



## Ontario Centre of Innovation – OVIN Skills Gap Analysis and Reskilling Training Framework for the Automotive & Mobility Sector.

Request for Proposals | **7 February 2024**

Deadline for submission of proposals: **7 March 2024**

Proponent Session: 21 February 2024 from 10:00am-11:30am EST

Link to Register: <https://us02web.zoom.us/j/81183414702>

### 1. Organization Description

The Ontario Centre of Innovation (OCI), established in 1987, is a leading not-for-profit organization that works with industry, academia, and government. OCI focuses on ensuring that the people of Ontario personally and economically benefit from leading-edge research underway the province's publicly funded universities, colleges, and research hospitals - research that can be transformed into technologies and services that enhance quality of life and help build a globally competitive, job-creating economy in Ontario.

Specifically, OCI supports the commercialization of academic intellectual property (IP), industry-academic collaborations, and the development and adoption of emerging technologies. This includes overseeing the execution of advanced technology platforms that will equip Ontario companies to compete in a competitive global digital economy. The organization also contributes to the development and retention of talent to ensure that industry has access to personnel with the most advanced skills and knowledge and that highly trained personnel find opportunities to apply their expertise in Ontario.

OCI leads the Ontario Vehicle Innovation Network (OVIN) initiative on behalf of the Government of Ontario. OVIN's mandate is to accelerate the development of the next generation of electric, connected, and autonomous vehicle and mobility technologies and lead the sector through significant change.

OVIN builds upon Ontario's position as a world-leading automotive manufacturing and supply jurisdiction in addition to the large cluster of information and communication technology companies operating in the province. Ontario's high-quality post-secondary institutions, first class talent, innovative small and medium sized enterprises, and infrastructure to support entrepreneurship ensure that the province is uniquely

positioned to capture the economic opportunity of the connected and automated vehicle (C/AV) and mobility technology space and lead the global mobility transformation.

Through resources such as research and development (R&D) funding, talent development, technology acceleration, business and technical supports, and demonstration grounds, OVIN provides a competitive advantage to Ontario-based automotive and mobility companies – allowing Ontario to reinforce its position as a global leader in transformative automotive technologies, as well as transportation and infrastructure systems.

OVIN's five objectives are to: foster the commercialization of Ontario-made advanced automotive technologies and smart mobility solutions; showcase Ontario as the leader in the development, testing, piloting and adoption of the latest transportation and infrastructure technologies; drive innovation and collaboration among the growing network of stakeholders at the convergence of automotive and technology; leverage and retain Ontario's highly skilled talent; harness Ontario's regional strengths and capabilities, and support its automotive and technology clusters.

OVIN is supported by Ontario's Ministry of Economic Development, Job Creation and Trade (MEDJCT), Ministry of Transportation (MTO), and Ministry of Labour, Immigration, Training and Skills Development (MLTSD).

## 2. Objectives

Ontario's automotive and mobility sector is facing significant technological disruptions driven by the priority to transition to the low carbon economy, as well as improvements in digital and automation technologies. Key drivers contributing to this evolution include factors like environmental sustainability, digitalization, infrastructure demands, and increased expectations for safety and concerns over cybersecurity. As a result, the occupational and skills requirements for the sector are shifting to include an increased demand for: technological skills, data analysis skills, and more recently EV (Electric Vehicle) production skills (e.g., mechatronics, battery systems and battery chemistry repair) and EV charging infrastructure skills.

[In the last three years, Ontario has attracted more than \\$27 billion in new investments from global automakers, parts suppliers, and electric vehicle \(EV\) battery manufacturers.](#) With new investments in the last year from Mitsui High-tech (Canada), Umicore, Magna, and Volkswagen Group [in addition to significant investments in mineral exploration](#), Ontario is successfully positioning itself for long-term economic growth and job creation throughout the current EV transition. Moreover, recent shifts in jobs and the workplace have changed the skills required for workers and companies to prosper.

In response to these shifts, the Ontario Vehicle Innovation Network (OVIN), as part of the Ontario Centre of Innovation (OCI), developed a [Talent Strategy & Roadmap](#) to position the sector for long-term global success. Objectives within this Talent Strategy include collaboration and coordination across the province, talent sourcing and attraction, workforce development and retention, and equity, diversity, and inclusion (EDI). Within the scope of this Talent Strategy, OVIN is deploying new workforce development initiatives to support the reskilling of workers who have faced displacement due to COVID-19 or changing labour market demand.

Our most recent initiative is designed to directly support the reskilling needs of Ontario-based automakers during the EV transition, with an emphasis on supporting displaced and at-risk workers in the sector. As a result, OVIN is seeking expertise to complete the following for Ontario's automotive and mobility sector:

1. Conduct a Skills Gap Analysis for the automotive industry's EV transition
2. Establish a Reskilling Training Framework to support closure of these skills gaps, with an emphasis on the following key areas:
  - Leadership development training
  - EV production - general awareness training
  - Battery systems training – technical and non-technical skills
  - EV battery safety training
  - EV Infrastructure, Aftermarket, and Repair Training
  - Health and safety training – beginner to intermediate level

OVIN invites qualified Consultants with extensive workforce development and analytical experience to submit proposals outlining their approach and capabilities in addressing our specific requirements.

NOTE: OVIN is collecting workforce planning information from the Ontario automotive and mobility ecosystem for this project. The selected Consultant will conduct all required supplementary research, analyses, strategy and training framework development to directly meet industry's anticipated skills needs for planned electric vehicle production. The selected Consultant is also expected to determine the best model for analyzing skills gaps and developing strong reskilling initiatives tailored to the sector's needs.

A core objective of OVIN's initiatives is the inclusion and advancement of people belonging to underrepresented and equity-deserving groups in awareness-raising and development opportunities for automotive and mobility sector employment. By increasing interest in the levels of diverse talent, the industry can begin to cultivate a more diverse and inclusive culture. As a result, the Consultant is expected to integrate practical measures to generate improved outcomes for the current level of engagement among workers from these underrepresented groups within an industry they may not consider advancing in due to systemic barriers or perceived skill gaps. These groups can include (but are not limited to):

- Women/ individuals who identify as women
- Black, Indigenous & people of colour (BIPOC) communities
- 2SLGBTQ+ communities
- People with disabilities
- Immigrants/refugees/newcomers to Canada
- French-speakers
- Those living in remote areas (E.g.: Aboriginal and non-Aboriginal settlements, villages or cities as well as long-term commercial outposts and camps for mining, fishing and forestry activities)
- Those living in under-served communities (in this context, populations of people who face additional barriers to accessing learning or educational opportunities such as those with low socio-economic status)

To fulfill these outcomes, OVIN is calling on interested and qualified consultants to submit a proposal to develop a Reskilling Talent Strategy, conduct a Skills Gap Analysis report, and develop a Reskilling/ Training Framework report on behalf of Ontario's automotive sector amidst the EV transition. The work consists of the components outlined under the scope of work below.

### 3. Scope of Work/ Key Components

NOTE: In executing the work below, the Consultant is expected to assess/evaluate existing best practices for rapid retraining/reskilling within the automotive and mobility sector. Moreover, the Consultant is expected to share how they intend to complete industry validation of all requirements (skills gap analyses, data and insights) used in the development of the Reskilling Framework for the EV transition.

#### 1. COMPONENT ONE: Conduct a Skills Gap Analysis

- Conduct a thorough inventory of skills needed across departments and job classifications for the shift from internal combustion engines (ICEs) to EVs within an automotive industry manufacturing establishment.
  - The Consultant must have an effective evaluation framework, including analysis tools that are approved by OVIN.
- Conduct a comprehensive analysis of anticipated skills requirements within the automotive industry for the EV transformation.
- Prioritize critical skill areas that need immediate attention within the sector's EV transition through upskilling and reskilling initiatives.
  - **These include technical and non-technical skills associated with EV battery manufacturing, including EV general awareness training, beginner to intermediate EV battery safety training, and occupational health and safety within a manufacturing plant.**
- Consider external market trends and emerging technologies that influence skill requirements.
- Develop a skills matching mechanism that evaluates skills required for building an internal combustion engine (ICE) vehicle compared to an electric vehicle (EV) to determine transferable skills and develop a framework to ease the transition of the sector's workers throughout the transition. This mechanism will be based on the components and expertise required in general by the industry for this transition.

#### 2. COMPONENT TWO: Develop a Reskilling Training Framework

- Develop a framework and training model that is aligned with identified skill gaps for the EV transition. This strategic model will proactively facilitate skills matching and training for building an EV.
- The training models developed for this framework must address the following areas associated with EV and EV Battery Manufacturing:
  - Leadership training
  - EV general awareness training
  - Battery systems training
  - EV battery safety training
  - EV Infrastructure, Aftermarket and Repair training
  - Health and safety training – beginner to intermediate level
- NOTE: The framework must identify what EV production training would require, including the recommended training methods, like online courses, workshops, or hands-on/synchronous learning experiences that are appropriate to the automotive and mobility sector.
- Implement a system to monitor employees' progress throughout the training to ensure alignment with automotive establishment skills needs.
- Incorporate feedback loops for continuous improvement of the framework and its resulting modules.
- Recommend partnerships with educational institutions or industry experts with specialized training modules.

The Consultant must provide OVIN with Key Performance Indicators (KPIs) and quantitative measures for the successful deployment of the required components in this project. These measures can include KPIs for the successful engagement of workers from underrepresented and equity deserving groups, and the effective deployment of respective reskilling/training initiatives.

NOTE - The *Reskilling Framework* will:

- Use knowledge from the Skills Gap Analysis and additional research about the sector's transformation to inform the development and continued evolution of a Reskilling framework and the design of responsive initiatives to support worker reskilling.
- Address the diverse needs of talent across the automotive and mobility sector by developing a complementary approach to reskilling and the redeployment of workers who have been displaced by labour market/ industry disruptions (for example, the COVID-19 pandemic) and whose occupations are at-risk, into in-demand occupations for the EV transition and other significant sector shifts.
- Include a map of in-demand skills and occupations within EV production alongside those in internal combustion engine (ICE) vehicle production that are anticipated to be disproportionately affected by sector transformation and broader labour market shifts. This skills map will evaluate and facilitate redeployment of displaced or at-risk roles within the sector with transferable/relatable skills to ease the transition to newer, in-demand roles in EV production.
- Highlight how the requirements for automotive manufacturing are expected to change with the EV transition and identify how existing skillsets can be enhanced and leveraged elsewhere in the sector.
- Establish tailored and relevant reskilling journeys/pathways to assist employers and workers to develop basic skills sets that are applicable regardless of an individual's role (e.g. digital skills, higher cognitive skills, social and emotional skills and adaptability and resilience skills), in addition to specific expertise based upon their interests, goals and sector demand.

This component is expected to be completed in two phases:

1. **Phase One:** The Consultant will analyze data gathered during the skills gap analysis.
  - a. In addition to insights gleaned from the Skills Gap Analysis conducted in partnership with OVIN, the Consultant is expected to conduct supplementary secondary research about skills, at-risk jobs, and career journeys that will inform the Reskilling Framework.
  - b. Based on requirements gathering and industry validation of findings on workforce displacement, identify reskilling needs to inform the development of the Reskilling Framework to support the reskilling of displaced and at-risk workers, equipping them with relevant skillsets and supporting their transition into new in-demand roles in the automotive and mobility sector.
  - c. Secondary research must include an examination of reskilling efforts in Ontario's automotive and mobility sector, including but not limited to examples of Ontario-based reskilling programs, government initiatives to promote or address reskilling efforts, opportunities and challenges with reskilling the automotive workforce, post-secondary institutions with reskilling opportunities (micro-credentials, certifications, etc.), and occupations and segments where workers are at risk of displacement due to the EV transition. Moreover, the selected Consultant is expected to identify classifications with increased demand, and transferable skillsets that can bridge the gap between existing labour supply and anticipated demand.

- 2. Phase Two:** The Consultant will develop a framework/report with strategic insights and recommendations for an Ontario-based Reskilling Framework to support the EV transition and job matching for at-risk roles within the sector.
- a. All elements for the Reskilling Framework are outlined above, including the identification of reskilling needs to support displaced or at-risk workers, equip them with skillsets and support their transition into new in-demand roles in the sector throughout the EV transition.
  - b. The Consultant will acquire and leverage research inputs, work with OVIN to extract insights, develop and refine key themes, conduct skills analysis, and identify opportunities and actionable next steps as part of the development of the Reskilling Framework. In addition, the Consultant will complete visualization of all required components, develop promotional graphics and/or content snapshots of key content which can be used across OCI/OVIN marketing channels.
  - c. The report should detail in-demand skills and occupations, recruitment and training gaps, in addition to identified transferable skills for the transition from producing internal combustion engines (ICE) to EVs. Moreover, the report should include recommendations to address skills shortages through reskilling efforts and address systemic barriers to entry and advancement within the sector for underrepresented and equity-deserving groups.

## 4. Selection Criteria

Applicants will be evaluated based on their ability to showcase the following in their proposals:

- Experience in designing and implementing skills needs assessments and designing training frameworks/initiatives to address industry-specific workforce development needs.
- Experience working with a range of stakeholders to test and evaluate innovative training models
- Expertise in implementing rigorous, independent evaluation while collaborating with multiple project partners and stakeholders.
- Rationale for approximate total budget.
- Alignment between proposed project timeline and timeline requirements outlined in this Request for Proposals.
- Demonstrated commitment to equity, diversity, and inclusion.

## 5. Project Management

Throughout the course of this project, the Consultant is expected to complete ongoing and final reporting in accordance with OCI requirements, communicating key findings, adjustments, lessons learned, and next steps. Moreover, the Consultant will work closely with OVIN for approval of project components and for updates to the assigned Project Lead, and the wider OVIN team as needed.

As part of the project management activities, the Consultant will prepare for a kick-off meeting, develop a workplan with detailed timelines for all project deliverables and deliver a status and/or weekly update meeting for the OVIN team.

The Consultant will share proposed methodologies for each deliverable. Each of these plans must be signed-off and agreed upon by OVIN prior to development and implementation stages. In the design and implementation of this project, the Consultant will effectively consider the confidentiality and privacy of user data and information security as outlined in PIPEDA and any other Canadian Legal Standards. The Consultant will ensure that data storage, content elements and software elements related to this work will be sustainable beyond the scope of this project.

## 6. Summary of Key Performance Indicators & Deliverables

The deliverables for this scope are summarized in the table below:

Section	Specific Deliverable	Format	Timeline
Deadline for proposal submissions	1. Proponents will submit proposals to OCI	PDF	5 March 2024
Decision by OCI	2. Decision by OCI	Email with formal contract PDF	19 March 2024
Project Management	3. Project kick-off deck	PowerPoint	25 March 2024
	4. Project plan including workback schedule for all components and phases of project	PowerPoint and/or PDF	25 March 2024
	5. Bi-weekly project status updates	PowerPoint and/or PDF	March 2024 to July 2024
Scope of Work	1. Proposed evaluation framework (detailing assumptions and approach) for skills gap analysis.	Word or PDF	1 April 2024
	2. Data collection and skills gap analysis – all	Word and Excel	Late-March to Mid-April 2024

Section	Specific Deliverable	Format	Timeline
	data will be owned by OCI		
	3. Draft of Skills Gap Analysis Report Due	Excel, PDF and PowerPoint	Late-April 2024
	4. Reskilling Framework Draft Due	Word/PDF	16 May 2024
	5. Final Reskilling Framework Due – including visualization and promotional materials	Word/PDF	30 May 2024
	6. OVIN approval of all deliverables		13 June 2024
	7. Project Close		27 June 2024

## 7. Bidding Requirements

- a. **Financial. Must include a breakdown of costs by activity (including things like different plug-ins required and enhancement options, etc.).** Daily rate for the project including any estimated expenses is to be provided. Any expenses or additional cost must be approved by OCI in advance and in writing.
- b. **Firm Fixed-cost Proposal.** Descriptions of the approach and methodology. Detailed timelines and deliverables are to be provided. 30-minute interviews including a presentation on approach and methodology and Q&A may be scheduled with short-listed candidates.
- c. **Collaborative Bids.** Proponents are welcome to submit collaborative bids in partnership with other Consultants.
- d. **Service Level.** Delivery of milestones on time and of a quality acceptable to OCI.
- e. **Terms and Conditions.**
  - Any information provided by OCI either in this RFP or in subsequent verbal or written communications shall be considered confidential and for express use in the preparation of this proposal.
  - All proposals submitted become the property of OCI and are to be received and held in confidence.
  - All data collected and all resulting reports and publications prepared by the successful bidder will be the exclusive property of OCI.



- This RFP does not create an employment relationship. Individuals performing services required by the contract are not employees of OCI.
  - Any changes to scope of services and associated costs following execution of contract must be submitted in writing and are subject to approval by OCI.
  - Travel and travel reimbursement may be authorized for this acquisition and will require written requests, breakdown of costs, and formal approval by OCI.
  - The successful bidder will be paid at the prices stipulated on the contract upon submission of final invoice to OCI after the successful completion of the project.
  - Invoices will contain the contract number and reference number.
  - OCI follows a standard contract and agreement policy allowing for limited changes to clauses.
- f. **Conflict of Interest.** Arms-Length relationship or disclosure of potential conflict of interest is required.
- g. **References.** References with details of work completed are to be provided.
- h. **Evaluation Criteria.** Proposals will be evaluated based on:

#### **Expertise & Qualifications (30%)**

- Those assigned to deliver this project reflect a diverse team of qualified individuals who will each have an active and intentional role in the work. There should be a balance of junior and senior level staff with the appropriate subject matter expertise engaged in this work.
- Demonstrates understanding of the project objectives and context, including clear ability to incorporate EDI considerations in all aspects of work and being able to clearly measure the impact according to the project's guidelines and objectives.
- Relevant experience and references in skills gap analysis and training framework development, particularly during significant sector/ industry transitions.

#### **Methodology (50%)**

- Proposed approach and methodology of the project is clear, detailed and feasible. Proposal includes the types of information and research that will inform the Consultant's report(s).
- Proposed approach has a strong responsive, proactive, and analytical strategy that demonstrates exceptional understanding for how to appropriately address skills gaps and workforce planning needs within the sector.
- How well does the proposal address RFP requirements?
- Management and organization of the assignment.
- Commitment to assignment timelines, deadline, and overall terms and conditions.

#### **Cost (20%)**

- Breakdown of costs by activity
- Justification of the budget line items

- j. **Submission Format.** Proposals are to be submitted in free form electronically in Word and PDF format. Please have proposals named as “Company Name Submission OVIN\_Reskilling\_Strategy\_RFP\_DD- MM-YYYY”. The receipt will be confirmed via e-mail.
- k. **Contact.** Send proposals submissions and any questions and additional information requests to Shannon Miller at [smiller@oc-innovation.ca](mailto:smiller@oc-innovation.ca). Please note that any responses may be shared with all potential bidders.

**Bidding Process and Schedule:**

1. The application deadline is **7 March 2024**.
2. Short-listed candidates may be invited for an interview.
3. Final selection is expected to be done by **21 March 2024**.

We reserve the right not to award the contract to any of those submitting proposals, and we may seek further responses.