

Increasing Electricity Use in Ontario's Greenhouse Sector

180%

forecast over 5 years to 2024

1.4 TWh to 3.9 TWh in electricity use by greenhouses

Driving Factors:



More vegetable and fruit greenhouses



More lighting in vegetable and fruit greenhouses



Cannabis ramp up from using 10% to 100% of growing space

10x
more electricity

Used by a lit vegetable greenhouse than an unlit vegetable greenhouse

752,000 MWh
for lighting in 2018

The largest electricity draw for greenhouses, more than all other greenhouse electricity uses combined

100%
increase by 2020

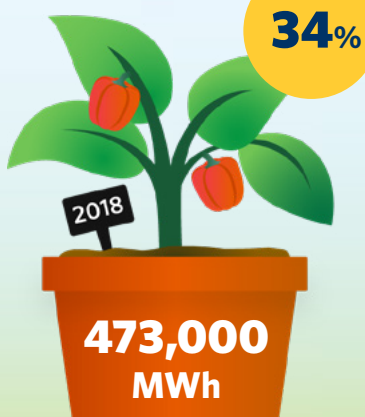
In lit vegetable and fruit greenhouse area

Total greenhouse electricity consumption in 2018 vs 2024 forecast

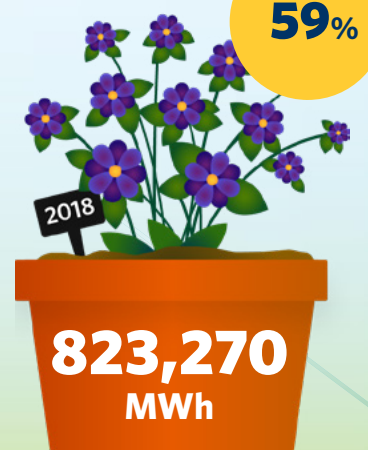
Percentages represent electricity use by greenhouse category



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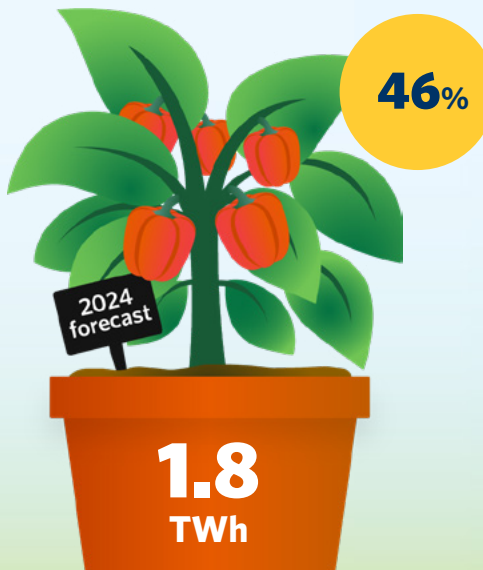
VEGETABLES & FRUITS



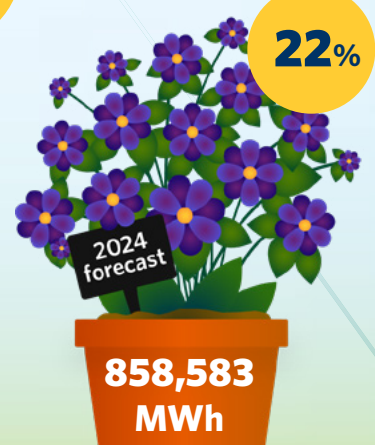
FLOWERS & POTTED PLANTS



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VEGETABLES & FRUITS



FLOWERS & POTTED PLANTS

1,253%

282%

4%

Increase over 5 years

Electricity savings of 230-550 GWh a year by 2024

if new grow lights use LED instead of HID**

Learn more about energy efficiency programs at SaveOnEnergy.ca

35-55%
energy savings
from LED
grow lights

Southern Ontario's Prime Growing Regions

- Essex
- Norfolk
- Chatham-Kent
- Niagara

80.7 million sq. ft.

Greenhouse area in southwestern Ontario's Essex County, the largest concentration of vegetable greenhouses in Canada and the U.S.

[Greenhouse Energy Profile Study](#)



*includes indoor cannabis facilities

** LED is light-emitting diode; HID is high-intensity discharge lighting.

This study by the Posterity Group was funded in partnership with Enbridge Gas and the Ontario Greenhouse Vegetable Growers.