





# Demonstration Zone (DZ) Call for Applications

#### Background

OVIN, a key component of <u>Driving Prosperity</u>, builds upon the highly successful Autonomous Vehicle Innovation Network (AVIN) to ensure that Ontario capitalizes on the economic potential of advanced automotive technologies and smart mobility solutions such as connected and autonomous vehicles (C/AVs), and electric and low-carbon vehicle technologies, while enabling the province's transportation and infrastructure networks to plan for and adapt to this evolution. Ontario is a North American leader in transformative automotive technologies, transportation and infrastructure systems. Ontario's strengths in automotive manufacturing and information and communications technology will continue to be leveraged under OVIN, with an expanded mandate to include accelerating the development of next generation electric, connected, and autonomous vehicle and mobility technologies and supporting Ontario's position in the automotive value chain and creating and maintaining jobs in this highly competitive and evolving sector. Via OVIN's skills and talent strategy, companies will be able to access next-generation talent to ensure Ontario has the skills, and is creating the jobs, required to increase competitiveness in the sector.

OVIN is driving collaboration throughout the supply chain by linking large companies (partnering OEMs, Tier 1, etc.), fleet operators, municipalities and utilities with Ontario entrepreneurs, innovators, start-ups and small- to medium- sized enterprises (SMEs) through the OVIN Regional Technology Development Sites as well as the **Demonstration Zone (DZ)**. The Demonstration Zone will allow for open collaboration and innovation, make available physical space, technology platforms, facilities, specialized equipment, hardware and software and other infrastructure and to enable the testing and demonstration of leading-edge C/AV technologies.

## Call for Application

On behalf of the Government of Ontario, OVIN seeks applications from interested parties to form the new Demonstration Zone (DZ).

Please connect with our Sector Manager to receive a copy of the full application form and to open an application.

A summary of the scope and application process is provided below.

## Eligibility

The Applicant must be one or more provider(s) of publicly funded organization(s), such as established Regional Innovation Centres, Economic Development Corporations, accredited academic institutions, or

industry associations. Applications must be operating in Ontario with a successful track record supporting advanced automotive technologies and the smart mobility innovation economy.

Partners may include a consortium of not-for-profits including sites in multiple locations across Ontario to form the Demonstration Zone (DZ). Consortium models are encouraged, however there should be one Lead Applicant organization who will lead and coordinate all DZ activities.

Organizations already in receipt of OVIN funding (e.g., RTDS site partners in receipt of funds) are ineligible to be a DZ Applicant but can be partners.

#### Scope of Work

At the Demonstration Zone, advanced automotive technologies and smart mobility solutions (connected, autonomous and electric) should be showcased through their integration into relevant platforms (e.g., such as, but not limited to, C/AVs which are open to software applications and hardware drivers that determine vehicle performance). Some examples of these technologies include:

- Connected Vehicles:
  - V2V and V2X communications
  - Navigation Systems
  - o Infotainment systems
  - o Telematics
  - Cloud computing and data analytics
  - Cybersecurity
- Autonomous Vehicles:
  - Perception (sensor data fusion)
  - o Localization
  - o Driver assistance systems
  - o Human-Machine interface
  - Safety
  - o A.I. powered Operating Systems
- Shared Multi-modal and Integrated Mobility:
  - o Ride sharing and car sharing
  - o Parking and mobility optimization solutions
  - First and last mile solutions
  - o Fleet management
- Electrified Zero-Emission Vehicles:
  - Plug-in hybrid and battery EVs
  - o Hydrogen fuel cell EVs
  - o Electric powertrain
  - o Critical minerals
  - BEV supply chain

Some examples of integrated demonstrations include:

- Vehicles (i.e., C/AVs which are open to software applications and hardware drivers that determine vehicle performance) in live scenarios, in accordance with applicable laws and regulations (e.g., Ontario's AV Pilot Program).
- Infrastructure innovations for technology demonstrations of intelligent transportation systems ("ITS")
- Demonstration of technologies, infrastructure and operating models related to electric vehicles
   (EV) and battery technologies

The Demonstration Zone will be a key hub of commercial activities, especially for start-ups and SMEs that may not otherwise have the resources to demonstrate or promote their technologies to potential customers. The DZ will facilitate functional demonstrations of made-in-Ontario technologies in an operational environment. It will provide customer facing marketing events as well as inbound business development engagements with industry decision makers for participant companies.

The Demonstration Zone will provide Ontario SMEs with a platform, both technological and promotional, to showcase their technologies to current and/or potential customers.

#### **Demonstration Zone activities may include:**

- Demonstration of Ontario-made\* disruptive, commercially ready technologies for application in the following priority areas:
  - o Mass light vehicles, such as cars, trucks, and vans
  - Heavy duty vehicles, including commercial vehicles, trucks, buses, recreational vehicles (RVs), and others used for goods movement
  - Transportation infrastructure
  - o Charging infrastructure
  - Intelligent Transportation Systems (ITS)
  - Transit-supportive systems and vehicles
- Creation of a platform, both technological and promotional, for Ontario SMEs to showcase technologies
  related to autonomous, connected, shared and electric (CASE), alternative propulsion, public safety,
  infrastructure, cybersecurity, and light weighting innovations to current and potential customers; and
- Promotion of Made-in-Ontario products and solutions supporting Ontario's position as a globally recognized connected, autonomous, and electric vehicle technology R&D and manufacturing jurisdiction.

\*Note that non-Ontario-based companies (Canadian or international) are not precluded from testing technologies in the Demonstration Zone.

The Demonstration Zone will demonstrate how OVIN's activities effectively leverage resources, infrastructure, and expertise, and maximize provincial investment, including the Regional Technology Development Sites, OVIN R&D funds and other OVIN Central Hub activities.

The Demonstration Zone will not preclude C/AVs from being tested anywhere else in Ontario (whether at a Regional Technology Development Site or elsewhere), in accordance with applicable laws and regulations (e.g., Ontario's AV Pilot Program).

The site will be collaborative, sharing best practices, networking opportunities and other services with the other Regional Technology Development Sites across Ontario.

It is expected that the site will function as a resource hub for OVIN in the region, coordinating activities among and engaging with stakeholders across the ecosystem.

The new DZ will use an Open Innovation Ecosystem Model (sharing of knowledge) to ensure SMEs (including start-ups and entrepreneurs) retain intellectual property. The site should bring resources and partners within the innovation ecosystem together to create collaborative spaces and an environment that enables innovation to thrive.

An Open Innovation Ecosystem Model is an operational paradigm based on principles of integrated collaboration, co-created value, cultivating innovation and entrepreneur ecosystems. The Open Innovation Ecosystem Model will focus on transformative technologies and technological adoption. The Open Innovation Ecosystem Model seeks to use both the demand-side and the supply-side as catalysts for innovation, as part of a hyper-integrated open innovation marketplace that leverages the idea that customers are valuable co-creators throughout the innovation process. Further, the Open Innovation Ecosystem Model brings technological adoption to the forefront of the innovation process and integrates the end-user and customer-supplier feedback loop as a critical component of sustainable innovation.

#### Use of Funds

The maximum contribution from OVIN to the DZ's budget is \$2.7M over a program lifetime period; ending March 31, 2025. Funding will flow from OCI to the Lead Applicant organization. If the application is made by a consortium, the Lead Applicant will be responsible for coordination and oversight of delivery plans, regular reporting, and distribution of funds to partner organizations.

## Required Private and Public Sector Contributions

A minimum of 1:1 in private sector contributions is required to be secured over the contracted funding period. Private sector contributions can be comprised of direct funding, value of staff time, operations, and value of equipment or services provided to the site. To be eligible as a matching contribution, private sector contributions must be unencumbered from other public funding sources.

Other non-private sector sources of funding, such as from municipalities and academia, are valued and will be measured separately. There is no minimum matching requirement for public funds. These do not contribute to the private sector match requirement.

As part of the agreement, OCI reserves the right to revise the approved funding amounts based on the evaluation of the business plan, or failure to achieve the private sector match requirements.

Contributors to the DZ may include industry (SMEs, NEs and MNEs), publicly funded academic institutions, economic development corporations, not-for-profits, Indigenous communities, municipalities, transit authorities, road and railroad operators, or utilities.

#### Operating Period and Reporting Expectations

The DZ will be operating to March 31, 2025. All final reporting will be due by June 30, 2025.

The DZ will report on progress semi-annually. Funding disbursements are made on approval of semi-annual reports. Funding is provided on reimbursement basis with an initial advance upon activation.

Refer to the eligible expenditures guide in the Business Plan Template for a list of allowable expenses. Eligible expenses include salaries and benefits of staff, operating costs, travel and living costs, and lease and facilities improvements. Note that funding is intended to support clients through the site's resources and facilities. It is not meant to be used to seed clients financially or directly fund client projects.

#### **Evaluation Criteria**

Your application will be evaluated on the following categories:

- Lead applicant organization and partners' background, experience, and track record of success
- Proposed DZ's area(s) of focus: unique value proposition and overall potential impact and expected outcomes, including the expected number of SMEs to be supported
- Proposed DZ site: physical space(s), technology platforms, facilities, and specialized equipment, other infrastructure, and compliance to standards
- Quality, effectiveness, and diversity of proposed activities, and how these activities will support Ontario SMEs to achieve the above stated DZ objectives
- Proposed budget and use of funds, ensuring realistic forecasts and demonstrating value for money
- The secured and potential private sector leverage from private and public sector sources (minimum 1:1 match for private sector sources), as demonstrated through letters of support
- Strength, diversity, and value of partnerships (including private sector partners and partnerships with other organizations) and their contributions, roles, leadership, and commitment to the site
- Sustainability, including expected impact to the region and to Ontario
- Intellectual Property policies enabling open innovation
- Quality and strength of the site's proposed governance structure
- Quality and strength of the outreach and marketing plan to effectively engage with organizations across Ontario and the promotion of OVIN globally
- Risk-mitigation strategies

## **Application & Award Process**

The application template is available upon request from the Sector Manager.

Your application must be submitted through email to <a href="ovinteam@oc-innovation.ca">ovinteam@oc-innovation.ca</a> by December 20, 2022. Please include "DZ Business Plan" in the subject line.

An internal review will be conducted. Only complete applications meeting the requirements above will be approved and advanced for external review.

External review consists of a panel of experts who will score your application.

A presentation to the panel will be conducted before OCI makes a final decision.

A decision is expected in **Spring 2023.** 

The winning application will undertake a contracting process with OCI outlining the terms and conditions of the DZ project.

#### Contact:

#### **Sector Manager:**

John George

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