



# Smart Greenhouse Living Lab



The CENG Smart Greenhouse Living Lab is located at DC Farms in Kingsville, Ontario. An active greenhouse that can host company technologies for validation in a real environment.



Canada's Agricultural Sector generated  
**\$111.9B** to GDP in 2016.



Agricultural demand in 2050 will be  
**50%** higher than it was in 2013.

## Driving Innovation in Agriculture

The Smart Greenhouse Living Lab is designed and funded to support Canadian companies in the testing and commercialization of smart agriculture solutions.

Each project will involve the testing of physical products in the living lab at the DC Farms site. Project companies will also have direct access to CENG's cloud infrastructure, allowing them to complete end-to-end testing of their solution; from device to hub at the living lab to their cloud platform running on the CENG cloud.

This opens the door for scale testing and validation of complex machine learning and artificial intelligence processing, mass Internet of Things (IoT) deployments and other technologies related to agriculture.

## Smart Greenhouse Living Lab Project Categories



Greenhouse  
Vegetables  
and Production  
Monitoring



Disease Detection



Harvest Optimization



AI Video Crop  
Monitoring

## LAB TECHNICAL INFRASTRUCTURE

The CENG Smart Greenhouse Living Lab will feature CENG owned wireless infrastructure, commercially available wireless services sourced through a local internet service provider (ISP), and an on-site mini-data centre for local bare-metal services and processing capacity.

## SUPPORTED APPLICATIONS

- Wireless IoT sensor deployments
- Mission-critical push-to-talk (PTT) and push-to-video (PTV) services
- Low-latency edge computing for remote and automated operations and drone surveillance
- Low-power sensor networks
- Robotic crop disease detection
- Financial or greenhouse business/productivity optimization

Validate Your Smart Agriculture Technology Solution in a Commercial Grade Infrastructure

Submit a Project: [cengn.ca/smart-agriculture-program](http://cengn.ca/smart-agriculture-program)



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