





OVIN Research and Development (R&D) Partnership Fund – Stream 1

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Program Information and Eligibility Requirements

Overview and Benefits

The R&D Partnership Fund – Stream 1 program contributes up to one-third of eligible project costs for approved research and development projects up to a maximum of \$100,000, with the remainder contributed by *Applicants* and/or private sector *Partners*.

Project funding can be used towards the technology/product/service validation, testing, piloting, demonstration, commercialization, and deployment of technologies, in the area of connected and autonomous vehicles, electric vehicles, advanced charging and vehicle-to-grid technologies, and semiconductors and hardware.

At project completion, recipients are required to demonstrate their product and/or service developed or advanced through Ontario's support. Please note that any public communications about the project, OVIN, or Ontario funding will require review and approval from OCI prior to release. Sharing information and achievements through showcase events and media communications is encouraged and will be supported.

Benefits to Applicants and Partners	Benefits to Society	
 Commercialization of Ontario-made technologies. Demonstration of Ontario-made technologies to potential customers. Relationships with researchers to extend company R&D. Marketable solutions. Public/private partnerships. 	 Cleaner transportation. Reduced environmental and carbon footprint. 	

Focus Areas

Each OVIN program supports the development and demonstration of automotive technologies and mobility solutions such as connected, autonomous, electric, and smart mobility technologies in areas such as:

- Commercially ready technologies for application in mass light vehicles (cars, trucks and vans)
- Heavy duty vehicles (commercial vehicles, trucks, buses, recreational vehicles, and others used for goods movement)
- Transportation infrastructure
- Intelligent transportation systems (ITS)
- Transit-supportive systems and vehicles

Projects related to the following 4 focus areas can be proposed. These examples illustrate eligible projects but do not represent an exhaustive list.







1. Connected and Autonomous Vehicles (CAV)

- i. Advanced driver-assistance systems (ADAS), autonomous driving software, and connectivity technologies enabling vehicle-to-everything (V2X) communication.
- ii. Autonomous and semi-autonomous driving systems, telematics, and fleet management technologies for logistics optimization.
- iii. Smart road systems, connected traffic signals, and digital platforms supporting communication between vehicles and infrastructure.
- iv. Integrated mobility management, real-time traffic analytics, and Al-driven coordination tools improving safety and efficiency.
- v. Connected public transit fleets, demand-responsive routing systems, and data platforms supporting operational optimization.

2. Electric Vehicles (EV)

- i. Electric drivetrains, battery management systems, and power electronics supporting efficient vehicle performance.
- ii. Electrified propulsion systems, high-capacity energy storage, and depot-level charging coordination technologies.
- iii. Fast-charging, wireless charging, and smart charging systems integrated with grid management platforms.
- iv. Connected charging infrastructure, route optimization, and data systems enabling efficient energy use across EV networks.
- v. Electrified buses, shuttles, and fleet optimization tools supporting zero-emission public transportation.
- vi. Advanced battery chemistries, lightweight materials, electrified powertrains, and hydrogen or alternative fuel cell systems.

3. Advanced Charging and Vehicle-to-Grid Technologies (A/C & V2G)

- i. Advanced charging technologies, including wireless, high-speed, bidirectional, dynamic, and smart charging systems enabling flexible and efficient energy transfer.
- ii. Vehicle-to-grid (V2G) technologies, including interoperable bidirectional systems, energy aggregation platforms, and grid balancing solutions.
- iii. Energy demand and grid management systems, including smart grid integration, demandresponse technologies, and predictive energy optimization tools.
- iv. Zero-emissions technologies relating to the integration of renewable energy within charging infrastructure, including solar- and wind-integrated charging systems and on-site energy storage solutions.
- v. Energy storage and transmission technologies (including battery and hydrogen-focused technologies), including stationary energy storage systems, hydrogen production and distribution, and power management electronics supporting grid capacity.
- vi. Vehicle-to-grid (V2G) energy management systems and other advanced charging technologies, including smart load management, distributed energy resource coordination, and renewable energy integration tools.





4. Semiconductors and Hardware (S&H)

- i. Automotive-grade semiconductor devices and architectures, including microprocessors, microcontrollers, and system-on-chip (SoC) solutions that enable next-generation vehicle electronics and edge computing.
- ii. Power electronics and enabling components, including wide-bandgap semiconductors (e.g., SiC, GaN), high-efficiency inverters, converters, and power modules that support electric propulsion and vehicle energy management.
- iii. Sensor hardware and device-level integration, including lidar, radar, camera, and ultrasonic sensors, and associated signal-processing hardware for perception, safety, and automation functions.
- iv. Connectivity and communication hardware, including semiconductor-based V2X modules, 5G, and high-speed communication for mobility applications.
- v. Advanced manufacturing processes, packaging and thermal management, including innovations in semiconductor fabrication, chiplet/advanced packaging, materials, heat dissipation, and durability of semiconductor components for automotive and mobility environments and applications.
- vi. Energy-efficient and low-power semiconductor technologies, including hardware solutions that optimize power consumption across vehicle electronics, charging systems, and transportation infrastructure.
- vii. Testing, validation, and reliability systems, including automotive-grade equipment, hardware-in-the-loop platforms, and testing technologies for assessing semiconductor performance under automotive operating conditions.

How Funding Works

OVIN Contribution	Reimbursement of one-third (maximum) of total eligible project costs, up to \$100,000 triggered by submission and approval of quarterly reports.
Matching Requirement	 Two-thirds (minimum) of total eligible project costs (i.e., minimum 2:1 match to OVIN contribution) Contribution match may come from Applicant and/or Partners. Contribution match MUST be in the form of private sector contributions, and be unencumbered from other government grant sources.
Example	Total eligible project costs: \$300,000 Maximum OVIN contribution: \$100,000 Minimum Private Sector contribution: \$200,000







Funding Recipient

OVIN funds flow only to the *Applicant*. The *Applicant* is responsible for reimbursing *Partners*, if applicable.

- Refer to the Eligible Expenditures Guide (<u>Resource Documents OVIN Ontario Vehicle Innovation Network (ovinhub.ca)</u>) for full details.
- All project activities must be performed within Ontario unless written approval has been obtained from OCI.
- OCI may reimburse expenses incurred after the application approval date. The Funding Agreement
 must be executed by relevant parties before a project is activated. Until activation is complete,
 project expenses are incurred at the risk of the participants.
- Collectively, the *Applicant*, *Primary Partner*, and *Secondary Partners* must achieve a 2:1 <u>private</u> <u>sector</u> contribution to the project. The contribution must be unencumbered; that is, it cannot be used to leverage other public funds to pay for a portion of the same activity.
- Contributions from public entities (municipalities, transit authorities, academic institutions, local electricity distribution companies, government agencies, provincial and federal departments, and grant programs, etc.) do not constitute eligible sources of matching.
- Applicants and Partners will be required to disclose all sources of funding being applied for and/or received for the project.

Eligibility Requirements

Applicant

- A small- and medium- sized enterprise (SME) with fewer than 500 global full-time employees.
- May be an *Applicant* on only one R&D Partnership Fund project at a time.
- Must have registered operations (R&D, manufacturing, product management, etc.) in Ontario.
- Applicants who have received over \$500,000 of funding from OCI administered programs in their lifetime (excluding Talent Development) are required to obtain OCI approval before a new application for funding is initiated. Your Business Development Manager can guide you through the process.
- The *Applicant* is a co-signatory to the Funding Agreement.

Primary Partner

A *Primary Partner* is an organization directly participating in the R&D project and whose participation demonstrates "market pull" (e.g., as a customer) for the Applicant's technology.

- The *Primary Partner* may participate in multiple concurrent projects.
- The *Primary Partner* is a co-signatory to the Funding Agreement.

The *Primary Partner* may be:

- Small and Medium-Sized Enterprises (SMEs)
- National and Multi-National Enterprises (NEs and MNEs)
- Academic institutions (as clients only)
- Local electricity utilities or local distribution companies (LDCs)
- Municipalities
- Transit Authorities
- Crown Corporations







- Indigenous Communities
- Not-For-Profit Organizations representing industry

Secondary Partners

Secondary Partners are additional organizations directly contributing matching leverage to the project.

- Secondary Partners may participate in multiple concurrent projects
- Secondary Partners are co-signatories to the Funding Agreement.

Secondary Partners may be:

- Small and Medium-Sized Enterprises (SMEs)
- National and Multi-National Enterprises (NEs and MNEs)
- Not-For-Profit Organizations (such as industry associations and Not-For-Profit Organizations with non-public sources of funding)

Other Partners

Other Partners are organizations – such as public entities – providing support to the project, which can be recorded as an "other contribution" but do not contribute to the 2:1 private sector contribution requirement. Other partners do not co-sign the Funding Agreement.

Project

- One Applicant and minimum of one Primary Partner.
- Unlimited number of additional Secondary Partners, or Other Partners can join.
- Applicant and Primary Partner must have an arm's-length business relationship.
- Project activities are carried out in Ontario.
- Minimum 2:1 contribution match by *Applicants* and/or private sector *Partners*.
- Projects can be up to 24 months in duration.
- This program is not intended for research to prove feasibility or basic technology research. Projects should be at Technology Readiness Level 3-9.
- Intellectual Property (IP) arising from a project will be managed by project *Applicant* and *Partners* as OCI does not claim or manage IP rights.
- Applicant and Partners should demonstrate close collaboration and scalable outcomes with high
 potential for commercialization, strong commercial pull, competitive advantage, and alignment
 with intended program benefits.
- Eligible projects **MUST** include demonstration of actual products/services that can be showcased in Ontario at events, on the road, to OCI and its partners, and/or at customer sites.

How To Apply

Reference Documents

The OCI Funding Agreement, the Eligible Expenditures Guide, the EOI Questionnaire, the Full Proposal Questionnaire, the Letter of Support Template, and the Data and Information Sharing Protocol (DISP) documents are available for your perusal here:

Resource Documents - OVIN - Ontario Vehicle Innovation Network (ovinhub.ca)







Application Process

Applications to the OVIN R&D Partnership Fund – Stream 1 are accepted during open funding rounds. Deadlines are posted on ovinhub.ca.

The OVIN R&D Partnership Fund – Stream 1 contains one stage: a Full Application and is developed and submitted using OCI's AccessOCI web portal.

1. To begin the EOI submission process, please complete a client intake form (Resource Documents - OVIN - Ontario Vehicle Innovation Network (ovinhub.ca)).

<u>Please note: completion of this form does not constitute an application for funding.</u>
An OCI Business Development Manager (BDM) will contact you to discuss the opportunity and assist you with developing your Full Application.

- 2. Applicants submit their Full Application for internal and external review.
- 3. Your BDM must endorse your application for eligibility and suitability prior to submission.
- ERP makes funding recommendations to OCI's Internal Review Panel (IRP).
- 5. IRP, comprised of senior OCI staff, makes the final decision.
- 6. Successful *Applicants* will be notified by OCI and provided an outline of conditions and additional information necessary to activate the project.
- 7. *Applicants* who are not selected will be notified by OCI. Feedback on the decision can be provided by their BDM.

Notes on proposal submission:

Applications must be accompanied by a signed Letter of Support (LOS) from contributing Partner organizations, confirming financial commitment to the project, activities, duration, resources as a "Project Contributor/Partner," and acknowledgement of the requirement to sign the standard OCI Funding Agreement. A template is available as reference; although its use is optional, all items listed must be included in your letter.

Applicants should start negotiations with their project *Partner(s)* regarding intellectual property (IP), preferably before submission of the application.

Assessment Process and Criteria

The OVIN R&D Partnership Fund – Stream 1 is a discretionary, non-entitlement program with limited funding. OCI will fund qualified projects with potential for the greatest economic benefits and contribution to transportation advancements to Ontario. Not all eligible applications can be funded.

All eligible applications are assessed on their merit and reviewed against program objectives and evaluation criteria.

Full Applications are internally reviewed for eligibility, completeness, and financial compliance, prior to evaluation by independent external reviewers with domain and sector expertise. All reviewers are bound by Non-Disclosure Agreements (NDAs). The final funding decision is made by OCI.







Evaluation Criteria

Evaluation criteria include, but are not limited to, the following:

- Clarity of the challenges, significance of the market opportunity, expected economic benefit to the companies and Ontario (e.g., new revenues, job creation/retention, productivity improvements) and potential benefit/contribution to Ontario's transportation ecosystem (e.g., infrastructure, systems, and vehicles)
- Technical merit, novelty, and ability of the innovation to address challenges and market opportunities
- Expertise and experience of the team members, clarity of roles and responsibilities, and evidence of collaboration
- Potential impact and outcomes to the automotive and smart mobility sector, social, environmental, and/or other benefits (i.e., leading to globally competitive business and market opportunities)
- Clarity, feasibility and appropriateness of the project plan and budget
- A clear strategy and capacity to bring the results to market and/or implement proposed solutions
- Overall quality and completeness of the application

Project Activation, Funds and Project Reporting

Project Activation

- The *Applicant, Primary Partner*, and *Secondary Partners* must execute the OCI Funding Agreement, within 30 days of the announcement of award.
- The executable agreement with schedules specific to the approved proposal will be generated through our online management system and sent to all contracting parties.

Flow of Funds

- OCI funds flow only to the *Applicant*. The *Applicant* is responsible to reimburse *Partners*, if applicable.
- Reimbursements are triggered by the submission and approval of claims and reports.
- Reimbursement claims from the *Applicant* to OCI are made when submitting interim and final reports and paid following approval.
- An advance payment of up to 10 per cent, at the sole discretion of OCI, is released upon activation of the project.
- 10 per cent hold-back remitted upon submitted and approved final report.
- Payments are based on the total OVIN award project value.

Project Reporting

A major component of OVIN is the generation and analysis of data and information to support Ontario's automotive and mobility ecosystem (e.g., governments, broader public-sector organizations,







industry, post-secondary institutions, transportation authorities, etc.).

OCI will not be collecting, analyzing or otherwise handling and disseminating data and information considered by applicants to be proprietary, commercially sensitive, or publicly sensitive. OCI will work with applicants to ensure that the collection of information reflects specific project design or business needs and supports their interests. Please refer to DISP for details.

Reporting instructions and templates will be sent to successful parties at the time of reporting. Reports must be received and approved by OCI prior to release of funds for eligible claims.

Notes:

- Applicants MUST retain all proof of purchases, receipts, and other relevant documentation relating to eligible expenses.
- Completion of all required reports is a contractual obligation to receive funding from OCI.

The following project reports will be required:

Interim Progress Report(s)

Quarterly reports (based on OCI's fiscal year starting April 1), including progress, project metrics, data and information requirements, proof of expenditures and partnership contributions, financial attestation, and a request for reimbursement must be submitted by the *Applicant*. The reports are due no later than 30 days following the end of the quarter.

The Report form is accessed directly on the AccessOCI system from the Report Tab.

Final Report

A final report, including progress, project metrics, data, and information requirements, claim form, proof of expenditures and partnership contributions, financial attestation, and a request for reimbursement is required at the end of the project. Forty-five (45) days prior to the scheduled completion date, the *Applicant* and all contributing *Partners* will receive an email notification of the project end date from the AccessOCI system, with a link to the Final Report should the parties wish to begin entering data.

- Applicants can request early reporting by emailing the Program Manager.
- On the scheduled project completion date, the Applicant and all contributing Partners will receive another notification and a link to complete the Final Report from OCI's AccessOCI system.
- Applicants and contributing Partners must submit their Final Report within 30 days of project completion to be reimbursed for eligible expenses and maintain good financial standing with OCI.

Project Metrics

If a project crosses an OCI fiscal year end (March 31), the *Applicant* will be required to complete an annual metrics survey each April, for the part of the project that has been completed since the previous March 31. This annual report is mandatory for OCI to fulfil its contract with Ontario. Required metrics reports must be submitted to maintain good financial standing with OCI.







Retrospective Survey

At one, two and three years after project completion, the *Applicant* will be sent a link to complete a retrospective survey to collect data on commercial outcomes from the project. This information is required by OCI for assessment of program impact and continuous improvement.

Project Changes

If required, *Applicants* MUST request project extensions, milestone variances, and/or variances to the OVIN budget exceeding 10% of any budget category value, using the Project Change Request form in the Project Administration tab in their AccessOCI project file. Such requests must be made at the earliest possible opportunity and approved before any planned changes are implemented.

Applicants are encouraged to reach out to their business development manager for further guidance on project change requests.