



MEETING MINUTES

2021 ENERGY LEADERS CONSORTIUM MEETING #3
VIRTUAL ROUNDTABLE
MARCH 11TH, 2021

IN ATTENDANCE

Members

John Spence	Canadian Tire	john.spence@cantire.com
Ashish Patel	GTAA	ashish.patel@gtaa.com
Behzad Hosseinpour	Maple Leaf Foods	behzad.hosseinpour@mapleleaf.com
Mary Bianco	Maple Leaf Foods	mary.bianco@mapleleaf.com
Patrick Huynh	Maple Leaf Foods	patrick.huynh@mapleleaf.com
Katelyn Poyntz	Unity Health Toronto	poyntzk@smh.ca
Darren Borden	Weston Foods	darren.borden@westonfoods.com

Guests

Chun Liang	City of Brampton	chun.liang@brampton.ca
Quentin Chiotti	Metrolinx	quentin.chiotti@metrolinx.com
Lulu Li	Metrolinx	lulu.li@metrolinx.com
Phil Dick	OMAFRA	phil.dick@ontario.ca
Adam Vaiya	Region of Peel	adam.vaiya@peelregion.ca

Staff

Nathaniel Magder	TRCA	nathaniel.magder@trca.ca
------------------	------	--

REGRETS

Prasath Vinayagamoorthy	3M	pvinayagamoorthy@mmm.com
Michael Scott	Flynn Products	michaell.scott@rescoenergy.com
Evan Grant	Grupo Bimbo Canada	evan.grant01@grupobimbo.com
Craig Rock	GTAA	craig.rock@gtaa.com
Thomas Skelly	Kingspan Group	thomas.skelly@kingspan.com
Shahrul Huda	Lincoln Electric	shahrul_huda@lincolnelectric.com

Leaya Amey	Maple Leaf Foods	leaya.amey@mapleleaf.com
Antonio Mayne	Molson Coors	antonio.mayne@molsoncoors.com
Doug Dittburner	Molson Coors	doug.dittburner@molsoncoors.com
Khalil Daniel	Molson Coors	khalil.daniel@molsoncoors.com
Adrian Khan	Mother Parkers	akhan@mother-parkers.com
Kwame Danso	Mother Parkers	kdanso@mother-parkers.com
Nicole Savard	Pratt & Whitney Canada	nicole.savard@pwc.ca
Ron Robinson	Pratt & Whitney Canada	ron.robinson@pwc.ca
Paul Saliba	Lincoln Electric	paul.saliba@lincolnelectric.com
Chris Hood	Lincoln Electric	chris_hood@lincolnelectric.com
Aaron Wouters	Trillium Health Partners	aaron.wouters@thp.ca
Emily Huang	Unity Health Toronto	huangyir@smh.ca

AGENDA

2:00pm-2:05pm: PPG Introduction

2:05pm-2:25pm: City of Brampton's Low-Carbon Design of a Recreational Centre

2:25pm-2:40pm: Unity Health Toronto Crowd-Sourcing Ideas for New Hospital Wing Project

2:40pm-3:30pm: Group Roundtable

FOLLOW-UP ACTIONS AND COLLABORATION

- Adam to share analysis of IESO projections for future grid carbon energy emissions
- Patrick is seeking Anaerobic Digestion vendors, various members of the group will reach out offline
- Nathaniel to reach out to Patrick for information on wetland restoration carbon offset offering

MEETING MINUTES

#1 – PPG Introduction

Nathaniel reviewed upcoming ELC events, including:

- **Low Carbon HVAC with Modern Niagara (Apr 1):** Presentation of Net Zero Carbon retrofit at a recreation centre near Ottawa. The facility utilizes electric thermal technologies for both heating and dehumidification.
- **Resilience and ESG (Apr 15):** A discussion of preparing for climate impacts from the view of the insurance industry.

#2 – Presentation: Brampton and MCW Low-Carbon Design for Recreation Centre Retrofit

Chun Liang (Brampton) presented the retrofit design project alongside the consultants leading the design and energy modelling, Steve Burton and Mark McVan (MCW).

The presentation highlighted:

- 3 designs for each of 50%, 80% and 100% carbon reduction (total 9 designs)
- District energy and wastewater heat recovery potential
- End-of-life equipment makes it easier to justify replacement costs
- Using a battery to push the site into Class A, while the battery being under 500kW means interconnection with the utility grid is easier
- Parametric energy model was created to assess performance
- Ground source heat pump was a important factor in achieving optimum energy performance design
- CO2 refrigerant

Group comments included:

- New potential TSSA regulations could mean operating ammonia plant will become more costly
- It will be important to manage messaging around CO2 refrigerant, so that people understand how using CO2 as a refrigerant actually reduces emissions ‘

Contact information for MCW presenters:

Steve Burton P.Eng. | Associate
MCW Custom Energy Solutions Ltd.
O: (416) 598-2920 ext:493 M: (647) 449-9898
E: SBurton@mcw.com

Mark McVan | Associate
MCW Consultants Ltd.
O: (416) 598-2920 ext:269
E: MMcVan@mcw.com

#3 – Presentation: UHT Healthcare Facility Wing Reconstruction

Katelyn Poyntz presented a project at Providence Long-Term Care facility to demolish and rebuild a wing of the facility. The project is in the nascent stages of design and is seeking opportunities to improve energy performance.

Energy performance assets being considered so far include:

- Solar wall
- Green roof
- Wastewater heat recovery
- Resilient design of grounds to manage rainwater on site

Suggestions from the group included:














- Commissioning an energy model
- Avoiding use of steam in place of hot water or glycol loop
- High albedo (reflective) rooftop

#4 – Roundtable Discussion: Conservation Projects

Roundtable discussion where members give updates on current projects and share recent successes, challenges and related tools and resources.

Below is an overview of energy projects identified at meetings that are currently being evaluated, are underway or recently completed. The purpose of this working document is for members to identify others in the group that are working on similar projects.

PROJECT SYNERGIES – Energy Leaders Consortium

													
Battery Storage	●							●	●	●			
Biogas								●	●				●
Boilers	●			●	✓	●	●	●	✓	●	●	●	
Building Automation Systems (BAS)		●		●		●			●	●			
Cogeneration				✓									
Compressed Air	●	✓	●			●	●	●	●	✓			●
Continuous Commissioning				●					●	●			
Corporate Energy/Sustainability Strategy							✓		●	✓		●	●
Energy Monitoring		●	●	✓	●	✓	✓	●		●	●	●	●
Employee Engagement			●			●	●	●		●	●	●	●
Energy Star Certification	●									●		●	
Electric Vehicles (EVs)		●	●	●					●			●	
Forklifts		●					●						
Heat Recovery	●							●		✓	●		
Hydrogen		●											
Insulation Upgrades								●		✓			
ISO 50001 Certification			●		✓							●	
Lighting	●	✓	●	●	●	●	●	✓	●	●	●	●	✓
Low-GWP Refrigerants	●												●
Peak Curtailment								●	●				●
Power Quality				●		●			✓			●	
Process Efficiency						●		●					
Pumps and Fans			●							●	●		
Refrigeration Plant				●		●	●				●	●	
Renewable Energy Procurement / Carbon Credits	●						●		●				
Solar PV (On-Site)			●	●		●							
Solar Thermal				●									
Sustainable New Construction				●							●		
Waste Management	●					●			✓		●		●
Water Efficiency				●		●	●		●			●	

-  In Progress
-  Completed

CITY OF BRAMPTON

Energy Star

- Working to improve Energy Star scores for City Hall campus.
- East Tower is in mid-70s and West is in Mid-80s, looking to improve West Tower into the 90s using operational improvements only.

GTAA

Solar

- Exploring expansion of successful pilot of panel installation along 401 corridor

Lighting

- Looking into upgrade project of the Administration building

Heat Recovery

- Exploring sewage wastewater heat recovery system

Energy Monitoring

- Evaluating remote monitoring systems

REGION OF PEEL

Sustainability Strategy

- Looking to join the growing group of municipalities who are advocating the provincial government to seek alternatives to natural gas for future grid mix, as this will make a huge impact on achieving municipal community emissions targets.
- Internal analysis shows that carbon emissions from Ontario's electricity grid will increase by 4x by 2040, according to IESO projections.
- Underwent a project to target poor performing buildings and integrate energy performance upgrades into capital planning process

Sustainable New Construction

- Evaluating design for net zero new building, capital cost premium of only \$1.2M

EV Chargers

- Installing 35 charging stations this year

Waste-to-Energy

- Anaerobic Digester construction project is underway

MAPLE LEAF FOODS

Sustainability Strategy

- New hire complete for Heritage Plant Energy Manager position (welcome Behzad!)

Battery

- Aiming to complete by 2022 GA-period.

Waste-to-Energy

- Evaluating opportunity for biodigester for animal waste from Alberta hog farm facilities.

Carbon Offsets

- Looking at vendor who supplies offsets from wetland restoration projects

Refrigeration

- Large project last year at Heritage facility ammonia refrigeration plant (one of the largest units in the country) achieved massive carbon reductions

UNITY HEALTH TORONTO

Sustainable New Construction

- Advising on construction of new hospital wing

WESTON FOODS

Sustainability Strategy

- Current project underway, public announcements to be expected soon.

Refrigeration

- Looking to achieve \$100k annual savings just from changes to the way the plant is controlled, leveraging HOEP overnight vs. daytime prices.

Energy Star

- Darren featured in video by NRCAN ([LINK](#))

