



JML Electric Inc

Commercial • Residential • Electric Vehicle Charging



***Prepared for:
Future Retail Group***

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JML Electric Inc. – Background...

- **Joe Edwards – Owner/ President** >>> - 24 Years in business...
- About 7 years ago, JML started our foray into EV Infrastructure (EVI) or EVCS. Reputation and momentum has gradually built to where it is 70% or more of our business today, along with small solar - often tied to / into EVI, sustainability / back-up power (BUP/UPS) systems and LED Lighting retrofits in large commercial facilities.
- Joe was the first electrician certified in Toronto / Ontario by the only firm in the business at the time – Eaton.
- **Dave Rowlison – Director** >>> Urban Planner by education - having spent 17+ years in the siting of telecom facilities for Bell & Rogers, 7 years in municipal government and 5 years in solar for a large LDC prior to 'marrying' his automotive and sustainability interests - culminating in the EVCS / EVI realm 7 years ago.
- Over 7+ years – JML has undertaken over 1700 installs - ranging from single residential, to multi-residential / commercial use buildings (MURBS), large commercial complexes in both Level 2 & Level 3 DCFC projects as well as SLA Agreements.
- Our client list reads like a who's who of the automotive, institutional and property management realm – a sampling of which comprises...

- BMW Canada
- KIA Canada
- TESLA Motors Inc.
- Jaguar-Landrover Canada
- Volkswagen / Audi Canada
- Brookfield Property Management
- Cadillac Fairview
- Morguard Properties
- Suncor – Petro Canada
- Panasonic Canada
- Longo's Bros Fruit Markets Inc.
- Michael's Canada
- St. Joseph's Health Centre – Toronto
- Humber River Hospital
- University Health Network Hospitals

- Agriculture & Agri-Foods Canada (AAFC)– Fed Gov't
- Shangri-La Hotel
- Windsor Arms Hotel & Residences
- Crossbridge (Brookfield) Condo Services
- Tridel Condo Services
- Province of Ontario
- City of Barrie
- City of Brampton
- City of Niagara Falls
- City of Peterborough
- City of Toronto
- County of Oxford
- County of Essex
- Region of Peel

Major Accomplishments within the Private Sector

- ★ **Suncor-Petro Canada - BTCPower** installation partner on the first L3 DCFC 'Super' (250kW unit) site
- ★ **Installation experts of Tesla Wall Connectors** for both residential - new vehicle owners and Destination Charging / Workplace Program infrastructure in southern Ontario... 2013 in the GTA / Southern Ontario
- ★ **Brookfield Properties / Crossbridge Condo Services** – various MURB locales across the GTHA
- ★ **Cadillac Faiview** - Partnership with AddEnergie/FLO >> various big box/shopping Centre L3/L2 multi EVSE Installations – Cadillac Fairview, Canadian Tire, Pen Equity Mgmt
- ★ **Morguard Properties** – Bramalea City Centre & The Colonnade - Toronto
- ★ **BAKA Communications >> 10 EV Charging stations along with the GTA's first major Solar Carport (40kW)** - complementing the EV Chargers energy consumption and reinjecting energy into the grid.
- ★ **Hilton & Hilton Garden Inn Brand, Choice Hotels, Marriott Hotels** - Involved on a mass basis with various hotel chains within Canada
- ★ **TDL Group – Tim Horton's** - Involved in a major 'trial period' for chargers - 2013
- ★ **BMW Canada, Audi Canada, Hyundai Canada, KIA Canada and Mercedes Benz Canada Corporate** as well as many 'one - off' dealer store sites
- ★ ***Major new partnerships with two of Canada's most successful 'big box' retailers – Canadian Tire - where JML is currently undertaking sites with CTCRE / Petroleur***



Major Accomplishments within the Public Sector

- ★ **Awarded major Agriculture Canada(AAFC) RFP – March 2016** – First federally related EVSE (EVI) project at a national level – Four sites across Canada (Quebec to BC) involving numerous Level 3 and Level 2 EV chargers, as well as a 2nd major project Q3 – 2018 with AAFC.
- ★ **Awarded the very first ‘EV Charger Ontario’ (EVCO) Program deal (March 2016)** at a St. Joseph’s Health Centre – Toronto. Entailed Level 3 and Level 2 chargers across this campus – which JML Energy Solutions actually owns and operates.
- ★ **Above has lead to more hospitals >> 2018/19 >>** University Health Network (UHN), Sunnybrook
- ★ **2014-2018 >> City of Brampton** – Initial eight (8) EV charger across 4 sites in the downtown CBD area – and was awarded a further 4 sites(2017) and solar carports at a major community centres and is now (Spring 2018) working on more Provincial Awards (WEVCIP) with City of Brampton.
- ★ **2018 > City of Barrie** – Multiple Level 2 EVI sites for Tesla Motors Inc. & City of Barrie
- ★ **2017 - 2019 >> Region of Peel** – Multiple L3 and L2 site awardee for two major \$500k ea. projects
- ★ **2011 >> City of Toronto** – Initial EV charging pilot project – 30+ EV units across various City sites
- ★ **2016-2018 >> Major ‘teaming’ with AddEnergie/FLO** to address EVCO Program and other multi-municipal - regional EVI opportunities en mass at the **City of Peterborough, Oxford County (Woodstock & Ingersoll), Town of Essex, Cadillac Fairview, Canadian Tire, etc.**



AddEnergy Charging Stations

- ✓ Designed for harsh weather
- ✓ Built to last
- ✓ Modular installation
- ✓ Scalable
- ✓ Corporate branding
- ✓ Pricing thresholds dependant on quantities:

- ❑ Core+ (L2) >> ~\$3400 ea. + pedestal
- ❑ SmartTWO (L2) >> ~\$4900
- ❑ SmartDC (L3) 50kW DCFC >> ~\$47,000+





Residential



Multi-residential



Workplace



Fleets



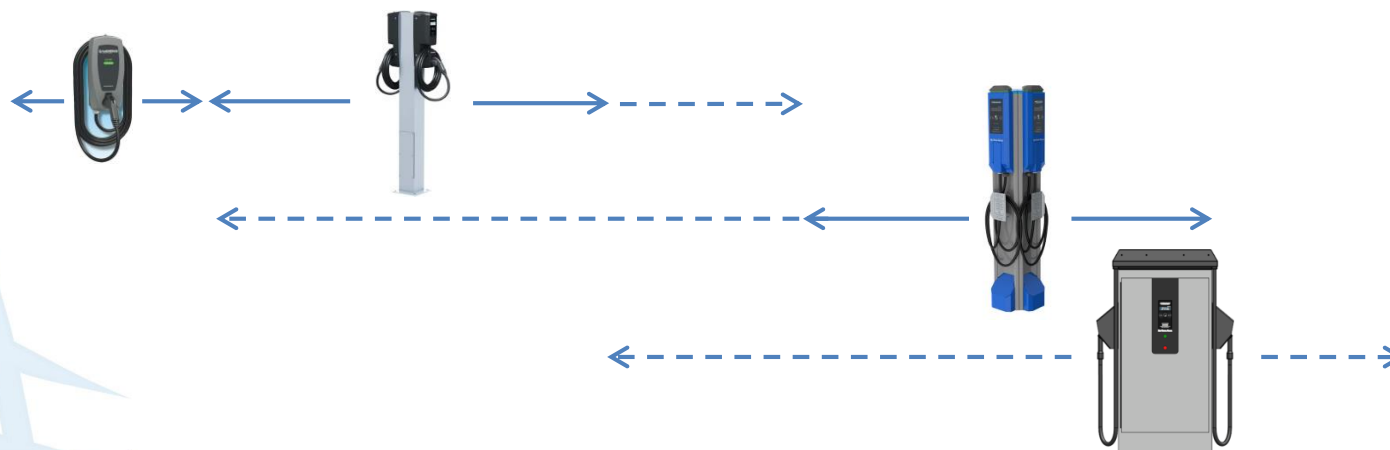
Public Parking



Rest areas



Service Stations



ChargeLab – JML Electric > Partners in Large Application Solutions



chargelab.co
1 (800) 636-0986

Your Dashboard



Once your EVCS are connected to ChargeLab's management platform, you can monitor and configure your charging stations through a web-based dashboard. You will be given a unique URL and login to access your dashboard. The ChargeLab dashboard can be accessed using any modern web browser on most devices (Chrome, Firefox, Safari, Microsoft Edge).

ELMEC Chargers

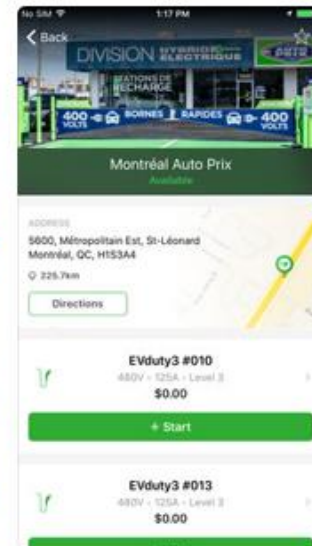
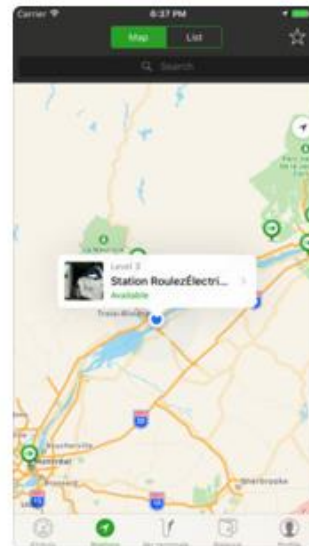
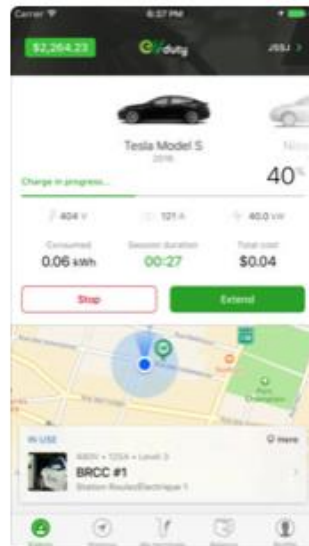
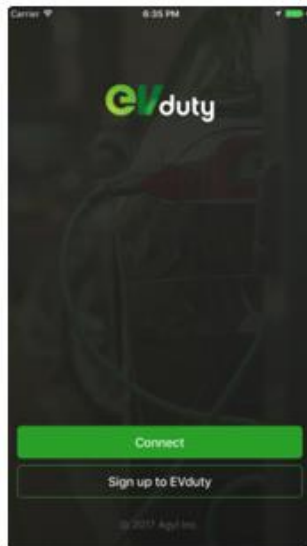


EVduty

EVC30 SERIES

ELECTRICAL VEHICLE
CHARGING STATION
LEVEL 2

BJM-1019
V17042-230217



BOSCH - Charging Stations



**BOSCH – Home wall
mount units ~\$800-900**

**Commercial networked
L2 units - ~\$2500-\$4000**
- Single & dual pedestals

AND

24kW L3 DC Fast Charger
(here w/ Chargepoint
Logos) - ~\$17,000



Overhead - Networked Charging Stations



Overhead Charging Solution

- ✓ Vandal / tamper proof
- ✓ Trip and fall proof – self recoiling
- ✓ No bollards required to protect against ‘bumping’
- ✓ Mounts directly or with ‘Unistrut’ mount system
- ✓ Operational with / in numerous payment systems - networkable
- ✓ Handicapped / Assisted persons’ - enabled system

BTCPower / CHARGION



- *George Brown College – Toronto* (above)
- *Suncor-Petro Canada - Milton* (right)



Commercial networked L2 units - ~\$2900-\$4500

>> Single & dual pedestals

50kW - 100kW L3 DC Fast Charger Dual Mode - ~\$29,000+

>> CCS & Chademo

300kW – ‘SuperFast Tower of Power’ DCFC Charger – \$ - TBD

>> Totally custom configurable per order (** **FIRST in Canada & new for 2019!!** **)

7+ years of EVCS / EV Infrastructure Experience



7 years of EVCS / EV Infrastructure Experience



- ✓ Level 2
- ✓ Level 3 DCFC
- ✓ Level 3 DCFC Extreme (250kW)

Solar Carports and Charging Shelters



- ✓ 100% Canadian made
- ✓ No ground (surface) penetrations – movable in future
- ✓ 22' (5.95m) clear to lower underside
- ✓ Modular in sets of 2 spaces – 5-7kW each
- ✓ Many upgrades available... (LED lighting, powder coating, enclosed raceways, signage panels, etc.)



JML Electric Inc

Commercial • Industrial • Residential • Service



JML, through our engineering partners has capability to undertake turnkey solar carports in almost any size and has undertaken 7-8 such structures in concert with EV Charging across Ontario in the past 4-5 years.

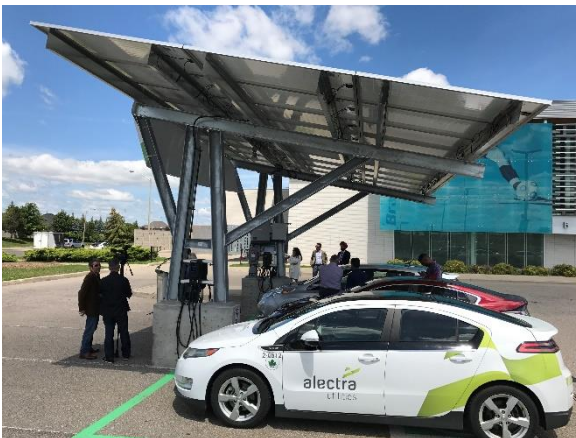


Mono-slope, South Foundation, 1 stall deep

Solar Carports and Charging Shelters



BAKA Communications – Hwy 427/Rathburn, Etobicoke – JML's first solar carport and in fact - first in Canada! >>>> has lead to many others... Panasonic, City of Brampton, Wilfred Laurier, etc.



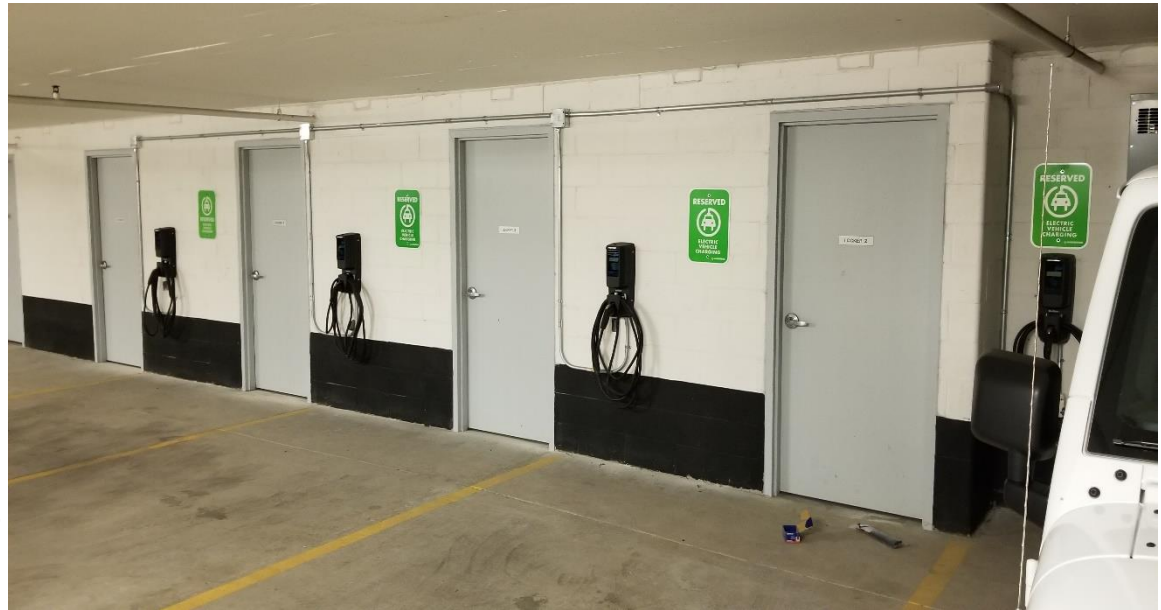
Back-Up Power & Uninterruptible Power Supplies



JML Electric Inc. – Case Studies

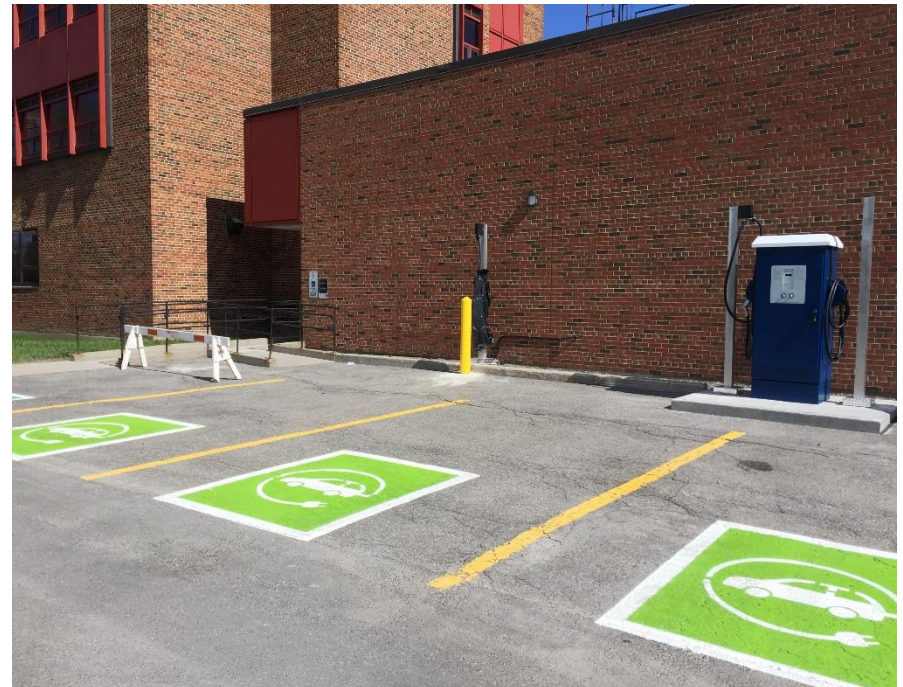
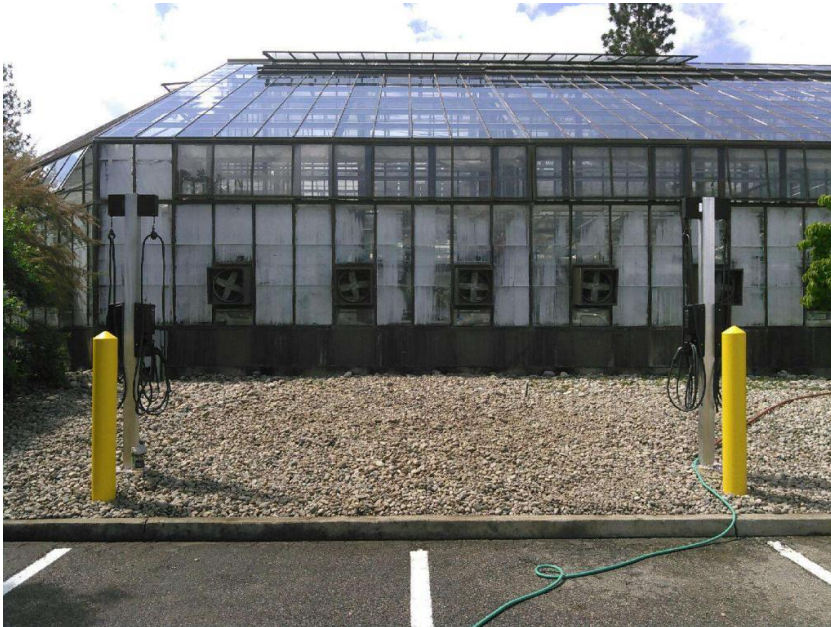
■ Brookfield Properties / Crossbridge Condo Services

- Ability to serve commercial, residential and mixed use high-rise developments successfully within constrained energy environments of
- Whitepaper undertaken in conjunction with Brookfield on the ‘proper’ – most appropriate manner in which to undertake high-rise EV Charging
- ‘Community Charging’ in multi-unit properties where importance as far as Pay Per Use (PPU) equity and ‘non EV driving’ resident equity is of concern.
- Dedicated areas for EV charging activities **“Charge then Move It...”**
- Crucial building circuits protected and safeguarded.
- Will never be feasible to afford every resident in a multi-story building, a charger of their own!



JML Electric Inc. – Case Studies

- **Agriculture & Agri-foods Canada(AAFC) Federal Government**
 - Responded to RFP's, was awarded and successfully built-out numerous sites Canada wide - in order to cater to new EV transportation adoption initiatives by AAFC from 2015 through 2018
 - Numerous (in excess of 35-40) Level 3 DC Fast Charger & Level 2 units to accommodate newly acquired vehicles
 - St. John's Newfoundland to Kelowna BC. – concentrating on most appropriate manner in which to undertake high volume fleet solutions
 - Free – tracked charging to fleet AND Pay Per Use (PPU) solutions to staff and public.
 - Crucial building circuits protected and safeguarded.



JML Electric Inc. – Case Studies

■ IKEA Canada

- Sustainability Marketing & Branding benefits
- 'Community optics'
- Additional shoppers / diners = longer duration Shopping Trips – Greater Spend in store!
- IKEA Have not followed through with parking enforcement AND maintenance =>> BAD Customer Experience (for the most part...)
- Giving their energy away for FREE – causes many issues (*charge a 'token' amount and give to a cause... reduces abuse*)
- Delta L3 DCFC's - problematic



JML Electric Inc. – Case Studies

- **Tim Horton's Canada >>>> One of JML's first 'big name' clients!!**
 - Sustainability Marketing & Branding benefits – 'dual prong' approach – parking lots for customers
 - 'Community Optics'
 - Additional diners/shoppers – who they wouldn't get otherwise AND Retain guests in restaurant/store longer = Greater Spend
 - Incremental Revenue Stream... through Pay Per Use

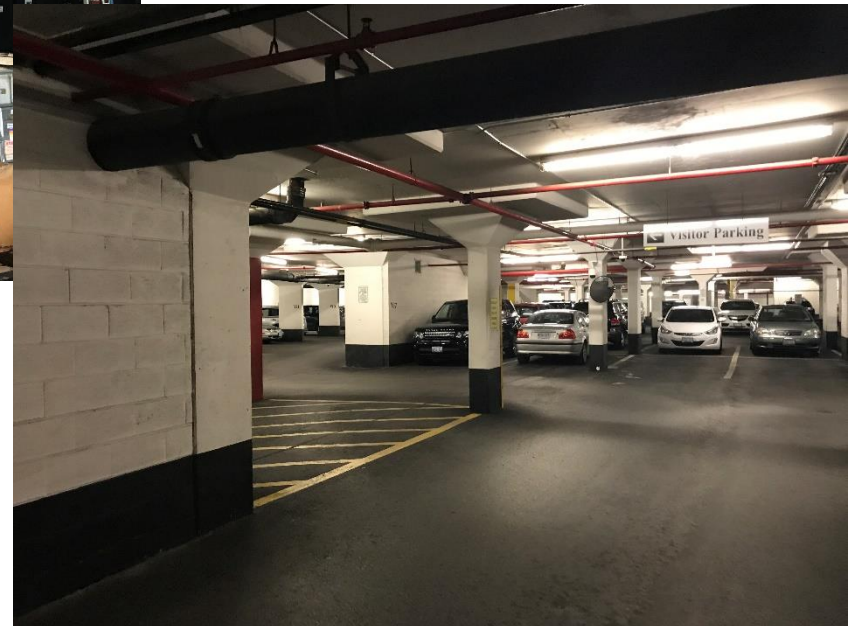


JML Electric Inc. – Case Studies

LED Lighting Upgrades & Retrofits = EV Charging Opportunities



Recovering 'wasted' energy in commercial facilities OR underground parking areas though LED lighting retrofits can often support the EVI requirements for a business OR 100-150 unit MURB and 6-10 community EV charging units!!!



Charging for EV Charger Usage... Where to Start?

- Most EVs consume while charging approx. \$0.55 - 0.85 of energy per hour (*based on an 'average' energy usage – Peak to non-Peak of ~.10¢/kW per hour*) while gaining approx. ~40km per hour of charge.
- Exceptions to this are Tesla and other new vehicles such as the Chev Bolt, KIA Nero – which both consume approx. \$2.00-\$3.00 of energy per hour due to their much larger batteries and accelerated charging capacities on 480v circuits.
- Many new vehicles are coming >>> Currently about 35-40 available from various manufacturers. ...In 1-2 years, that number is set to balloon to 70+ different vehicles – most all with larger batteries (BEV's) and complex charging rates.
- Parking lot operators in Toronto currently levy a surcharge on their parking patrons who wish to charge of anywhere between \$0 to \$10 (*on top of daily/hourly parking fees*).
 - **Example – Metrolinx/Go Transit charges a \$2.50 flat fee for charging at their parking structures**
- MURBS, as well as commercial facilities are awaiting to see what usage is experienced and currently in their initial period of free charging in order to 'gauge' usage. >> Utilize low tech means of recouping electrical costs, 'honour systems', concierge logging, etc.
- As a firm that has done more EV Chargers in the GTHA / Ontario than anyone else, JML would suggest a 'flat fee' of \$2-4 to 'keep things easy' for administration purposes of the project and fairness to all employees and/or residents.
- One must decide gauge how much of the CapEx can be recouped back OR simply recover electrical costs+ operational expenses for upkeep. Currently there are no government programs other than the EVCO Program 1.0 (2016) and the more recent WEVCIP (EVCO 2.0) which assists with infrastructure costs – this will obviously be affected by the coming provincial election of mid 2018.
- The best - most economical EV Charging unit to undertake Pay Per Use functions with is **AddEnergy's(FLO)** unit @ \$3300 ea. OR **EV Duty's EVC 30** unit @ \$1450 ea. + respective management fees.
 - Both the above firms take a percentage of the PPU charge for administration and the balance drops quarterly into a designated account.

JML Electric Inc. – Questions??

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