



The Ottawa Innovation Farm at Area X.O powered by AgExpert

The Ottawa Innovation Farm at Area X.O is a hub for sustainable agriculture innovation.

Powered by AgExpert, the Ottawa Innovation Farm is part of Area X.O, Ottawa's nextgeneration technology research and development complex supporting the testing, demonstration, and commercialization of innovative technologies. With a focus on sustainability in both profitability and environmental stewardship with a mission to advance adoption through knowledge transfer and collaboration, the Ottawa Innovation Farm offers a technology rich environment where Innovators, farmers and other stakeholders can collaborate, facilitate on-farm pilots and create pathways for widespread adoption of AgTech innovations. Ottawa's rich rural landscape comprising 80% of the city's land mass, coupled with our vibrant Tech community, creates an ideal ecosystem for a thriving Ag Tech community dedicated to sustainability, profitability, and environmental stewardship goals.



Empowering Advancement

Established by Invest Ottawa and the City of Ottawa in 2020, the Ottawa Innovation Farm at Area X.O powered by AgExpert, brings together autonomous systems, sensors, IoT technologies, telecommunications, big data, analytics, robotics, drones and CAVs on 100 acres of farmland to showcase the tangible benefits of tech-enabled farming solutions and best management practices. By making it possible for innovators to work directly with their stakeholders; farmers, regulators, investors, and industry experts, and by providing unfettered access to assets, and technical support through our world-class partners, the Farm empowers advancement in tech-enabled farming. Innovation lies at the core of the program's strategy, employing technologically advanced methods to facilitate highly efficient, data-driven decision-making. Through calibrated GPS guidance, drones, sensors, and precision machinery, farmers can optimize practices to enhance crop efficiency, reduce waste, and maximize sustainability.

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Simply being at Area X.O and with a team that supports and encourages innovation has been inspiring. It's also exciting to see autonomous vehicles, drones, and military equipment whizzing by in action at the site. Area X.O is a fantastic environment for anyone looking to work with cutting-edge technology and drive the future of smart mobility.

Rob Imbeault, Co-Founder, Heartee Foods Working with Area X.O has been an extremely positive experience on many levels. First, the Area X.O team. Just a delight to work with! Second is the space. We needed an area where we could muck around and be a bit messy, and they got us the perfect space. Finally, and arguably the most important... the networking and connections. I am always invited to present my company to many Area X.O visitors. Area X.O has been a pivotal partner in accelerating my company. I cannot thank you enough.

John Fielding, President & CEO, Nanobubble Control Systems

The Ottawa Innovation Farm at Area X.O powered by AgExpert:

- is the largest secure test facility in Canada located in the completely fenced and gated 1,866-acre Area X.O site.
- Features one of the most advanced, integrated communications test infrastructures in the world, equipped with GPS (RTK), C-V2X, WiFi, 4G/LTE, private LTE, LoRa, whitespace and 5G (including mmWave) telecommunications and networking infrastructure.
- operates in climate zone 5b offering innovators a unique set of conditions within which to test their technologies, and within an ecozone where most of Canada's corn is produced



Key focus areas include harnessing big data, advancing AI and machine learning applications, addressing rural connectivity challenges, and providing a platform for testing and demonstrating new technologies.

Data-Driven Solutions

The Ottawa Innovation Farm at Area X.O powered by AgExpert incorporates advanced technologies allowing agriculture leaders to make more data-driven decisions, improving cost and production efficiency, crop yield and quality, waste management, and overall farm management. In addition, the research complex also offers opportunities to simulate scenarios before real-world testing to reduce time, cost, effort, and risk. Remote sensing, interconnectivity, and data transmission rates can all be simulated using Ansys software and aerial or satellite scans can be used to simulate coverage of multispectral and hyperspectral cameras to assess crop health.

A Global Leader

In response to the Federal Government's 2022 directive to reduce greenhouse gas emissions associated with fertilizers by 30% below 2020 levels by 2030, the Ottawa Innovation Farm at Area X.O powered by AgExpert takes center stage. The Farm pioneers innovative farming practices accessible and feasible for adoption within the local farming community. As an example, by managing nitrogen (N) fertilizer applications, the R&D facility increases crop productivity while mitigating environmental contamination, especially crucial for high Nitrogen-demand crops like corn.

The Future of Farming

The Ottawa Innovation Farm at Area X.O powered by AgExpert is not just a testbed for agricultural technologies, it's a visionary project aligned with partner farms across the country to reshape the future of farming. By integrating data, advanced communications and sustainability, the research farm contributes to agricultural science, engineering, and computer science. As collaboration between diverse fields continues to flourish, new potentials in agriculture unlock, ensuring food security, sustainability, and resilience amidst global challenges.

Connect with Our Team

The Ottawa Innovation Farm at Area X.O powered by AgExpert allows AgTech entrepreneurs to put technology to work and leverage the top tech talent and agricultural expertise at every step of the way from testing and demonstration to commercialization.

<u>Connect with our team</u> today to find out more about how you can join our AgTech community at the Ottawa Smart Farm powered by AgExpert.

