



Project Application Guide
AI for Manufacturing (AI4M) Call for Projects

CONTENTS

NGen Overview

What is the AI4M Funding Challenge?

The Challenge Goals

Project Areas

Project Requirements

Who is Eligible to Apply?

Basic Eligibility Requirements

Applying for project funding

Application Guidance

Documents required for assessment

Upon Agreement

Templates guides and reference documents

NGen Overview

Next Generation Manufacturing Canada (NGen) is an industry-focused, not-for-profit corporation dedicated to building world-leading advanced manufacturing capabilities in Canada. NGen leads Canada's Global Innovation Cluster for Advanced Manufacturing. NGen aims to:

- Connect and strengthen the collaboration among manufacturers and technology companies to accelerate the development and scale-up of transformative capabilities in Canadian manufacturing,
- Strengthen the competitiveness of Canada's manufacturing sector,
- Drive innovation and investment in advanced manufacturing technologies in Canada,
- Generate new commercial opportunities for Canadian companies in global markets,
- Grow world-leading Canadian enterprises, and
- Develop a modern inclusive workforce with the skills to excel in advanced manufacturing.

What is the Artificial Intelligence for Manufacturing Challenge?

Overview

Canadian manufacturing and technology sectors have an opportunity to capitalize on the power of Artificial Intelligence (AI) to improve the design, processes, and supply chains to make Canadian manufacturing more efficient and cutting-edge. Canadian manufacturers can realize real-time, bottom-line benefits by widespread innovation through Artificial Intelligence applications.

With the advances in computing power, storage, communication technology, data analytic tools, and the knowledge base, AI solutions have become financially attractive solutions for many manufacturing processing challenges. At the same time, manufacturers are moving towards reshoring production and facing increasing customer expectations for product cost, quality, flexibility, and transparency in production. AI tools and models have the capability to transform industries by addressing these problems in many ways. They also offer manufacturers opportunities to develop new sources of revenue from data-driven analytics services.

The Challenge Goals:

NGen's AI4M program is funded through the Government of Canada's Pan Canadian Artificial Intelligence Strategy (PCAIS).

In this challenge, NGen will invest up to \$13M to build advanced manufacturing capability in Canada by integrating AI and ML innovation in our manufacturing sectors.

NGen is looking to invest in projects that:

- Are focussed on the commercialization of AI solutions, are business-led and collaborative. The projects should promote the introduction, development, and scale-up of solutions involving Artificial Intelligence as well as the activities required by manufacturers for successful implementation.

- Aim to enhance the efficiency, agility, and competitiveness of Canadian manufacturers, thus enabling the development of new commercial opportunities for AI solution providers and manufacturers alike.

Project Areas

The AI4M call for projects will support AI-enabled advanced manufacturing technology development and commercialization in areas such as:

- Systems optimization within manufacturing facilities or across supply chains.
- The development of new advanced manufacturing solutions. Eg autonomous vehicles, robotics, and automation equipment.
- Rapid prototyping and testing of materials, products, and processes.

If in doubt about the project scope and eligibility of a project idea, the NGen project team is available to provide support throughout the application process at ai@ngen.ca

Project Requirements

The projects must be transformative, applied, enduring, and collaborative and meet the scope criteria below:

- **Transformative** – should have world-class impact on manufacturing performance and have the potential to confer a significant global competitive advantage to the Canadian industry.
- **Applied** – should have significant potential for widespread commercialization with a short to medium term path to commercialization.
- **Enduring** – should provide broader benefits to Canada's advanced manufacturing ecosystem by helping promote Canadian AI capabilities in manufacturing, sharing industry knowledge, providing general education, training, and EDI opportunities, and/or enabling access to applied research, testing, and demonstration capabilities.
- **Collaborative** – should demonstrate meaningful collaboration between partners, developing industry relationships, building trust and sharing in knowledge, risk, investment and the resulting benefits. Projects should involve the participation of multiple industry partners, especially small and medium-sized enterprises (SMEs). Involvement of academic institutions would also be an asset.

Who is Eligible to Apply?

Any NGen member company may apply for project funding or apply to be considered as a partner or co-investor in Global Innovation Cluster projects. It is free to become a member, please register at: www.ngen.ca/join

Recipients of NGen funding must be a business registered in Canada and have a value-added presence in Canada, beyond a sales office.

Funding recipients must be:

- for-profit organizations,
- not-for-profit organizations that facilitate and fund research and development on behalf of the ecosystem and whose funding and/or revenue is received primarily from private-sector or industry organizations,
- non-federal Crown corporations whose funding is from commercial activities,
- indigenous organizations.

Other publicly funded not-for-profit organizations, post-secondary institutions, federal Crown Corporations, and government departments or agencies are not eligible to receive NGen funding directly, although they may bring their contributions to projects or be subcontracted by funded recipients to carry out project activities.

International organizations (offshore companies and research organizations without a registered business presence in Canada) may also participate in NGen projects, but any project activity undertaken by these organizations will not be eligible for NGen funding.

Involvement of the National Research Council of Canada (NRC):

NGen welcomes the participation of the NRC in its projects. The mechanism for the NRC to participate in a project would be through a subcontract to an industry partner. There are options on how NRC will be treated in an NGen project:

- NRC will be part of the consortium’s Collaboration Agreement, recognizing they bring value to the consortium, which may be IP or support for project delivery. NGen will recognize NRC as a partner in publications and promotion of project activity. NRC’s portion of the project would be subcontracted and directed by an industry partner – the agreement is solely between the industry partner and the NRC. NGen may recognize NRC as a partner in publications and promotional activity as agreed to by the consortium.

Basic Eligibility Requirements

All projects must demonstrate the development or application of AI solutions in support of Canadian manufacturers.

Projects must be focused on commercializing AI solutions in advanced manufacturing, be business-led and collaborative.

Projects must be in addition to the regular business undertakings of the applicants.

Projects are encouraged to support commercialization across a broad number of manufacturers or manufacturing facilities rather than providing company or facility-specific solutions.

Project partners are expected to have in place a cyber security strategy with protocols for managing, protecting, and sharing data.

Projects must have the potential to deliver significant commercial benefits and create jobs among project partners and beyond.

Projects must include at least one manufacturing company and one AI solution provider.

Projects must include at least one SME (Small, Medium Enterprise) partner. Applicants are encouraged to include more SME partners and academic and research partners. An SME is defined as an organization that has less than 500 employees globally.

Project participants must have robust project management processes in place. Project work packages, milestones, timelines, and estimated costs should be well-defined. Projects are expected to create jobs for a diverse and inclusive workforce skilled in AI applications in manufacturing and contribute to environmental sustainability, supply chain resilience, and the health and safety of Canadians.

Project activities and expenses must be undertaken and incurred in Canada. Companies or organizations incorporated outside Canada are not eligible for AI4M funding but may be involved as project partners.

NGen will reimburse 40% of total eligible project costs.

Projects will have total project costs between CAD \$1.5M and CAD \$8M. Any deviations to this will require written NGen approval. The maximum project value allowed for NGen funding support is \$8 million. Projects with total costs over this amount will be accepted; however, NGen funding support will be capped at CAD \$ 3.2 million.

The project spend profile should be such that 60% of eligible expenses must be submitted by March 31st, 2026.

Eligible project costs are defined in the Project Finance Guide available here:
www.ngen.ca/funding/challenge/ai4m

This call for proposals will support organizations in creating new AI-enabled manufacturing capabilities. Capital expenditures of up to 45% of the total project costs will be allowed. Capital equipment expenses need to be for new advanced manufacturing equipment that creates new AI capabilities within the organization. The Capital expenditure needs to support the project.

The total amount of sub-contracted or consulting costs cannot exceed 40% of total project costs, and the work must be performed in Canada.

Project partners cannot also be sub-contractors for labour services or consultants within the project.

No individual partner may receive more than 80% of NGen funding.

Projects are expected to be completed and all claims for eligible, paid expenses submitted by all partners by the January 31st, 2027.

NGen is a not-for-profit organization. Project administration fees are applied to projects as a condition of funding. The fee is a one-time, non-refundable project administration fee payable to NGen equal to 5% of the total cost of the project. 2.5% is payable at the point of project launch and 2.5% is payable within the subsequent 6 months. Payment of the fee is a non-negotiable condition of project funding. The fee enables NGen to support projects through its project monitoring and claims management process.

Projects out of scope and will not be funded include:

- Activities where benefits accrue to a single firm or organization.
- Projects that do not demonstrate collaborative partnerships with a manufacturer and a clear demonstration of improving manufacturing processes through AI.
- Projects that would be undertaken at the same scale or scope and within the same period without NGen funding.
- Projects that focus primarily on product development or the design of products themselves. The project must focus on the development and/or scale-up of advanced manufacturing capabilities using AI.
- Projects related to experimental or theoretical work without any direct commercial application or use. Projects must demonstrate a strong commercialization strategy and path to commercial success.
- Production activities themselves or activities that subsidize full-scale production.
- Capital investment for purposes not related to the project. Capital investment must demonstrate new AI-enabled manufacturing capabilities for the organization.
- Activities that could be viewed as anti-competitive.
- 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.

If in doubt about the project scope and eligibility of a project idea, the NGen project team is available to provide support throughout the application process at ai@ngen.ca

Applying for Project Funding

A dedicated portal for applications can be accessed by NGen Member organizations. The portal is required to enter the project information.

To apply for funding, start by joining NGen as a member: www.ngen.ca/join
Then apply for funding within the NGen portal.

It is recommended that the project be registered early on the NGen Grant Management portal so that NGen can review and support the project through the screening process. This is to ensure that the project is eligible for funding before completing the full application.

NGen Support for Project Applications

NGen's Project Team is available to assist in the development of project applications prior to their assessment. NGen staff may assist by:

- Providing high-level advice and guidance with respect to scope criteria, funding rules, eligible activities, and project requirements, and draft responses to the ten questions.
- Make suggestions that might augment project plans.

- Identifying potential project partners.
- Identifying other sources of funding for project activities.
- Providing advice for improving Intellectual Property plans or identification of IP used in or developed by the project.

Resources are limited, and the support will be provided on a first-come, first-serve basis. Support can be requested by email at ai@ngen.ca

Emailing confidential or sensitive documents is not recommended. NGen can support the review of project information through the secure Application portal.

Project Screening

NGen will screen all proposals to ensure they meet basic eligibility requirements for projects.

Applicants will be asked to:

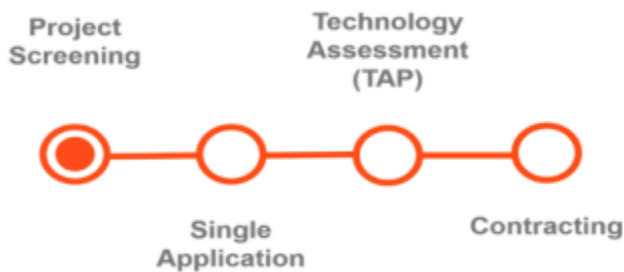
- Complete an Application Agreement – template can be accessed here: www.ngen.ca/funding/challenge/ai4m
- Certify that they have read, understand, and are willing to comply with NGen's project requirements.
- Describe the purpose of their project and how it contributes to new AI and advanced manufacturing capabilities in Canada.
- Indicate that their project is collaborative and identify the lead private sector partners.
- Certify that private sector partners looking for funding are incorporated in Canada and that the project will be carried out in Canada.
- Certify that the project team has or will develop cyber security plans.
- Certify that their project would not be undertaken in the same form without funding.
- Provide an estimate of project costs and indicate that they are willing to invest in the project within the timelines of NGen's funding horizon.
- Certify that they have adequate financial means and project management capabilities to carry out the project.
- Confirm that there is an SME in the project.
- Attest that they follow Canadian Sanctions and Environmental Assessment regulations.
- Agree to provide information necessary for NGen to conduct Financial Due Diligence.

Financial Due Diligence (FDD)

NGen will undertake a financial assessment of each participating project partner to ensure that they will be able to support their commitment to the project for its entire duration.

Please read and refer to the Finance Guide for requirements.

The Application Approval Process



Applicants who meet eligibility requirements as part of Project Screening will be invited to apply.

Each project application will be assessed based on ten questions by up to 5 independent assessors.

Responses are equally weighted in assessments.

Applications will be scored out of 100 marks (10 marks per question) by independent experts.

The assessors will answer two yes/no gateway questions.

- Is the project in scope for funding for this challenge?
- Is the project recommended for funding based on the overall application?

If the majority of Assessors answer **no** to either gateway question, the application will not be considered for funding, regardless of the overall score. It is recommended throughout the application process that advice is sought from the NGen project team to ensure the project meets the scope criteria.

Independent Expert Assessment Panels

All project proposals will be subject to an independent assessment process undertaken by up to five external experts. The expert assessment panels will ensure that approved projects are of high quality, meet NGen's strategic objectives, and are selected fairly. These panels may also include Government representatives.

NGen funding is limited. NGen aims to fund the highest quality projects based on an independent assessment of industry experts.

NGen reserves the right to take a portfolio approach across the call for proposal project areas.

NGen's external experts include former CEOs of manufacturing and technology companies, former senior manufacturing, engineering, and technology executives, senior personnel at universities and colleges, and executives from business consulting organizations.

The identity of experts participating in individual project assessments will be kept confidential. Assessors will sign non-disclosure agreements and conflict of interest disclosures to ensure independence and confidentiality.

Acceptance or Rejection

Following an Assessment and Recommendation from the Independent Assessors, NGen staff will advise all applicants directly if their project has been successful or not.

Feedback

All applicants will receive feedback from the assessment process, outlining why they were approved or not, and provided recommendations to strengthen their application.

Program Timeline

Please refer to the Program website, <https://www.ngen.ca/funding/ai4m>, for the most updated project guides, templates, and webinar recordings.

Two application deadlines must be met to submit a compliant proposal:

- 1.** Screening Deadline - The first is a mandatory submission for screening so that NGen can ensure that the project is in scope and can complete financial due diligence. Screening deadline is June 17th 2025, 5PM Eastern Time.
- 2.** The screening includes a summary of the project intent, the partners, and the high-level financials.
 - Failing to meet this deadline will mean the proposal will not be considered for funding.
 - Members can apply for funding through the member portal, under Funding Programs. The portal will be open to receive project registrations by April 23rd, 2025.
- 3.** Final Application Deadline - Projects that have been successfully screened will have to submit their final application before July 17th at 5:00 pm Eastern Time. Once submitted, applications will be sent to an independent third-party panel for assessment.

Applicants will be notified of assessment results shortly after the completion of the Assessment process. Projects that are recommended for funding will proceed to the contracting phase.

Projects are expected to complete contracting and officially launch by September 30th, 2025. It is recommended that project teams review the Collaboration Agreement and the Master Project Agreement drafts on the NGen website before applying.

All projects must be completed, and claims filed no later than January 31st, 2027.

Failing to meet the Screening and Final Application deadlines will mean the proposal will not be considered for funding.

Summary of Key Dates

Application Portal Opens	April 23 rd , 2025
Project Screening Deadline	June 17 th , 2025 (5 pm EST)
Final Application Deadline	July 17 th , 2025 (5 pm EST)
Completion of the contracting phase and the official start of the project	2 months from project approval

Application - Guidance

The application consists of:

Answers to ten Questions. There will be a maximum of 7,000 characters to answer each question.

To ensure that the level of information provided is fair for all applicants:

- Any information provided above 7,000 characters will not be sent out to the Assessors.
- No external links are allowed.
- Additional information, such as reports are not allowed to be submitted in the appendices.
- Please include any information in the application's ten questions and cite a suitable reference if appropriate.
- Consider utilizing graphs and charts, as they will not count toward the total word count. Text-heavy tables will count towards the question word count.

The questions can be answered within the portal or by providing answers on the application questions template and uploaded in the section for the ten questions.

Three (3) appendices:

1. Project Plan (DOC, XLS, MSP, PDF)
2. Risk Register (DOC, XLS)
3. Intellectual Property Tables (DOC)

Templates for the Project IP Plan and Application Agreement are available here:

<https://www.ngen.ca/funding/challenge/ai4m> .

There are no templates for the Project Plan or Risk Register; the company is expected to use the project management tools available within their company.

Project applicants must answer ten questions that will inform the assessment process.

To the best of your ability, please address the guidance provided for each question.

This guidance is to be answered by all applicants, not just the lead partner, so that the impact and anticipated benefits that will accrue within the consortium are well defined.

Throughout the application, provide information specific to the project and, where possible, quantify and provide evidence for the statements.

The response guidance below each question guides the project team on how to respond to the questions. Please respond to all relevant guidance and add additional points of relevance to the question to strengthen your proposal.

1. What is the overall opportunity that the project addresses?

Response guidance:

- Outline the big-picture motivation and the overall advanced manufacturing objectives that the project intends to achieve.

- Describe how this project enables the commercialization of the AI solution(s) and promotes smart manufacturing in Canada.
- Provide an overview of the project considering both technology and business impacts, highlight other strategic benefits. Describe in detail the AI solution being deployed and what it is intended to do.
Consider:
 - Defining the specific AI solution, types of algorithms, data sources and any unique capabilities.
 - Outlining where and how the solution is being implemented.
 - The current stage of development.
 - If the solutions are new or existing with new applications.
- Outline what the project team needs to do to successfully achieve the project objectives within the desired timeframe and budget. What are the specific challenges, research questions, and/or technical complexities that need to be addressed within the timeframe of the project?
- Describe the nature of the challenges facing you and/or your potential customers, along with the potential market challenges or barriers to entry that the project addresses.
- How will the outcomes of the project overcome these challenges?
Clearly describe the project partners and how the partners will collaborate towards achieving the overall opportunity the project addresses
- Describe, if available, the applicants' ethical AI governance framework.

2. What is transformative about the project?

RESPONSE GUIDANCE

- Clearly define the transformative advanced manufacturing aspects of the project and what new knowledge pertaining to advanced manufacturing is being created by each partner organization.
- Identify the extent to which the project is transformative and innovative both technically and commercially:
 - Are the technologies new or are you looking to apply existing technologies to develop unique transformative manufacturing solutions?
 - Outline the current state-of-art manufacturing processes and technologies for your industry (or sector) and describe how this project pushes the boundaries in the context of advanced manufacturing
 - Will the project lead to technological and business advantages that will allow Canadian companies to leapfrog global competitors and become world leaders in the application and/or production of advanced manufacturing technologies?
 - Describe how the project could be recognized globally as conferring or strengthening Canadian leadership in advanced manufacturing or AI.

- Explain how the project has the potential to transform or support the transformation of each partner organization.
- Outline your own background intellectual property rights, as related to the project, and include results of a Freedom to Operate search.
- What is the plan and rationale for the protection of IP, and or sharing of IP among your consortium partners and, beyond this, with other NGen members?
- Provide evidence for all statements above. This could include the results of: patent searches, competitor analyses, literature surveys, benchmarking strategic analysis/roadmaps.

3. What is the nature and size of the potential market the project will address?

RESPONSE GUIDANCE

For each project partner, describe the market(s) that you are entering with the development of the new AI or Advanced Manufacturing Technology solution and describe the existing market that the manufacturer is operating within and how this AI or advanced manufacturing opportunity will enhance your competitive position within the market.

- Consider including details of:
 - the target market, including the size, margins, market leaders, key competitors, price competition, barriers to entry
 - dynamics of the market(s) including historical and projected growth rates
 - quantify the market differentiators for your project outcomes
 - identify and analyze adjacent markets where the new knowledge could be commercialized
 - the specific target product, platform and service applications underpinning the market
 - the expected share of market to be captured because of this project
 - the opportunity timeline and when you expect benefits to be realized
 - the impact of the project on existing or future customer relationships

Provide evidence for your statements about the market opportunities your project opens

4. How will the results of the project be commercialized?

Response guidance:

Please ensure there is a compelling commercialization plan describing how this proposal's benefits will be delivered to the marketplace and how the economic results will be achieved.

- The Commercialization plan should highlight the new business opportunities anticipated by each partner in collaboration and individually.
 - Describe what will be commercialized, such as new or improved:
 - Products,
 - Services,
 - Processes,

- Capabilities,
 - Intellectual Property, and
 - Applications
- Describe the potential to commercialize the outcomes in the existing market, future or adjacent markets as defined in Question 3.
- Provide a description of how each of these outputs will be achieved along with a timeline for commercialization. Consider:
 - A roadmap showing the route to market.
 - The number of manufacturers or facilities the AI solution will be implemented in.
 - Highlight your competitive advantage and value proposition.
- Include insights into the sales and marketing plan aligned with the direct and indirect economic benefits (benefits to be described further in the response to Question 5.)
- Describe the plan for managing Intellectual Property (reference Appendix 3 – IP Tables). (Please note: IP is not just patents, it also includes trade secrets, know-how, copyrights, industrial design, etc).
- Outline the plan for protecting and sharing IP among your consortium partners and, if appropriate, beyond this with other NGen members.
 - Include a patent filing plan for domestic and foreign jurisdictions.
 - Describe opportunities to commercialize the Intellectual Property, including the license to manufacture, licensing of IP, manufacturing, or direct sales in your IP Plan.
- Outline any other commercial spill-over opportunities and highlight how your activities will contribute to the wider industry and other sectors.

5. What economic benefits is the project expected to deliver to those inside and outside the consortium, and over what timescale?

Response guidance:

Projects must deliver significant economic benefits to the manufacturers and the AI solution providers.

- Identify the economic benefits the project will have for participating project partners and other suppliers/partners inside and outside the project.
- Consider whether there are multiple manufacturers/facilities that could benefit from implementing the AI solutions.
- Ensure that the tables in the application portal show the expected additional revenue that will be generated for each partner: 0-2 years after the project and 3-5 years after the project.

The economic case can be further strengthened by representing additional direct and indirect economic benefits. Examples include:

- The potential economic opportunity to implement the AI solutions in multiple manufacturers/facilities

- The economic value associated with:
 - Efficiency gains
 - Reduced downtime
 - Reduced manufacturing footprint
 - Positive environmental benefits
 - Reduced material usage
 - Higher quality output
 - Reduced scrap and warranty.

Ensure that the tables in the application portal show the expected additional jobs that will be generated for each partner: 0-2 years after the project and 3-5 years after the project.

- Please identify:
 - the number of direct jobs created, and
 - the number of direct jobs maintained/safeguarded,
 - the number of indirect jobs created within the supply chain (consider referencing multiplier effects based on direct jobs),
 - the number of indirect jobs maintained/safeguarded.
- Highlight the type of jobs that the partners will create.
- Indicate any commercial opportunities for other manufacturers/industry sectors arising from the application of the AI solutions and use cases involved in the project.
- Define the economic benefits that the project can have on the whole Canadian supply network upstream and downstream.
- Will the project create spin-off business opportunities (new businesses, new or expanded supplier or partner relationships) in Canada?

6. What is the impact on the broader advanced manufacturing ecosystem and Canadians?

Response guidance:

Projects must provide enduring ecosystem benefits. Benefits cannot accrue to one partner; the project must leave a legacy beyond the partners for Canadian manufacturing. It is also important to highlight any workforce development and Equity, Diversity & Inclusion (EDI) opportunities practiced by the partners.

- Describe how the project will help promote Canadian AI capabilities and create a widespread positive impact leaving a legacy in manufacturing in Canada for the partners and beyond (consider how the project impacts beyond the partners, throughout the supply chain, the industry sector and internationally). To highlight this, consider the following:
- Workforce Development, for example:
 - How will the project encourage the engagement of women, indigenous, and underrepresented groups in the workforce and enhance or create equity, diversity, and inclusion (EDI) efforts?

- Outline the opportunities for attracting, training, and developing a highly skilled talent pool (both existing and new staff).
- Outline any initiatives to engage students in the project.
- Other Social Benefits, for example:
 - Social inclusion/exclusion
 - Enhanced quality of life
 - Public empowerment
 - Health and safety
- Industry knowledge, for example:
 - Will the project serve as a model, learning platform, or data lake for others? For example, providing tours or use cases on best practices or data access.
 - Will the project generate any intellectual property that others can use to accelerate technology applications or scale-up manufacturing in Canada?
 - Will the project influence the activities of colleges, universities, research institutes, or public services to support advanced manufacturing and AI education, resulting in the diffusion of this knowledge back into the industry?
- Infrastructure support, for example:
 - Will the project help to develop or support the use of tools, testbeds, data, and technology platforms that will foster future technology development, adoption, scale-up, and commercialization activity in Canadian manufacturing?
- Collaborative Networks, for example:
 - Will the project further enhance the ability of industry partners, post-secondary education institutions, research centres, and other private and public organizations to work together to strengthen advanced manufacturing in Canada?
 - Will the project provide greater capacity, opportunities, and capabilities to support Small and Medium Enterprises?
- Environmental Benefits - Outline the environmental improvements and impacts as an outcome of this project, for example:
 - GHG, Particulate Matter reduction
 - Process and Resource Efficiency
 - Better Energy Management
 - Reduced Volatile Organic Compounds
 - Reduced Land degradation
 - Reduced Water usage
 - Footprint Reduction

- Reduced emissions due to more efficient and optimized transportation and distribution within the supply chain
 - Use or Creation of Sustainable Materials
 - Reuse, Recycle, and remanufacture
 - Other Life cycle benefits
 - Other sustainability opportunities
- Describe any other benefits that might be achieved because of this project. (Regulatory, certification, standards development, regional and policy benefits, etc.).

7. What is the overall project plan?

Response guidance:

- Describe the overall Project Plan, identifying key project management tools and mechanisms (e.g., Quality Management Systems) that will be implemented to provide confidence that sufficient control will be in place to deliver the project on time, within budget, and according to the specifications.
- Provide a summary of the project, including work package descriptions, a description of the key project milestones, resource, and management requirements, and key metrics to measure success.
- As part of Appendix 1 provide a detailed project plan consisting of a Gantt chart that details the Work Packages, tasks, timelines, milestones, deliverables, dependencies, resource allocation and work package costs for all partners.

The assessment and scoring for this question will consider both the written answer and Appendix 1. In evaluating the project plan, the assessors will consider the following:

- Is there sufficient detail provided when considering the complexity of the project?
- Is there sufficient detail to understand the tasks involved and the resources required?
- Is the timing of key milestones realistic?
- Is there a demonstration of sufficient resource commitment and capability to undertake the project?

8. What is the overall risk management plan?

Response guidance:

NGen recognizes that projects of this type are inherently risky and therefore seeks assurance that the projects it funds have adequate arrangements for managing this risk.

- Describe the Risk Management approach, including the management tools and mechanisms to identify, evaluate and address the project risks.

- Key risks identified in the risk register can be elaborated upon as part of the answer to this question.

Provide a comprehensive risk analysis as part of the Risk Register (Appendix 2).

- Identify the key risks within the project. Please provide enough information in the risk statement so that the cause, uncertainty, and effect are clear.
- Provide an analysis of the likelihood and impact of each risk and provide a relative ranking for each risk.
- Identify the management strategies for each risk. Strategies can include: Avoid, Transfer, Mitigate (reduce), Accept (and manage).
- For complex, high-risk projects, it would be advantageous to provide the effect of each risk management strategy in terms of the residual risk.
- Include at least the following risks categories:
 - Technical,
 - Commercial,
 - Managerial,
 - Resource
 - Financial,
 - Intellectual Property
- All relevant risks should be identified. Additional risks categories could include and are not limited to:
 - Freedom to Operate,
 - Safety,
 - Regulatory,
 - Legal,
 - Environmental
 - Supply chain risks.
- Assessors will be looking to see that all key risks are identified and that there is sufficient risk in the project to warrant NGen funding.

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

Response guidance:

- Describe the collaborative nature of the project: how the consortium working together will achieve more than if they were working individually and how the consortium will execute the project successfully by sharing efforts/learning/risk.
- Describe how the project partners will develop relationships, build trust, and increase knowledge sharing.

- Describe any additional collaborative activities related to suppliers, sub-contractors, and academic or research organizations involved in the project.
- Consider using the IP Tables (Appendix 3) to demonstrate the collaborative nature of the project wherever applicable in terms of joint development of foreground IP and/or access to background and foreground IP during and after the project.
- Demonstrate that the consortium has the right skills and experience to deliver the project successfully.
 - Include a high-level description of the partner(s)' record of accomplishment in achieving similar projects.
- Describe the accomplishment of the project team members in undertaking and exploiting the results of AI projects to show your capability to develop, commercialize and adopt the technology.
- Demonstrate that there are appropriate management reporting and governance structures between the consortium partners to manage and deliver the project. Consider including a governance structure diagram.
- Demonstrate appropriate access to facilities and resources, including identifying and allocating appropriate space and infrastructure for the project to succeed (consider floor space, specialized equipment needs, specialized resources, etc.).

10. Why is NGen funding being requested, and what is the financial commitment for the project?

Response guidance:

Part 1 – is NGen Funding requested?

Projects must clearly articulate why NGen funding is being requested, how it will benefit the project, and demonstrate that the project activities are in addition to the regular business undertakings of the applicants. Questions to consider:

- Will the project's technical or commercial scope be affected by NGen support?
- Why is NGen funding critical to undertake the project as proposed?
- Does NGen funding allow the project to be undertaken differently (more quickly? at a larger scale? with more partners?)?
- Would the collaborative partnerships have been formed without the project?
- Is the project too risky for commercial investors?
- Is the budget realistic and reasonable for the scale and complexity of the project?

Part 2 – Financial Commitment

- Provide a breakdown of the costs per work package and by milestone, showing how it aligns with the project plan. Consider adding this to Appendix 1 or described in this section.
- Using the Financial workbooks, indicate the anticipated project costs, making clear the level of contribution from all project participants and the level of funding required from NGen.
- Supporting information and an explanation of extraordinary or specialized project costs should be provided in this section.
 - For each partner, ensure that all key points relating to these costs are described per cost category.
 - Ensure that project funding is not subsidizing production.

Consider:

- **Labour:** Justification for the use of labour with especially high rates.
- **Subcontract:** Explain the reason for and use of subcontractors, their impact on the project, and why they are not formal project partners.
- **Equipment:** It is essential that:
 - The equipment purchase is directly linked to the project goals. This can include pilot production, where the project team is proving out the new AI capabilities.
 - It is creating a new capability that does not already exist within the organization.
 - It is not the purchase of multiple similar pieces of equipment that would be seen as subsidizing future production activities.
 - Considering the points above, please describe the capital required with a justification of why it is necessary to achieve the goals of the project and a rationale for any pieces of capital equipment exceeding \$1M CAD.
- **Materials:** Please explain any excessive amounts of material or the use of expensive materials. The amount of material listed should be for the project's R&D aspects and for the prove out of the AI capability.
- It is recognized that other funding sources may be required to complete the project.
 - Specify other government or private sector funding sources necessary to achieve the project goals.
 - Describe other private sector co-investment/financial contributions that this project will attract in the short, medium, and long term, identifying any potential follow-on funding.
 - Outline other government funding, including stacking limits, that this project has secured or plans to secure against the project.
- Describe how the project can help attract or retain and promote industry investment and product mandates in Canada.
- Please describe how the project is providing value for money for NGen funding. Consider the project's total potential impact and return against the amount of funding being requested.

Documents Required for Assessment

Compliant projects that have provided the following information will be sent for assessment. If documents or information is missing, NGen will not assess the project.

- Signed Application Agreement template – template available online.
- Answers to all ten application questions
- Appendix 1 - Project Management Plan
- Appendix 2 - Risk Register
- Appendix 3 - Intellectual Property Tables

Upon Agreement

- Upon the final recommendation of the independent assessment panel, NGen will conclude a Master Project Agreement (MPA) with selected funding recipients detailing project requirements, reporting, and NGen's compliance obligations.
- There must be a Collaboration Agreement in place among the members of project consortia defining the roles of project partners and joint risk management provisions.
- The Collaboration Agreement must also set out how foreground IP arising in the project will be shared among project partners. In addition, project participants must indicate the types of foreground IP they would be prepared to share with other NGen members, to whom, and on what conditions.

Templates guides and reference documents

Available for download here <https://www.ngen.ca/funding/challenge/ai4m>