

Project Development Automation Accelerator Georgian College 25th March 2021

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Agenda

8:30 – 8:35 - Welcome and Introduction to NGen

8:35 – 8:45 - Recap of Feasibility Studies and Pilot Projects

- Funding Scope overview
- Review of new guidance for Applicants

8:45 - Handover to Sukhvinder

Canada is an Advanced Manufacturing Nation

- NGen is the industry-led, not-for-profit organization that connects Canada's strengths.
 - Manufacturers
 - Technology providers
 - Government organizations
 - Research organizations
 - Academia



Canada is an Advanced Manufacturing Nation

Our Mission is to build world leading advanced manufacturing capabilities in Canada.

NGen measures success by the benefits it delivers to Canadians.

NGen aims to:

- Develop world-leading technological capabilities in advanced manufacturing
- Increase industry investment in innovation
- Enhance value creation and economic growth
- Connect & actively engage members of Canada's advanced manufacturing ecosystem
- Contribute to the development of a skilled advanced manufacturing workforce; and
- Improve the social well-being of Canadians

Funding Plus AMPUP Program

Under AMPUP (Accelerating Manufacturing Performance Upskilling Program), NGen will cover 50% of the cost of training for Canadian manufacturers to enroll their employees in selected skills development and certification programs offered by established trainers.

NGen's goal is to add at least \$13.5 billion and 13,500 new jobs to Canada's economy by 2030

Expected Outcomes:

New domestic and international sales

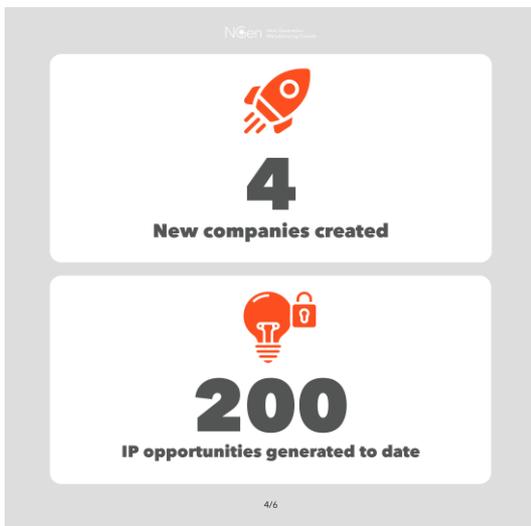
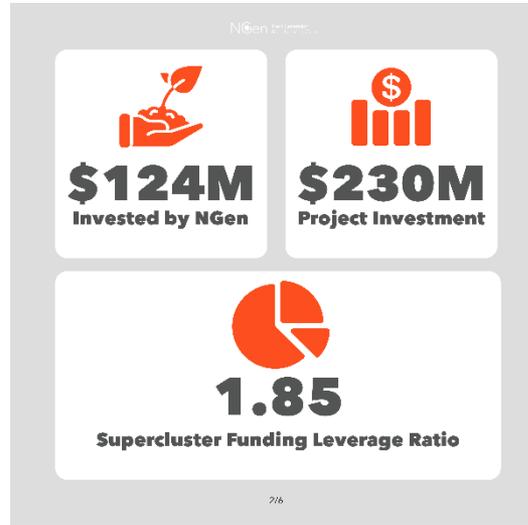
Jobs created

Companies created

New products, processes, and services

Intellectual property created

2019-2020 Year in Review



Funding Streams

Ngen: SME Funding Streams from \$50K - \$500K

Feasibility Studies

Partnership of 2 or more SME's working to prove or demonstrate the technical or economic feasibility of an advanced manufacturing opportunity

Funding at 50%

Total project size between \$50 to \$200k

400 words per question

Pilot Projects

Partnership of 2 SME's working on a smaller scale advanced manufacturing project.

Funding at 50%

Total project size between \$100 to \$500k

600 words per question

Ngen: Funding Streams Cluster Building and major projects

Cluster Building	Major Projects Single stage	Major Projects Dual Stage
Group of SMEs with geographical, industry or technical interests, collaborating to forming a mini-cluster to address shared challenges and opportunities for business growth	Partnership of at least 2 organizations with an advanced manufacturing project. Project must include 1 SME.	Partnership of at least 3 or with an advanced manufacturing project. Project must include 1 SME.
Funding at 50%	Funding at 44.4%	Funding at 44.4%
Total project size up to \$150k	Total project size between \$500k to \$8m	Total project size between \$8m to \$20m+
400 words per question	900 words per question	Stage 1 - 900 words per question Stage 2 – 2500 words per question

Project Scope

It's all about... Making Canada a global leader

Transformative

Involving the development of Advanced Manufacturing capabilities with the potential to confer a significant global competitive advantage to Canadian industry.

Digital Technologies

High fidelity modeling, simulation and analysis, machine learning and AI for manufacturing processes, blockchain, innovative new sensing techniques, advanced vision systems, cyber secure systems

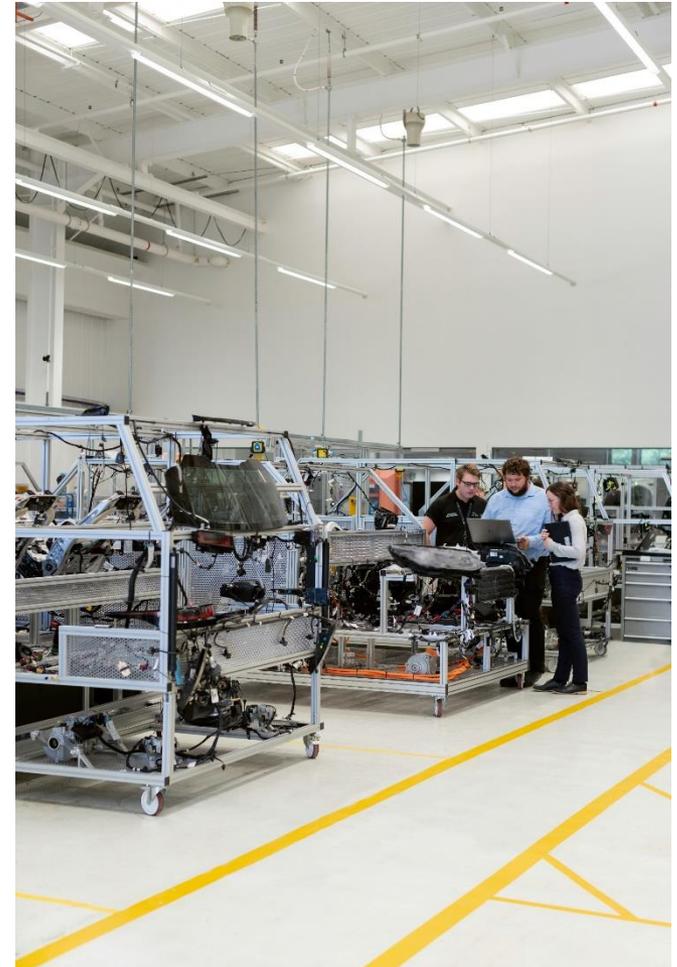
Advanced Robotics

Autonomous robotics, proximity to or collaboration with humans, improved manipulation, manufacturing flexibility or precision

New Industrial Platform Technologies

Data Engineering and Analytics, development of 3D printing technologies, the creation of new groundbreaking processes

It's the Cutting Edge

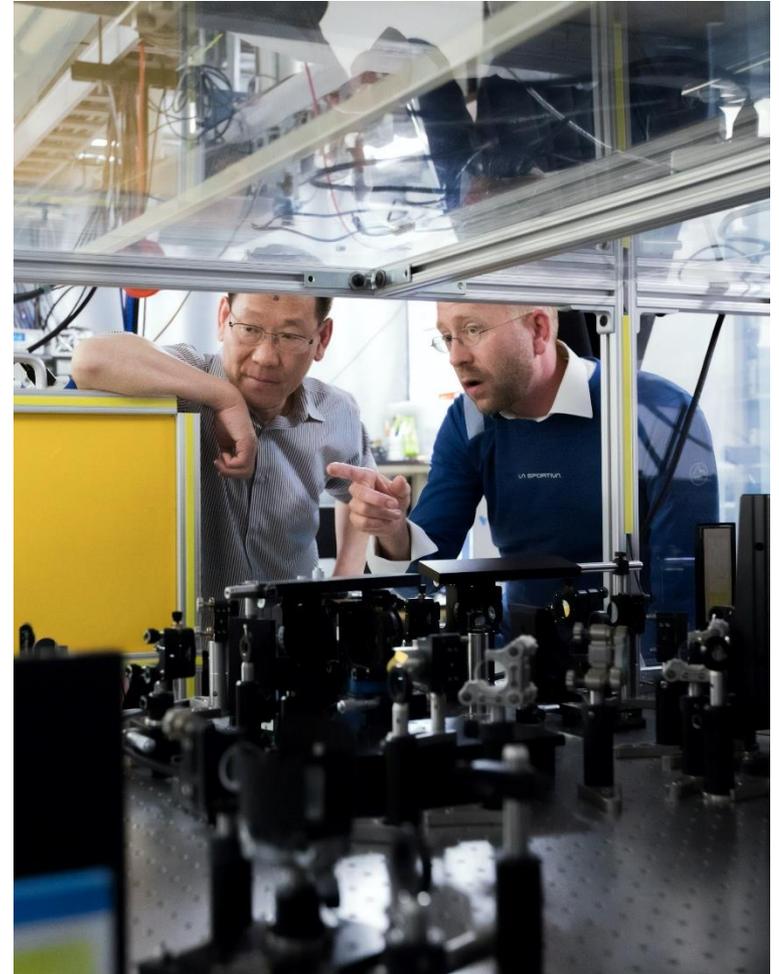


It's all about... Making Canada a global leader

Collaborative

Developing industry relationships including building trust and sharing in knowledge, risk, investment and the resulting benefits.

Projects for Feasibility Studies and Pilot Projects are targeting small and medium-sized enterprises (SMEs) and are encouraged to consider the inclusion of large organizations, academic and research organizations as subcontractors or using other funding sources.



It's all about... Making Canada a global leader

Enduring

Leaving a legacy in skills development, tools, testbeds, intellectual property, business knowledge for Canada's advanced manufacturing ecosystem beyond the partners and timeline of the project.

Applied

Focus on Solutions. Supporting later stage technology and manufacturing readiness with potential to generate significant long-term commercial and economic benefits, including jobs maintained and created.



Project Requirements Pilot projects and Feasibility studies

Projects Requirements – Feasibility studies & Pilot projects

- All projects must demonstrate the development or application of an **Advanced Manufacturing** Technology or Process.
- Projects must demonstrate that they are **Collaborative, Transformative, Enduring and Applied**.
- Projects must have the **potential** to **deliver significant commercial benefits and jobs** within the consortium and beyond.

Projects Requirements – Feasibility studies & Pilot projects

- Who can apply?
 - Any **Small or Medium sized company** (SME; defined as a company with fewer than 500 full-time employees globally)
 - Need to be a member of the Advanced Manufacturing Supercluster.
 - Companies must be **incorporated in Canada**.
 - Eligible organizations:
 - **for-profit organizations**;
 - not-for-profit organizations that facilitate and fund research and development and whose funding is received primarily from private-sector organizations;
 - non-federal Crown corporations whose funding is derived from commercial activities.

Projects Requirements – Feasibility studies & Pilot projects

- International organizations may participate as partners, but any project activities undertaken by these organizations will not be eligible for funding.
- Publicly funded not-for-profit organizations, post-secondary institutions, federal, Crown corporations, and government departments or agencies are not eligible to receive Supercluster funding directly, although they may bring their own contributions to projects or be sub-contracted by funded recipients to carry out project activities.
- Project partners cannot also be a funded sub-contractor or consultant within the project.
- Participating companies will be required to pay a one-time, non-refundable project administration fee to NGen equal to 2.5% of the total cost of the project at the time of project launch. This fee can be paid by one partner or divided between partners.

Projects out of Scope

- Those related to experimental or theoretical work without any direct commercial application or use.
- Projects that develop products that are **not used for Advanced Manufacturing**
 - A small amount of product development is allowed within a project as long as it contributes towards the achievement of the advanced manufacturing goals.
 - No more than 5% of the funding allocation can be related to product development
- Production activities themselves or activities that **subsidize full scale production**
- Activities where **benefits accrue to a single firm** or organization
- Activities that could be viewed as **anti-competitive**
- Capital investment for production or for purposes not related to the research being conducted
- Projects that would be undertaken at the same scale or scope and within the same timeframe without Supercluster funding
- Any routine or periodic changes made to existing products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements

Project Requirements

Feasibility studies - only

Projects Requirements – Feasibility Studies

- The total cost of projects must be between \$50K and \$200K.
- NGen will reimburse up to 50% of eligible costs; up to \$100K of NGen funding.
- Projects should be completed within 9 months of initiation.

Projects Requirements – Feasibility Studies

- All projects need to **demonstrate meaningful collaboration** with at least 1 **SME and a partner organization**.
 - Partner organizations can be any size of company, a Not-for-profit, an academic or research institution.
 - **Only SMEs companies and eligible Not-for Profits** are eligible to directly **receive NGen reimbursement**.
 - To be considered a partner, **collaborating companies** must be providing **some level of cash or in-kind investment** into the project, in-kind contributions from any partner are not eligible for reimbursement.

Projects Requirements – Feasibility Studies

- The total amount of **sub-contracting** eligible for funding under an NGen Feasibility Study is **capped at 70%** of total project costs. Only expenses incurred to Canadian subcontractors are reimbursable by NGen.
- The **financial structure** of the project needs to **demonstrate meaningful collaboration**.
 - A **single SME can** receive a full reimbursement of the funding.
 - A partner organization must be providing a meaningful contribution to the project of cash or in-kind that is more than 30% of the total project cost.

Example Project Structures - Feasibility Studies Only

Example 1 – Simple Collaboration

Project Financials

Company	Cash Contribution (\$)	Contribution In-Kind (\$)	Funding Sought From Ngen (\$)	Funding From Other Programs (\$)	Total Project Cost by Partner (\$)
SME 1	\$70,000		\$70,000		\$140,000
SME 2	\$30,000		\$30,000		\$60,000
Total Project Cost	\$100,000	0	\$100,000	0	\$200,000
Cost Ratios	50%	0	50%	0	

Total project cost - \$200k

- Lead applicant - \$140k
- Partner - \$60k

Reimbursed costs at 50% of **Total eligible project costs**

- Lead receives \$70k (70%)
- Partner receives \$30k (30%)

Admin fee 2.5% on \$200k

Example Project Structures

Example 2 – Collaboration with an Unfunded Partner and in excess of \$200K

Project Financials By Partner

Project Financials

Company	Cash Contribution (\$)	Contribution In-Kind (\$)	Funding Sought From Ngen (\$)	Funding From Other Programs (\$)	Total Project Cost by Partner (\$)
SME	\$87,500		\$87,500		\$175,000
MNE		\$75,000			\$75,000
Total Project Cost	\$87,500	\$75,000	\$87,500	0	\$250,000
Cost Ratios	35%	30%	35%	0	

Total project cost - \$250k

- Total Eligible - Lead applicant \$175k (70%)
- Partner (MNE or Academic or NRC) organization \$75k in-kind (30%)

Reimbursed costs at 50% of Total eligible project costs

- Lead receives \$87.5k (100%)
- Partner receives \$0k (0%) Admin fee 2.5% on \$250k

A partner organization must be providing a meaningful contribution to the project of cash or in-kind that is more than 30% of the total project cost.

Project Requirements

Pilot Projects - only

Projects Requirements – Pilot Projects

- The total cost of projects must be between \$100K and \$500K.
- NGen will reimburse up to 50% of eligible costs; up to \$250K of NGen funding.
- Projects are expected to be completed within 9 – 12 months of initiation.

Projects Requirements – Pilot Projects

- All projects need to **demonstrate meaningful collaboration** with at least **2 SME's**.
 - Other Partner organizations are encouraged to be part of the collaboration as subcontractors and can be any size of company, a Not-for-profit, an academic or research institution.
- **Only SMEs companies and eligible Not-for Profits** are eligible to directly **receive NGen reimbursement**.
- To be considered a partner, **collaborating companies** must be providing **some level of cash or in-kind investment** into the project, in-kind contributions from any partner are not eligible for reimbursement.

Projects Requirements – Pilot Projects

- The total amount of **sub-contracting** eligible for funding under an NGen Pilot Projects is **capped at 30%** of total project costs. Only expenses incurred to Canadian subcontractors are reimbursable by NGen.
 - Where **partnering ineligible organizations** are being subcontracted such as Universities, Research Organizations, eligible Not-For-Profits then a deviation to this cap can be sought from NGen.
- The **financial structure** of the project needs to **demonstrate meaningful collaboration**.
 - A single SME can not receive in excess of 70% of NGen funding.
 - In exceptional circumstances a slight deviation above 70% can be sought and requires a strong rationale and written pre-approval from NGen.

Unsure if you are in Scope?

Still unsure if you are in scope e-mail: project@ngen.ca

New Project Guidance

Project Guide V1 vs V2

1. What is the opportunity the project addresses?
 2. What is the overall project and risk management plan?
 3. What is transformative about the project?
 4. What is the nature and size of the potential market the project will address?
 5. What sort of economic benefits is the project expected to deliver to those inside and outside the consortium, and over what timescale?
 6. What are the **broader ecosystem, social,** and **environmental** benefits of the project. Including the extent of collaboration with SMEs, academic, and other research organizations?
 7. How will the results of the project be **exploited**?
 8. Does the project team have adequate skills and experience, resources, and access to facilities to deliver the identified benefits?
1. What is the opportunity the project addresses?
 2. What is the overall project and risk management plan?
 3. What is transformative about the project?
 4. What is the nature and size of the potential market the project will address?
 5. What sort of economic benefits is the project expected to deliver to those inside and outside the consortium, and over what timescale?
 6. What is the impact on the **broader advanced manufacturing ecosystem**?
 7. How does NGen add value, and what additional benefits will be achieved?
 8. How will the results of the project be **commercialized**?

9. How does NGen add value to your project?

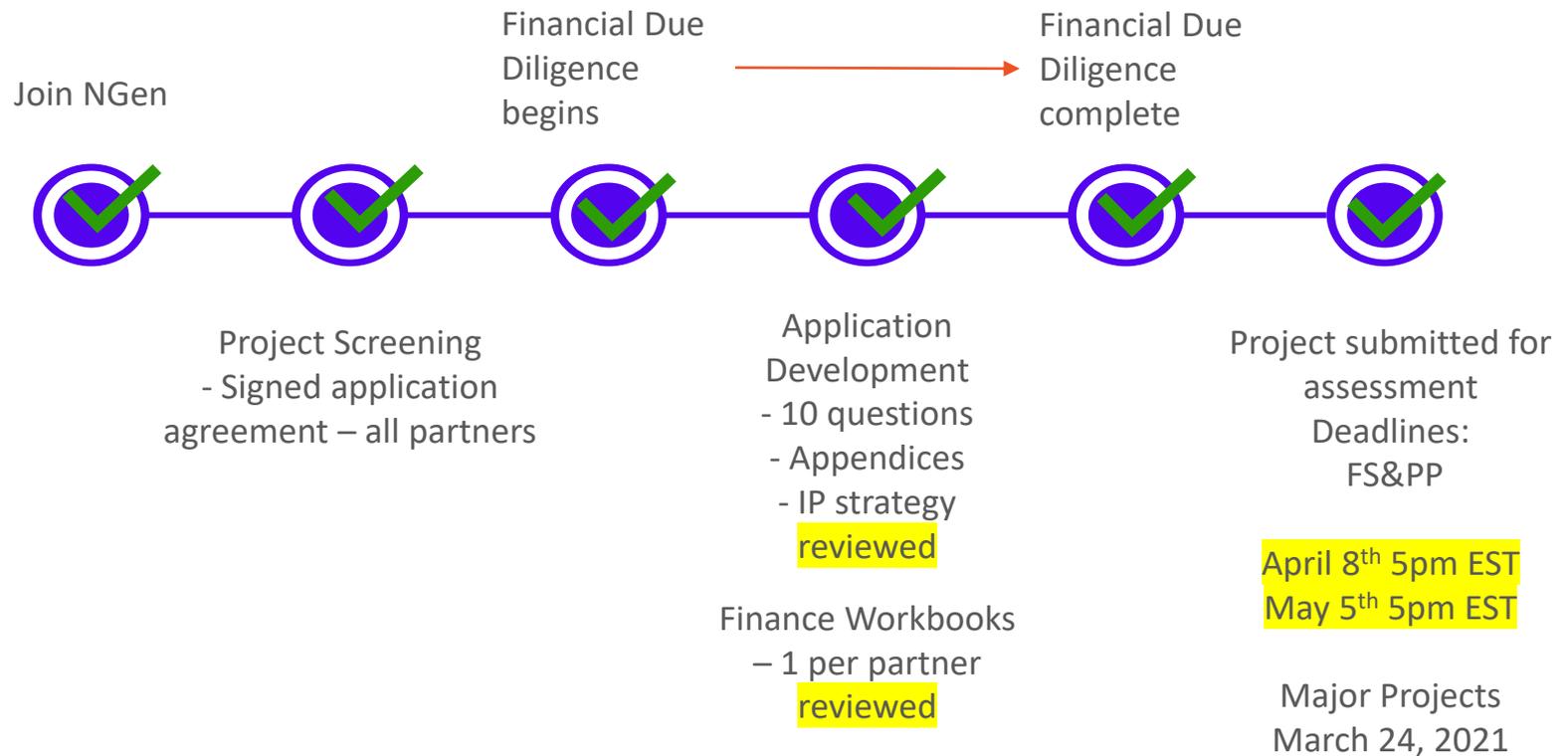
10. What is the financial commitment required for the project?

9. Describe the collaboration and the partner skills, experience, resources, and access to facilities to deliver the identified benefits?

10. What is the financial commitment required for the project?

Application process

Project Application Process



Independent Assessment

- 3-5 expert assessors separately, anonymously and independently score projects before the assessment panel meets to discuss the highest scoring proposals.
- Assessors are screened for conflict of interest, are under NDA and do not represent a particular organization.
- Assessors conduct an evaluation in three parts:
 1. Scope Gateway – Is the project in scope for NGen Funding?
 2. Overall recommendation Gateway – based on the information presented, would you recommend the project for funding?
 3. Assess and score 10 Evaluation questions - 10 marks per question application; scored out of 100 marks.
- The assessment will only be based on the information contained within the application.
- Word count limits will be monitored
- Links to websites are not permitted within the applications. If the information is important, it should be incorporated into the application and with an appropriate source reference.

Join NGen

<https://www.ngen.ca/join>

← → ↻ ngen.ca/join 🔍 ☆

SEARCH Member Login

NGen Next Generation Manufacturing Canada About COVID-19 Projects Members News Resource Centre **Become a Member** FR

Join the Supercluster.

Organization

- Companies in advanced manufacturing
- Government agencies
- Educational institutions
- Industry groups

Become a Member

Individual

- Researchers and industry experts seeking opportunities in advanced manufacturing.

Become a Member

Become a member of the NGen database to participate in Supercluster projects, find partners and customers, and access NGen services. **Membership is free.**

Next Generation Manufacturing Canada

Upcoming Dates

Assessment Deadline (5pm EST) – Feasibility Studies/Pilot Projects April 8, 2021

Also includes Cluster Building

Q&A Workshop for Feasibility Studies/Pilot Projects – April 14, 2021

Assessment Deadline (5pm EST) – Feasibility Studies/Pilot Projects May 5, 2021

Also includes Cluster Building

The background image shows a car manufacturing plant. In the center, a white car chassis is suspended on a conveyor belt. To the left and right, there are orange robotic arms. The entire scene is overlaid with a semi-transparent orange filter. The text "Thank You!" is centered in the upper half of the image.

Thank You!

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| project@ngen.ca

IN CLOSING

Backup Slides

Application steps from Joining to accessing the Hockeystick portal

Project page

Go to the project page on the member site once logged in Super Cluster Projects

Click Project Applications

NGen
Next Generation Manufacturing Canada

COVID-19 Supercluster Search **Supercluster Projects** Got an idea?

Supercluster Projects

Pilot Projects \$100K - \$500K
You are a two or more SMEs with a great NGen project idea, but you don't yet have the data, resources, or partners to prepare a project proposal.

Project Guides **Project Applications**

Feasibility Study \$50K - \$200K
You are an SME with an advanced technology that you have prototyped and need to develop a production version or scale-up to full rate production.

Project Guides **Project Applications**

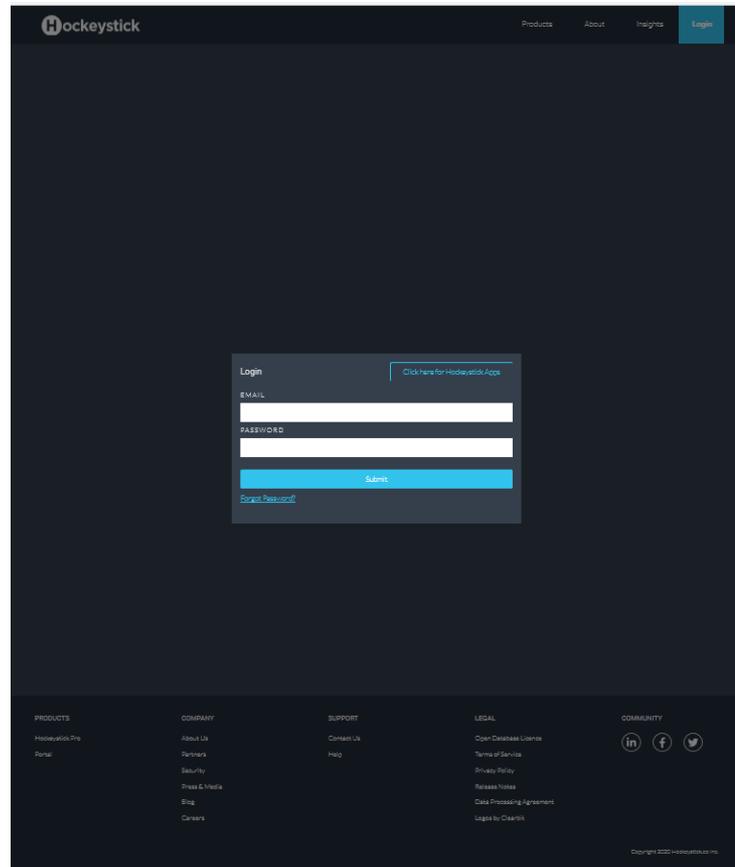
Note:

- This is not the NGen public site, this is the member site.
- Only Organizational members can access the Applications. Individual Members cannot.
- You will be redirected to a Hockeystick site. Hockeystick is the host of the NGen application portal.

Next Generation Manufacturing Canada

HockeyStick application portal

Please login with the NGen member login username and password



Next Generation Manufacturing Canada

Complete the Screening Application Details

Project title, projected start date, project duration (can be estimates), applicant and partner details etc.

Client Profile / Add new client

Application Details

Project Disclaimer: NGen will make every reasonable effort to maintain your information as confidential, however please be advised that any information you share with NGen through the application screening may be shared with the Ministry of Innovation, Science, and Economic Development and other provincial and federal government funding institutions. By submitting information to NGen you accept this.

Project Details

* Project Title
* Project Start Date
* Total Project Cost
* Primary Project Location
* Project Duration (in months)
Project Number

Public Project Description

* Brief summary of the purpose and objective of your project. Read the Application Guide for more information.

* Is this a greenfield project (creates new IP and does not leverage existing IP)?
 Yes No

* Would this project be first of its kind in Canada?
 Yes No

NGen Investment Value

* Would you undertake this project without NGen investment?
 Yes No

Project Lead Details

Eligibility Rules Confirmation

* Applicants for COVID-19 Response funding must meet all of the following criteria: All project participants have signed up for NGen membership. All project partners have read the eligibility checklist on the NGen members site. All project partners have read the project requirements on the NGen members site.

Confirm

Lead Company Details

* Legal name: CRA Business Number:
Registered Business Address: Years Incorporated in Canada:
Major Sectors: Website:
Employees:

Project Contact Details

* Project Contact First Name * Project Contact Last Name
* Project Contact Email
* Project Contact Title

Finance Contact Details

* Finance Contact First Name
* Finance Contact Email

Collaboration Partner Details (if applicable)

Project Partners in Addition to Lead Applicant

Legal Name	CRA Business Number	Registered Business Address	Financial Contact Name	Financial Contact Email	Financial Contact Phone
<input type="button" value="Add Organization Partner"/>					

Individuals

Member Name	Member Address
<input type="text"/>	<input type="text"/>
<input type="button" value="Delete"/>	

Note:
You can save the application at any time, as a Draft and go back to complete it at a later time.