

# Community Energy Plan

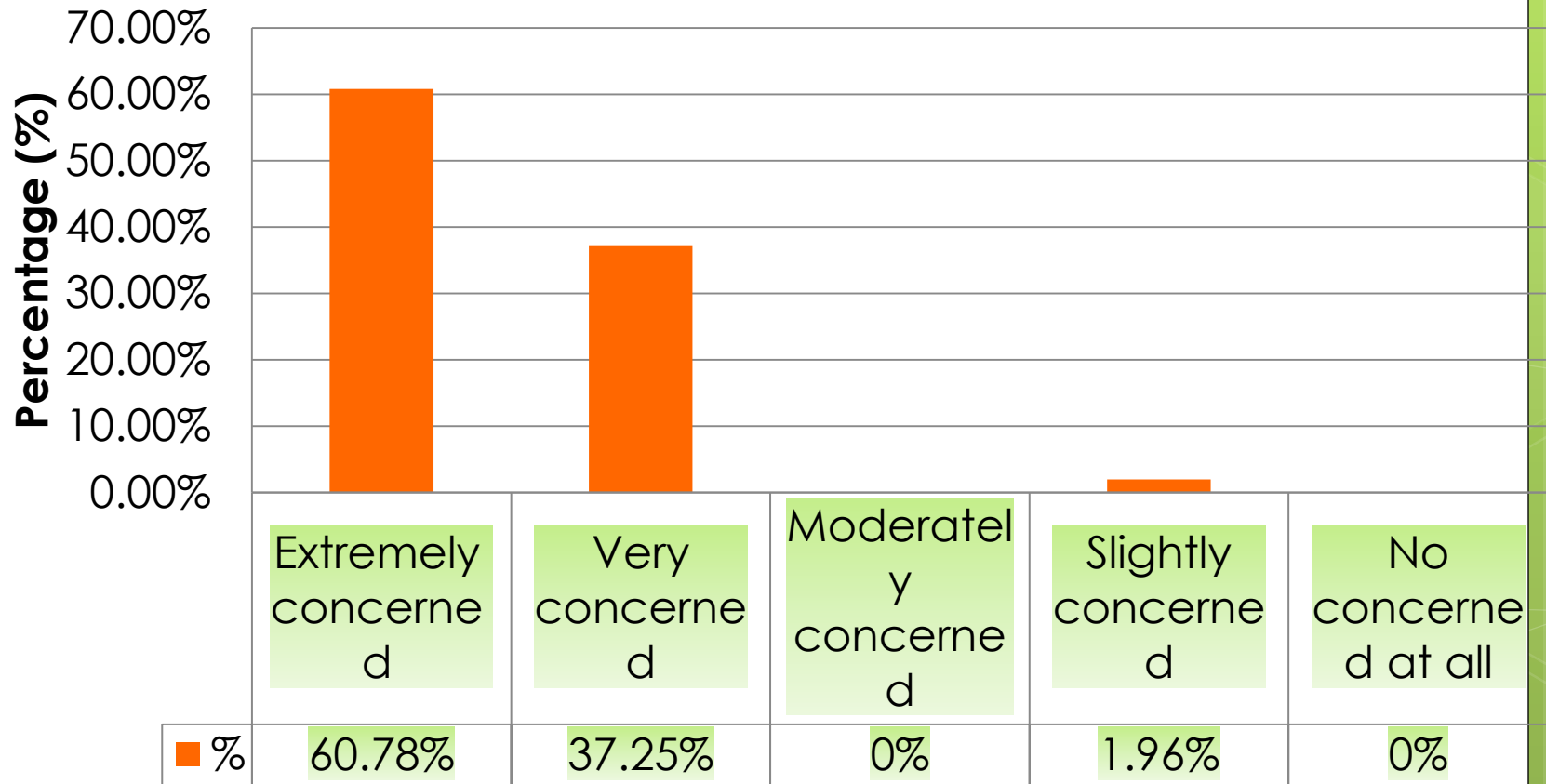
**Stakeholder Meeting**  
**25 October 2016**  
**7pm – 9pm**



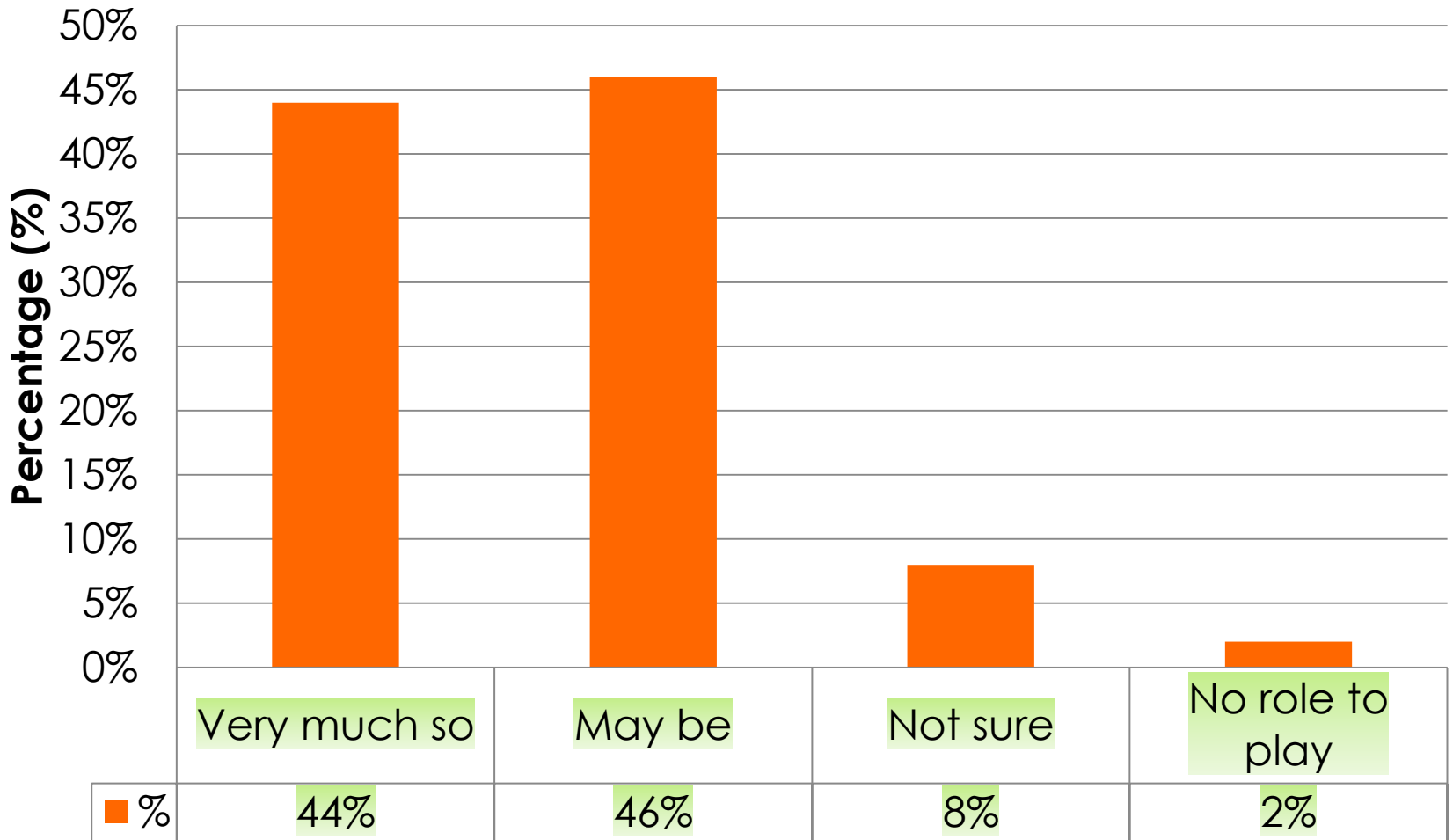
# Outline of Presentation

- Outcome of Online Survey
- What is CEP?
- Energy Efficiency Status Quo of Middlesex Centre
- Where do we go from here?

# How concerned are you about your energy cost?



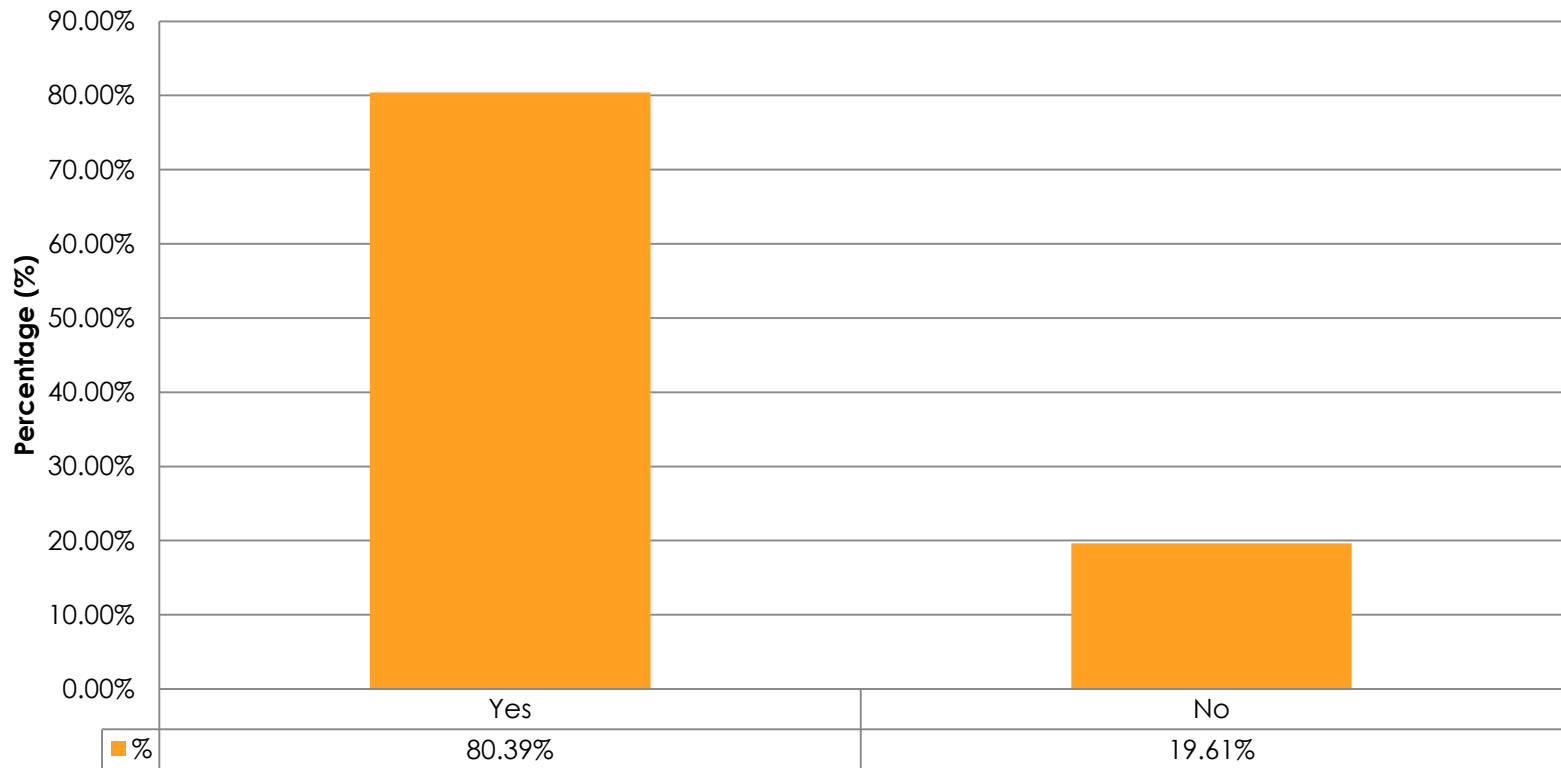
# Do you think there is role to play to reduce energy cost?



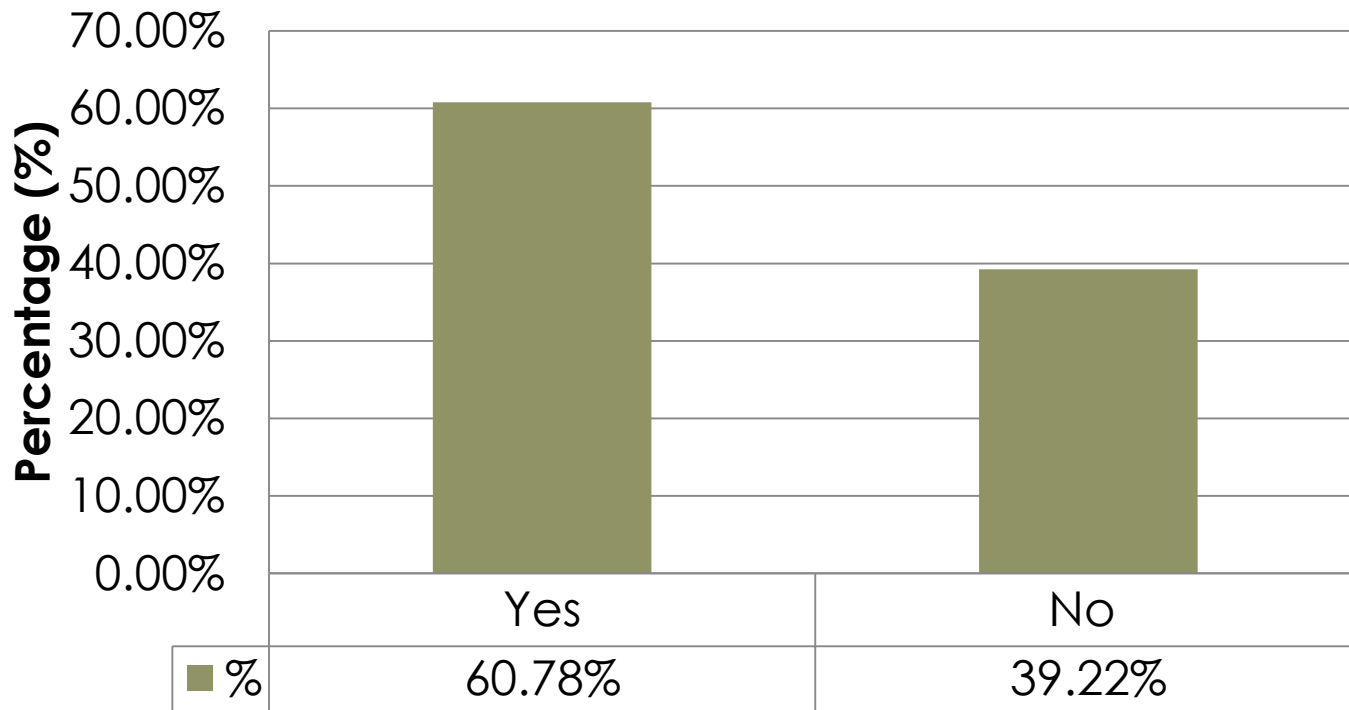
# Have you considered ways to reduce energy consumption?

- *Limiting use to off peak hours as much as possible. Would like to have solar energy options but is not affordable for us as a family of 9.*
- *Led lighting, improving thermal efficiency in dwelling, timers*
- shifting time of operations to off peak times
- Purchasing an electric vehicle , using only led lighting , solar pool heating
- Energy Audit, new furnace, tankless hot water, led lighting
- Setting up our own solar or wind power source
- LED Lighting, programmable thermostat, programmable lights,
- solar energy generation; net metering
- Off grid generation of power using our own NG generators.
- Switched to gas water heater, reduce AC use in summer
- VFD's, generation of electricity,
- Etc, etc. etc....

# Are you interested in learning about *Net Metering* program?



# Are you interested in learning more about 'Behind the Meter' projects?



# Why Community Energy Plan?

A comprehensive long-term plan to:

- Improve energy efficiency
- Reduce energy consumption and greenhouse gas emissions
- Foster green energy solutions
- Support local economic development

***The Four Pillars of CEP!***





# Energy Efficiency @ Middlesex Centre

- Conversion of 804 HPS street lights to LED
- Reduce energy cost for municipality
- Operational and maintenance savings of \$97,000 per annum
- Pay back of 4.5yrs
- \$85,000 incentives from HydroOne



# Municipal Office/Community Centre

- Conversion of T12/Halogen Bulbs/CFL to LED
- Total Energy Saved: 67,655kWh
- Simple Pay Back: 1.2yrs
- Operational Cost Savings: \$8,795.12 per annum
- \$5,507 incentives from HydroOne



# Net Zero Energy/Carbon Fire Hall



# Energy Demand of Fire Hall

- Funding from FCM – Green Municipal Fund
- Appx. 9,900sq/ft fire hall
- Annual Energy Demand: **55,800kWh**
- On-site Energy Generation: 60kw Solar PV System – **70,600kWh**
- Enough renewable energy to off-set annual energy load of building.

# Financial Returns

<b>Net Present Value</b>	<b>\$124,644</b>
Net Savings	\$366,021
Internal Rate of Return	9%
Simple Pay Back	9yrs

# Benefits to Middlesex Centre

- Reduced operation cost of property
- Lesser hydro bills (reduce/eliminate electrical peak demand)
- Greater occupant comfort and improved indoor air quality
- Regulation 397/11 expectation to reduced energy consumption and GHG emissions
- In supporting of Provinces' Climates Change Action Plan - Target of net zero housing by 2030

# Going Forward.....

How do we extend such initiatives to all sectors of municipality?

- Residential
- Commercial/Business
- Industrial
- Agriculture

Lets have a conversation!!!





Please send Comments:  
[tham@middlesexcentre.on.ca](mailto:tham@middlesexcentre.on.ca)  
519-666-0910 ext. 269