



## Critical Industrial Technologies Sector Adoption Program

# Advancing Modular Housing Solutions

<b>Challenge Launch</b>	September 16, 2024	<b>Challenge Deadline</b>	October 15, 2024
<b>Available Funding</b>	<ul style="list-style-type: none"> <li>Up to \$1 million</li> <li>2:1 funding match by the Applicant Consortia</li> </ul>	<b>Timeline</b>	Maximum Project duration of up to 1 year
<b>Challenge Info Webinar</b>	<ul style="list-style-type: none"> <li>Wednesday September 18 2024 at 11:00AM</li> <li><a href="#">Register</a></li> </ul>		
<b>Challenge Statement</b>	<p>Modular housing promises a faster, more sustainable solution to housing crises. However, the sector remains relatively nascent in Canada compared to other countries. To realize its full potential, significant advancements in modular housing technologies are required.</p> <p>In recognition of this need the <a href="#">Critical Industrial Technologies (CIT) initiative</a> is launching the “Advancing Modular Housing Solutions” construction industry challenge.</p> <p>Interested company consortia are invited to pitch modular housing projects that harness the power of critical technologies (5G and advanced networks, AI, blockchain, cybersecurity, quantum, and/or robotics) that accelerate the development, adoption, and integration of modular housing technologies to create sustainable, affordable, and adaptable living solutions.</p> <p>The challenge encourages participants to explore novel approaches and advancements that will drive a significant shift in the construction sector and greater adoption of modular housing technologies.</p> <p>Solutions must integrate and /or adopt critical technologies and should develop and refine modular housing technologies to improve efficiency, durability, and cost-effectiveness. This includes innovations in prefabrication, materials, and construction techniques ranging from the design and manufacturing to assembly and installation of modular solutions. Examples include but are not limited to robotics for modular construction, AI for quality control or 5G-enabled devices for real-time comfort and efficiency monitoring.</p> <p>This is an exciting opportunity to bring innovative solutions, collaborative efforts, and groundbreaking ideas to transform the modular housing sector, ultimately contributing to a more sustainable and equitable housing future in Ontario.</p>		

<p><b>Project Details</b></p>	<ul style="list-style-type: none"> <li>• Applications <b>MUST</b> come from a consortia of partners who will work collaboratively to develop and demonstrate a solution that will have widespread adoption and impact on the Ontario manufacturing sector.</li> <li>• The lead applicant <b>MUST</b> be an Ontario-based SME and must meet the requirements identified in the Sector Adoption Program Guidelines.</li> <li>• At least one of the project partners <b>MUST</b> be an end user/customer of the resultant product/service</li> <li>• Projects must involve the integration, development, adoption and/or acceleration of at least one of the following critical technologies - 5G, AI, Blockchain, Cybersecurity, Robotics, Quantum.</li> <li>• Proposed projects can be enhancements to existing products/services or new products/services.</li> <li>• At least one Primary Partner should exhibit market ‘pull’ to help validate the readiness of the sector to adopt the demonstrated solution.</li> <li>• Project partners will be required to sign a letter of support and if approved the OCI project funding agreement.</li> <li>• Project activities need to be carried out in Ontario.</li> <li>• The Project partner consortia will be required to present to an external review panel as part of the full application process.</li> </ul>
<p><b>Project Outcome and Participation Benefits</b></p>	<ul style="list-style-type: none"> <li>• Projects <b>MUST</b> demonstrate how the project partners are making a significant impact on moving the advanced manufacturing sector forward in Ontario.</li> <li>• Create scalable solutions that can be easily replicated and deployed across multiple stakeholders -thus fostering widespread adoption and impact.</li> <li>• Successfully integrate one or more Critical Technologies, including 5G, AI, Blockchain, Cybersecurity, Robotics and Quantum into solutions supporting enhanced safety in the mining supply chain.</li> <li>• Demonstrate the solution(s) with an end user/customer to show industry acceptance and suitability for widespread adoption.</li> <li>• Foster collaborative partnerships between Ontario-based SMEs and industry partners, leveraging diverse expertise and resources to drive innovation and achieve shared goals.</li> <li>• Generate significant job creation and economic growth for the applicant companies and related industries, supporting Ontario’s broader economic development objectives.</li> <li>• Create opportunities for market expansion and business growth by introducing innovative solutions that meet evolving market demands and customer needs, both within Ontario and beyond.</li> </ul>