the Province of BC



Program Overview

The Natural Resources and Applied Sciences (NRAS) Endowment was established by the Province of British Columbia to enhance the quality of life for British Columbians by building a strong research and development, advanced training, technology transfer and commercialization environment. The Ignite program was launched in 2016 to fulfill the objectives of the NRAS endowment, through targeted investments to research and commercialization activities in the natural resources, applied sciences and engineering.

Purpose

The Ignite program has been specifically designed to provide funding to advance research and commercialization activities for industry and academic collaborative projects, that are driven by industry needs and will have significant benefits to British Columbia. The program is strongly focused on commercialization outcomes. Funds from Ignite support the advancement of technologies that have a clearly articulated solution to an existing industry problem, are beyond proof of concept but pre-commercial, and demonstrate the capacity to move the proposed innovation to market within 3-years.

Program Objectives

The Ignite program aims to provide academic and industry consortiums or project partnerships with the opportunity to accelerate their innovations towards commercialization, to help solve known industry problems and provide significant economic, environmental, social and/or health benefits to British Columbians.

The specific objectives of the program are to:

- Support market-driven research and development aimed at addressing the core needs of local industry sectors to improve their competitiveness and provide strategic benefits to British Columbia;
- Strengthen strategic academic-industry partnerships that provide opportunities for advanced technology transfer and commercialization;
- Support talent development and training of high-caliber personnel through collaborative research and development work between industry and post-secondary institutions;
- Enhance British Columbia's economic development by supporting the commercialization of new technologies in various sectors.

Award Amount and Duration

Awards are valued to a maximum of \$300,000 (CAD) over a 3-year maximum project duration. Projects must secure matching funds from industry or government sources at a ratio of 2:1 matching dollars to Innovate BC's Ignite dollars (\$1 Ignite funds matched by applicants with \$2 dollars from other sources).



1.0 Competition Deadlines

Ignite Round 12

Deadline to submit application: July 4th, 2022

Deadline for invited applicants to submit full proposal: September 19th, 2022

Anticipated notice of decision: January 2023

Anticipated funding contracts finalized: March 2023

All applications are due to INNOVATE BC by 11:59PM PST on the published deadline listed above.

Innovate BC reserves the right to modify published deadlines as required. The academic partners institution may have a deadline for submitting the application to their organization that is earlier than Innovate BC's deadline. This enables the academic institution to review and approve the application before Innovate BC's deadline.

For program information, contact: programs@innovatebc.ca

2.0 Eligibility Requirements

This program is open to proposals for market-driven, industry and academic collaborative research and development projects, which will result in a commercialized application.

The Ignite Program:

- Supports only the most innovative technologies; those with the potential to meet market demand and to
 achieve the goals of the NRAS Endowment, which is to build research and development, advanced training,
 technology transfer and commercialization capacity in British Columbia.
- Does not identify priority research topics. Proposals must involve collaborative industry and academic
 research and development work, driven by industry needs, in the areas of natural resources, applied
 science and/or engineering and must meet the other program objectives.
- Funds research and development related expenses incurred by the industry and academic collaborators that are required to commercialize an innovation.

2.1 Key Requirements

Applicants must provide evidence that:

- The project will solve a significant demonstrated problem faced by industry; commercial research that solely benefits one company and does not solve broader industry challenges does not qualify.
- They have formed a collaborative arrangement between academic and industrial partners so that the project has the right managerial, business planning, financial, strategic, and technological capacity.
- The project is based on science or technology in the areas of natural resources and applied sciences.



- The innovation is at a <u>Technology Readiness Level of 3 to 4 or higher</u>, as per the scale used by the Build in Canada Innovation Program (BCIP).
- The innovation is new or novel to British Columbia and benefits British Columbia.
- The innovation will be commercialized within 3 years of the start of the project.
- The innovation has long-term economic sustainability (i.e. profitability).
- The innovation is likely to be adopted broadly, having national and/or global market potential.

Innovate BC reserves the right to declare applications ineligible based on the established criteria.

2.2 Eligible Costs

Ignite funds research and development related expenses incurred by the industry and academic collaborators that are required to commercialize an innovation. Examples of eligible costs include, but are not limited to:

- Salaries/stipends for research and development technical personnel;
- Materials, supplies and equipment directly related to the scientific or technical research and development work necessary for advancing the innovation towards commercialization (e.g., prototyping, scale-up, product refinement, validation studies, etc.);
- Necessary activities specifically related to technology transfer and commercialization (e.g., sharing of patenting and licensing fees with university, consulting fees for IP strategy, etc.);
- Travel and accommodation for collaborative purposes;
- Up to 10% of the Ignite funding request for indirect administrative costs (e.g., university overhead).

2.3 Matching Fund Requirements

Matching funds are defined as funds from other sources. Projects must secure matching funds from industry or government sources at a ratio of 2:1 matching dollars to Ignite dollars (\$1 Ignite funds matched by applicants with \$2 dollars from other sources). No more than 50% of matching funds can be from government sources, and a maximum of 50% of matching funds can be in-kind. For example:

- \$300,000 Ignite Funds
- \$75,000 Industry Partners In-Cash, \$75,000 Industry Partners In-Kind
- \$75,000 Academic Partners In-Cash, \$75,000 Academic Partners In-Kind
- \$300,000 Other Government Funding In-Cash
 - = \$300,000 Ignite Match By \$600,000 Other Sources (Including 50% Government, 25% In-Kind)

In-kind contributions must be valued at cost. In-kind contributions need to be considered essential to the success of the project. They could be in the form of cash-equivalent goods, services or personnel time that if not otherwise contributed by the industry or academic partner, the applicants would have to acquire the resources with cash. Innovate BC aligns its guidelines for in-kind cost eligibility with those used by the Natural Sciences and Engineering Research Council (NSERC) for organizations participating in research partnerships. Matching funding does not need to be confirmed at the application stage, but should be committed if short-listed to the full proposal stage so the project appears in good financial standing upon full proposal review.



2.4 Workplan

Project workplans must include both research and commercialization milestones that are clear, specific, and discretely identified. Funded projects must plan to conclude within 3 years or less and demonstrate that they can move the proposed innovation to market within the project timeframe.

2.5 Commercialization Definition

Commercialization of a technology is considered to have occurred when a customer purchases a technology product. Successful commercialization occurs when an identified 'problem' is solved. These problems are identified by industry or the marketplace. Commercialization is the process or cycle of introducing a new product or production method into the market. The technology must get through the prototype phase and be reasonably scalable to be considered to have the potential to be commercial. Therefore, the development part of research and development requires time and money as systems are engineered that will make the product or method a valuable commercial proposition. Having a market that demands the product is critical. Companies that are commercializing need to access these markets to find early adopters who are demanding solutions or tolerant of trying innovative technologies with their inherent risks.

2.6 Location of Project Work

It is expected that the research and development activities will be carried out in British Columbia using British Columbia-based personnel; in limited circumstances, specialized activities that can only be conducted outside of British Columbia or expertise that is available only outside of British Columbia will be accepted. Any specialized activities or resources required that are outside British Columbia must be pre-approved by the review committee.

3.0 Applicant Requirements

To be eligible, applicants must be a British Columbia-based partnership comprised of two or more companies, organizations, and academic researchers. At a minimum, the project partnership must include one British Columbia-based academic partner and one British Columbia-based industry partner as project leads.

A partnership must have the right academic, business planning, financial, and technological expertise to successfully bring their innovations from the research and development phase to market. A key criterion in the assessment of the project is that applicants have the right 'Go-to-Market Expertise'. Ideally this includes representatives of the project's full value chain from researchers to suppliers, to end users.

Although private companies are the most obvious means of exploiting research and development results commercially, other kinds of organizations may also be appropriate partners. Any proposed partner, whether an academic researcher, established company, start-up, or an industry association must have a credible plan for exploiting results for the benefit of British Columbia, and the expertise and resources to accelerate the commercialization of the innovation.

The following are general guidelines that project partners must meet.



3.1 Partnership Requirements

- Partnership may be formal or informal but there must be a clearly defined collaboration between the academic and industry partners before applying.
- Partners are responsible for ensuring IP arrangements are in order and agreed to by all members in advance of applying.
- If the partnership is pre-existing, there must be active involvement in the project from two or more members, at least one British Columbia-based academic and British Columbia-based industry partner.
- The partnership must demonstrate the capacity to guide the project.
- Partnerships can apply for and hold more than one Ignite grant.
- Partners can be members of other partnerships that apply for funding.
- The partnership can include members from outside British Columbia (including multinational and foreign member organizations) provided the majority of the team is from British Columbia, that an eligible British Columbia organization maintains a leading role throughout the project, results will be exploited in British Columbia, and the contributions of non-BC members to meet the program objectives are clearly demonstrated. See also, section 2.6 above on the location of project work.
- A researcher's own consulting company or sole proprietorship is **not** eligible as an industrial partner to collaborate on a project in which the academic researcher is the applicant or co-applicant. See section 3.4 below for more information on researcher-owned companies.
- The partnership acknowledges that the Ignite program funds collaborative research and development projects, not companies directly. All partners agree that the primary academic partner's institution will receive and administer Ignite funds on behalf of the partnership, and subsequently disburse the Ignite finds to the academic and industry partners as per the agreed-upon project budget.
- All partners must contribute to the project (a reasonable and proportionate degree of involvement). Notably the primary academic partner and primary industry partner must both be actively engaged in the project, and not merely contributing to the project in an advisory or consultancy role.
- The partnership will be viewed favorably if it includes industry partners that are end-users, potential customers, channel partners, or capable of market validation.
- Note: With Ignite projects the innovator can be the primary academic partner who is partnering with
 industry to bring their product to market, or the innovator can be the primary industry partner who is
 partnering with academia to bring their product to market, or both parties can be the innovators
 partnering to bring the product to market. See section 3.4 below for more information on researcherowned companies.



3.2 Academic Partner Requirements

- To be eligible as the primary academic partner, you must hold or have a firm offer of a permanent academic appointment at an eligible British Columbia academic institution at the time of application. The appointment can be a full-time faculty position, or a lifetime professor emeritus, adjunct faculty or other permanent part-time position.
- Adjunct professors who meet Ignite eligibility are eligible.
- For university faculty, the position must permit you to engage in research that is not under the direction of another individual, and must authorize you to supervise or co-supervise the research of students registered in an undergraduate or graduate degree program, or postdoctoral fellows (e.g., thesis supervision and not supervision of regular course or laboratory assignments).
- For institute and college faculty, the position must permit you to engage in research-related activities that are not under the direction of another individual.
- You must engage in research in natural resources and/or applied sciences.
- You must actively be conducting research and contributing to the project. Projects where the primary academic partner is serving only in an advisory or consultancy role will not be considered.
- The research being conducted for the project proposal must align with the field of research that the academic partner is responsible for at the academic institution.
- You must not have been barred from applying to NSERC, SSHRC, CIHR, MSFHR or any other research funding organization, for reasons of breach of standards of ethics or integrity (including financial or scientific misconduct).
- If you live abroad or hold a position of any kind outside of British Columbia, you must spend a minimum of six months per year at an eligible British Columbia institution.
- You are not eligible to receive an Ignite grant for leave periods beyond one year from your British Columbia institution, unless you spend a minimum of six months per year at another eligible British Columbia institution.
- Your salary must not be paid out of NSERC, SSHRC, or CIHR grant funds, except for Scientific Directors of Networks of Centres of Excellence (NCE).
- Applicant academic members working under another academic member cannot be paid a salary or consulting fee from the Ignite funds if their status makes them eligible to apply for funding independently. Additionally, Ignite funds cannot be used to pay the salary of the primary academic partner.



3.3 Industry Partner Requirements

- There can be multiple industry partners involved in the project. The primary industry partner must be actively contributing to the project. Projects where the primary industry partner is serving only in an advisory or consultancy role will not be considered.
- In general, an industry partner is defined as a British Columbia-based business providing products or services that derives the majority of its revenues from the sale of these products and services and not from government aid.
- Multinationals may be eligible if they have commercial activities that take place in British Columbia, such as research and development or manufacturing related to the proposed project.
- Foreign firms may be eligible as a partner, provided an eligible British Columbia-based private sector partner plays a major role in the project and will exploit the results to benefit British Columbia.
- Start-up companies (companies in the research and development phase) that have sound business plans
 and secure financial backing may be accepted as industry partners. However, they must demonstrate that
 they have the financial, managerial, and strategic business capability to exploit the results. If a start-up
 company is serving as the primary industry partner, it is highly recommended that an additional industrial
 partner that is either an end user, first customer, channel partner or capable of market validation also be
 included in the partnership.

3.4 Researcher-Owned Companies

A researcher's own consulting company or sole proprietorship is not eligible as an industrial partner to collaborate on a project in which the researcher is the primary applicant or a co-applicant. Situations where the researcher is a part owner must be able to provide evidence that they are at arm's length and that there will be an objective assessment of the project's progress. The company is usually considered eligible if the following conditions are met:

- There is significant investment by sophisticated investors, indicating that there has been an objective assessment of the commercial potential of the innovation and the company's viability.
- The company has its own facilities, physically separated from the post-secondary institution researcher's laboratory (e.g., located off campus or in a post-secondary institution incubator facility).
- The company employs its own professional staff, apart from the post-secondary institution personnel; this staff can receive and incorporate the results of the post-secondary institution research into company operations.
- The company is under the effective day-to-day management control of someone other than the postsecondary institution researcher.
- The company has a board of directors with external members (e.g., some of those members, including the Chair of the Board, are at arm's length).
- The commercial activity conforms to the post-secondary institution's established policies relating to the disclosure of commercial interest and conflict of interest.
- The post-secondary institution is prepared to ensure that the academic interests of students and postdoctoral fellows are protected.



4.0 How to Apply

The application process for the Ignite program competition is composed of two mandatory stages:

- 1. Submission of application
- 2. Submission of a full proposal (by invitation only)

4.1 Application

Applications must be submitted to Innovate BC by the deadline outlined in Section 1.0. The application will be submitted through the Innovate BC Smart Simple application platform, as follows:

- 1. See Smart Simple application instructions here.
- 2. The application cannot include appendices or attachments. Links to additional, supporting information can be included for the reviewer's consideration, but should not replace information or answers explicitly requested in the application.
- 3. The application must be signed and acknowledged by the primary academic partner and the primary industry partner as listed on the application. Where required by the university, signatures from the appropriate authority at the academic institution must also be obtained.
- 4. An email acknowledgement will be sent once the application is submitted. If you do not receive a confirmation email, please contact Innovate BC to verify that your application has been received.
- 5. It is anticipated that approximately 30-40% of applicants will be invited to submit a full proposal.

Backup documentation is highly recommended, as Innovate BC is not responsible for any materials/documentation lost during the digital application process.

4.2 Full Proposal

Full proposals are invite-only, based on an evaluation of the application. Full proposals must be submitted by the deadline outlined in Section 1.0. The number of Ignite awards available is dependent on several factors, including the total funds available for the program and the award value for each successful award recipient. Innovate BC anticipates approximately 7 projects will be funded per year.

Full Proposal Elements

Once invited to submit a full proposal by Innovate BC, applicants will complete and submit the full proposal form through the Innovate BC Smart Simple application platform. The proposal asks applicants to include several elements including a research and development plan, information about the partners, detailed budget, and a robust market and commercialization plan. Applicants must ensure that they include all information relevant to the evaluation of the project including, but not limited to, items such as:

- Technical description of the technology (product and/or service);
- Industry competition;
- Industry analysis including potential customers;
- Market application;
- Business model and commercialization strategy;



- Potential challenges and risks;
- Research and commercialization timeline and milestones:
- Detailed budget and supporting documentation; and,
- Letters of support.

The full proposal requires a letter of support from a leader in industry, another user community, or an expert in commercialization. The leader could be an individual from within or outside the province with the expertise to comment on the potential of the team and the proposed project to provide significant benefits to British Columbia. If necessary, the letter may be written by a member of the partnership if, for example, the partner is a potential first customer.

Though only one letter of support is required, proposals can include a maximum of three additional letters that comment on the potential of the partnership and the proposed project to provide significant benefit to British Columbia. The letter(s) should be addressed to: Ignite Review Panel c/o Innovate BC.

Signatures

The full proposal requires the authorized signatures of the primary academic partner, primary industry partner, coapplicants and institutional authorities including department heads, Vice President of Research and where the institution requires it, the Dean of the Faculty.

5.0 Evaluation Process

5.1 Application Evaluation

- Review by Innovate BC for completeness of required information and eligibility
- Evaluation by volunteer review panel for consideration

Each application must include all qualifying criteria. Applications will be reviewed for completeness, eligibility, and relevance to program objectives. Failure to provide an application containing all required information by the deadline may result in disqualification of the submission. Applications are evaluated by a review panel that makes recommendations on which applicants will be invited to submit a full proposal.

Applications will be evaluated on the following criteria:

- Project Innovation demonstrates the project is innovative, revolutionary and/or a significant leap forward compared to the present state of art, and there is a justified need for requested funding.
- Industry Problem includes solving a significant and demonstrated problem faced by industry as well as clear benefits to British Columbia.
- Research and Development Plan includes clear and focused research and development objectives, with a
 feasible plan for the project timeframe.



- Market Potential includes information showcasing a demonstrated market for the innovation and a likelihood of it being adopted broadly by industry, such as the market segment and customer needs, competitive analysis, and identifies whether a first customer has been engaged or secured.
- Commercialization Plan includes information showcasing a strong potential to be commercialized, and a feasible commercialization plan for the project timeframe.
- Partner Expertise/Role includes information showcasing the project partners have the expertise and capacity to execute on the innovation, along with a clear outline of roles and demonstrated alignment of goals across the partnership; demonstrates that both the academic and industry partners have the right research, technical, engineering, market, financial, managerial, business, and legal expertise.
- Matching Funding includes whether the necessary matching funds have been attracted and the project budget aligns and is reasonable for the proposed research and development activities.

5.2. Full Proposal Evaluation

- Review by Innovate BC for completeness of required information and eligibility
- Evaluation by subject matter experts
- Evaluation by volunteer review panel for consideration
- Recommendation for funding by review panel

External reviewers and the selection panel evaluate all applications using criteria similar in nature to those at the application stage. More robust plans and additional details, including a detailed commercialization strategy and project activity schedule, are expected in the full proposal. Applicants that are invited to full proposal will receive instructions on how to best apply and the evaluation criteria.

5.3 Review Committee

Members of the Ignite Review Panel consist of individuals with either academic, industry, business and/or government expertise relevant to the fields of natural resources and applied sciences. They may include professional researchers/academics, government, end-users of research and/or industry sector experts.

Full proposals are reviewed by subject matter experts with deep expertise in a particular area, usually relevant to the business aspect of a proposal. Technical assessment services are then provided by the National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP). These experts are asked to give their opinion on the project as it relates to their expertise. The Review Panel utilizes these technical assessments to inform their recommendations for funding.

All reviewers and technical assessors are obligated to follow the confidentiality and conflict-of-interest rules of Innovate BC.

5.4 Decision Process

The Ignite Review Panel will consider the recommendation from the subject matter experts and base their decision on the strategic goals of the Ignite Program and the level of funding available. In some cases, projects may be



approved with conditions. In those instances, awardees are free to accept the conditions or decline the award. Recommendations to approve an application or full proposal by the Ignite Review Panel are final.

6.0 Award Terms and Conditions

The following list is not exhaustive, but provides several key terms and conditions:

6.1 Award Contracts

- The Ignite program funds research and development expenses incurred by the industry and academic collaborators to commercialize an innovation. The program does not fund companies directly. All partners agree that the primary academic partner's institution will receive and administer Ignite funds on behalf of the project, and subsequently disburse the Ignite finds to the academic and industry partners as per the agreed-upon project budget.
- Successful applicants will receive an agreement outlining the terms and conditions of the Ignite award including details on reporting, milestones, and disbursements. The academic institution and primary academic partner will sign and return the agreement to Innovate BC within 30 days of receipt.

6.2 Disbursements

- Awardees are eligible to receive up to their maximum award amount, but every dollar disbursed will be on a 2:1 match.
- Awards are disbursed in installments, based on pre-determined milestones and annual progress reports. There is a 10% holdback on the last installment, which is triggered by submission of an approved final annual report.

6.3 Budget

- None of the awardee's income during the tenure of the project may be derived from another Innovate BC program or Innovate BC managed program.
- Applicants must identify awards and grants from all other organizations in their proposal. If awarded funding through Ignite, the awardee must notify Innovate BC of any new awards and grants, changes to existing awards and grants, or changes to the submitted and approved budget during the project.
- Only those expenses that are submitted in the proposal and approved by Innovate BC will be eligible and included in the funding agreement.

6.4 Reporting

- Awardees must submit annual progress reports outlining the progress of their project.
- As part of Innovate BC's ongoing impact assessment activities, brief survey questionnaires may be sent to Awardees from time to time.
- Any significant project variance must be approved by Innovate BC in advance of making those changes.

6.5 Publicity

• Awardees must agree to allow Innovate BC to publicize the project for marketing and promotion purposes. Innovate BC will not publicize information that will compromise the commercialization process or the business.



6.6 Ethical, Legal and Safety Approvals

• Projects must adhere to the established legal practices of the Province of British Columbia. Innovate BC reserves the right to determine if projects are within the legal guidelines. Failure to do so may result in the termination of the award.

6.7 Intellectual Property (IP)

- Applicants must identify any IP agreements in place for their innovation at the time of application.
- Applicants are responsible for ensuring that IP agreements are in order and agreed to by all partners.
- IP agreements held by the awardees must allow for results and reports to be released to Innovate BC on a confidential basis in accordance with the *Province of British Columbia's Freedom of Information and Protection of Privacy Act* in order to assess the progress of the project. Personal and commercially sensitive information is protected. Please visit the following website for more information: http://www.qp.gov.bc.ca/statreg/stat/f/96165 01.htm

6.8 Collection and Use of Personal Information

- All documents submitted to Innovate BC become the property of the Innovate BC and are subject to the *Province of British Columbia's Freedom of Information and Protection of Privacy Act*. Personal and commercially sensitive information is protected. Please visit the following website for more information: https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/96165 00
- Applicants are solely responsible for familiarizing themselves, and ensuring that they comply, with the laws applicable to the collection and dissemination of information, including resume details and other personal information concerning applicants and co-applicants submitted to Innovate BC. Applicants will ensure that they obtain consent from all partners before submitting information to Innovate BC.

6.9 General

- Awards are based on the information provided by the awardee during the full proposal stage. If there are any substantive changes to the awardee partnership or project, Innovate BC must be notified immediately and proposed changes to the proposal must be submitted in writing and approved by Innovate BC in order to proceed with funding. Failure to do so may result in termination and possible repayment of the award.
- Some funded projects may be selected for inspection and/or auditing each year.

If you have questions about how FOI pertains to the Ignite program, please contact Innovate BC for clarification.