



Essex County Official Plan Amendment Review

Ontario Greenhouse Vegetable Growers

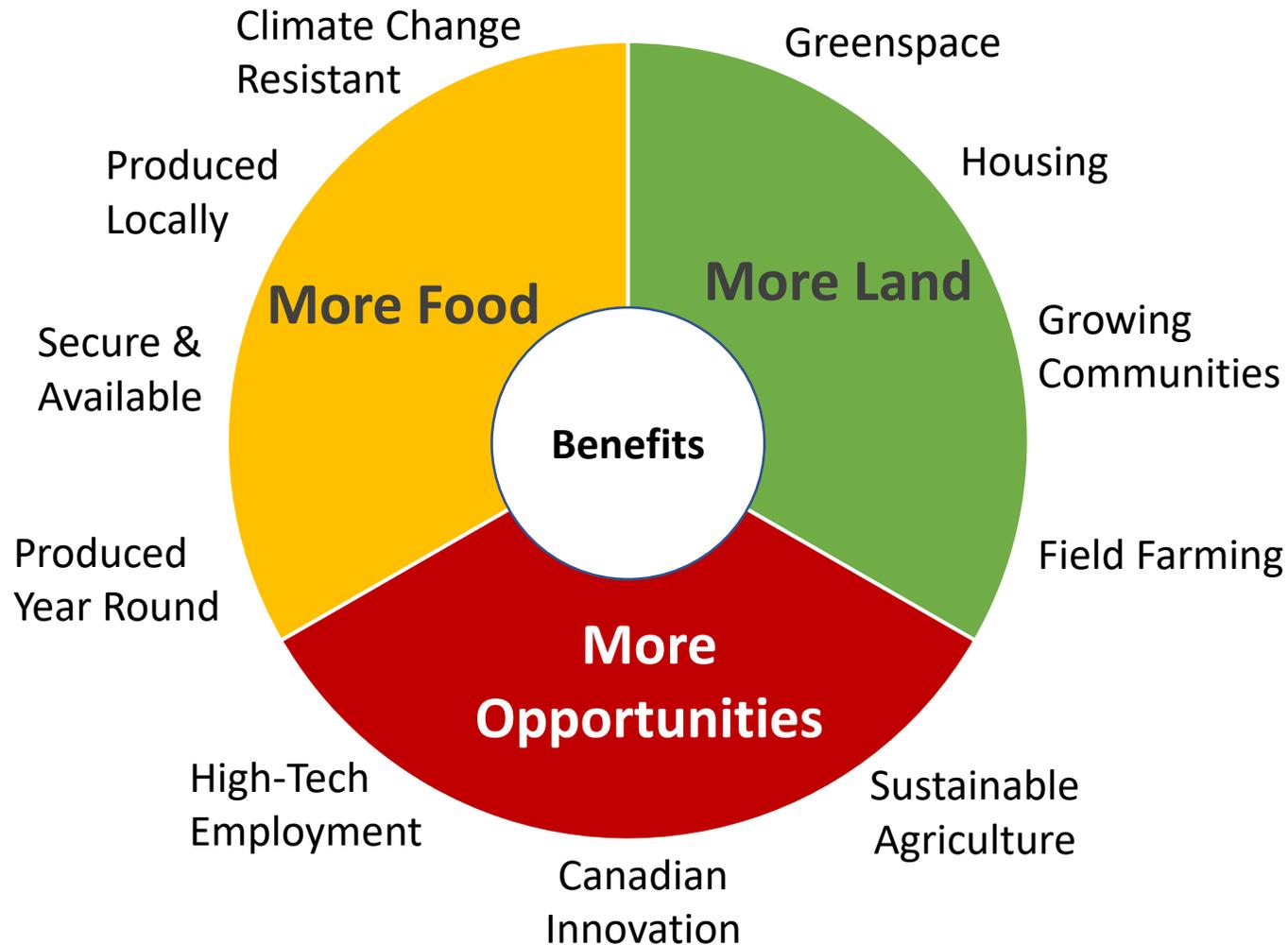
Official Plan = Land Use

- Protected Agriculture:
 - Highly Efficient Land Use
 - Climate Change Resistant
 - Food Security



Commodity	kg/m ²	lb/ft ²
Tomatoes	40.8	8.4
Cucumbers	50.9	10.4
Peppers	24.5	5.0
Lettuce	56.9	11.7
Eggplants	30.3	6.2
Strawberries	8.6	1.8

Greenhouse Goodness



Production Efficiency Compared to Field*

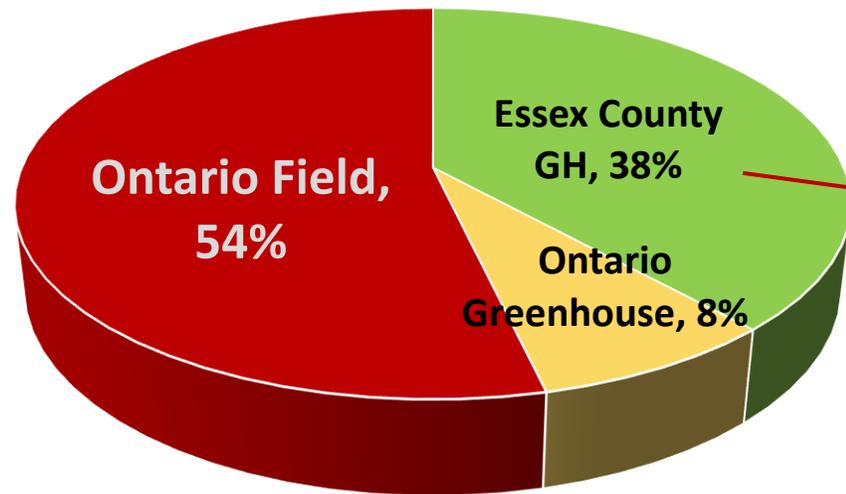
Tomatoes [†]	5×	 ONTARIO GREENHOUSE VEGETABLE GROWERS
Cucumbers	21×	
Peppers	8×	
Lettuce	36×	
Eggplants	22×	
Strawberries	11×	

*per weight basis

[†]some tomato varieties grown are smaller (cherry, cocktail, etc.) than field varieties which skews tomato production efficiency

Leamington, and Essex County, REMAIN the Tomato Capital of Canada!

**% of All Tomatoes, Cucumbers
and Peppers Grown in Ontario**



- Now add:
 - Sustainable Agriculture Capital
 - Protected Agriculture Capital
 - High Tech Agriculture Capital

More than 20% of all Canadian
Tomatoes come from Essex
County Greenhouses!



Valuable Efficient Land Use

Essex County	GH km ²	Eq Field km ²
Tomatoes	3.7	18.2
Cucumbers	2.8	59.5
Peppers	1.8	14.6
Total	8.3	92.3

Without greenhouses,
92.3 km² of field
would be needed to
maintain the same
level of food security!



Challenges from Technology, NOT Farming

- Lighting technologies have advanced faster than society was ready
 - This is normal, it happens with all technologies.
-

- 1997 Consumer Cell Phones become more common
Bell Mobility installs its digital wireless network in Ontario and Québec.
- 2003 Cell Phone are relatively common and distracted driving is in full swing
- 2007 Consumer Model Smart phones start appearing
- 2009 Legislation is past to prevent talking (and texting) while driving
12 YEARS after cellphones were introduced

*78.1 (1) No person shall drive a motor vehicle on a highway while holding or using a handheld wireless communication device or other prescribed **device that is capable of receiving or transmitting telephone communications**, electronic data, mail or text messages.*

Challenges from Technology, NOT Farming

1860s Lighting Plants documented in academic journal (France)

Mangon, H. 1861 Production de la matière verte des feuilles sous l'influence de la lumière électrique Compt. Rend. Acad. Sci. Paris

2000 First commercial use of LEDs for plant production in Japan

2010 Lighting was adopted on a larger commercial scale.

Facilitated by Double Ended Light Fixtures

Regulations:

2020 Proposals & Adoption of Lighting By-Laws in Leamington & Kingsville

2023 Adoption of Lighting By-Laws in Chatham-Kent

Technology led regulation.

Just like with Cell Phones, Education and Collaboration is paramount to build a better tomorrow.

<https://www.greenhousecanada.com/four-decades-of-change-and-innovation/>

Challenges from Technology, NOT Farming

- Future Challenges:

- Automation reducing projected labour needs
- Machine learning & AI reducing personnel needs
- Energy recovery reducing demand
- Others we do not yet see today!



In closing, the official plan is a **plan for tomorrow** as much as it is a plan for today.

Greenhouse agriculture has changed and developed from extending growing seasons by a few months to allowing efficient year-round production.

Greenhouse practices are local, high-tech, sustainable and will continue to evolve.



THANK YOU