Electric Vehicle Charging Construction Presentation 2021

In-Charge™
We Bring The Power™

MICROGRID CORPORATION

We are an ENERGY & EV CHARGING-AS-A-SERVICE company

We provide SCALABLE, TURNKEY, end to end commercial EV infrastructure solutions

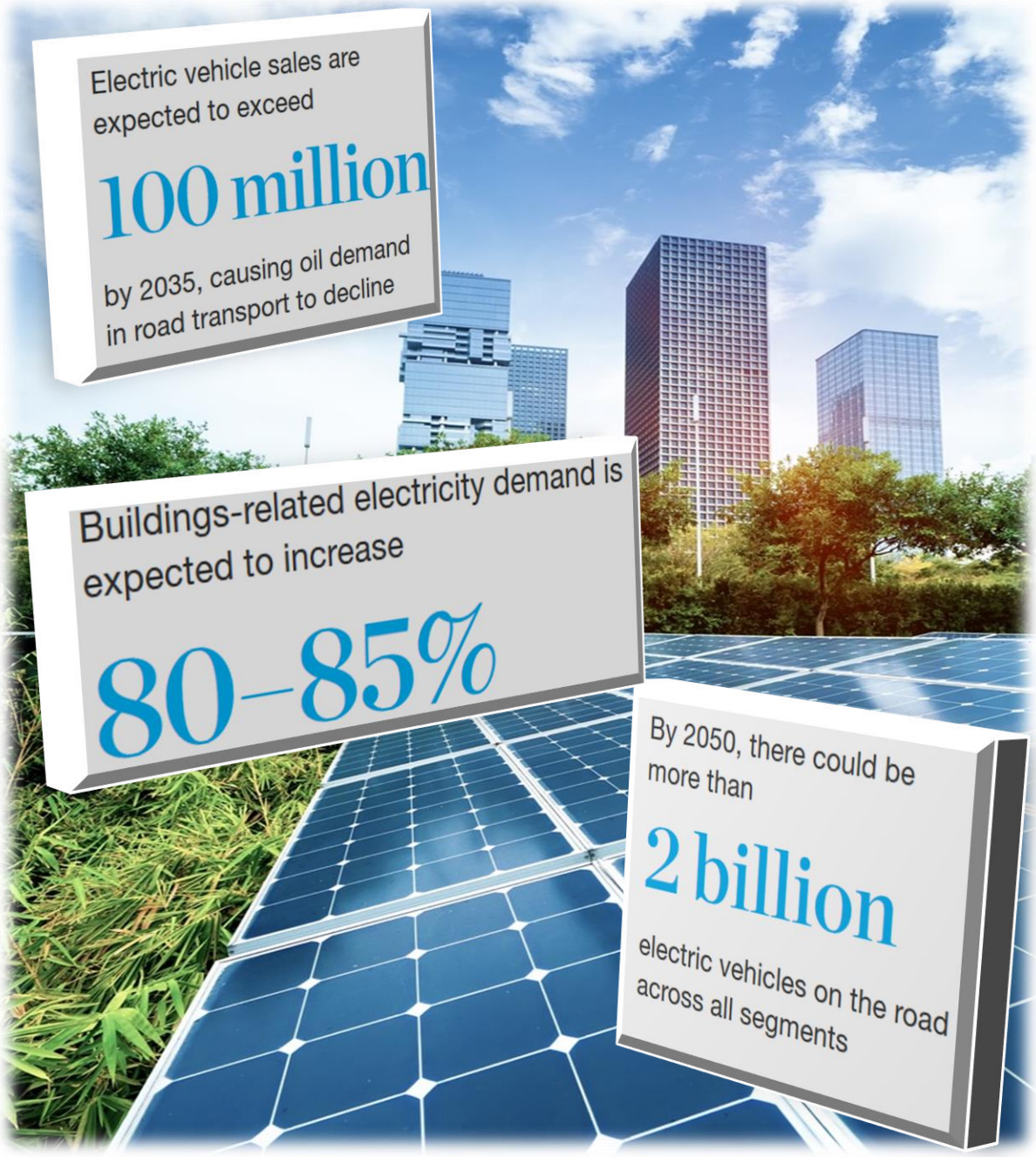
Our customers include commercial fleets, vehicle OEMs and their dealerships, ride-share operators, municipalities and facilities owners.

In-Charge Partners

The Commercial Fleet Dilemma

Electrifying a Fleet Requires Infrastructure Expertise

- Introducing large numbers of electric vehicles face multi-factor **Increases in Electricity Demand** that could **Undermine** the operating cost **Savings**.
- Utility service upgrades **Require Months to Years** that put the **Deployment Schedule at Risk** for the fleet or facility manager. (Vehicles that arrive early are unusable)
- **Capital is Required** for multi-site deployments and Customer may not own property or be able to build enough infrastructure on site to meet total requirement.
- Myriad incentives, technologies, and design strategies are available, but only a few **Guarantee Readiness** to ensure vehicles are charged and ready when needed.
- Many solutions are necessary to address market demands. (Mobile Charging, Energy Conservation, Energy Storage, Renewable Energy Production).
- Large Capital expenditures can be an obstacle and created an opportunity for a **"Grid on a Skid"** model.



In-Charge Energy At-A Glance – A Veteran Team

Staff Leadership

Cameron Funk, CEO
Energy Services and EVs
innogy e-Mobility US CEO
ABM e-Mobility Director

Terry O'Day, COO
Renewables, Grid Power, EVs
innogy e-Mobility Chief of Strategy
NRG Energy & EVgo Vice President

Krishna Vanka, CPO
Fleet SaaS, IoT, GIS
Verizon, Telogis, VP of Products
GeoSoft, Senior Engineer

Van Wilkins, SVP Operations
Electrical & Fleet Fuel Systems
ABM Global EV Operations
TEGG Data Center Development

Bill Maurer SVP Energy
Energy Solutions for Facilities
ABM – Vice President of Corporate Energy Programs

Board of Directors

Greg Callman, Director
EV, Energy Storage, Class 8 Trucks
Macquarie Capital Managing Director
Tesla – VP Business Development

Tracy Price, Director
Energy Services, Software
Qmerit CEO, ABM SVP
LINC Group CEO, Field Centrix CEO

Bob Stojanovic, EO Director
EV Charging Hardware, Microgrids
ABB N.A. EV Managing Director
ABB Microgrids / Solar Director

Buildings • Energy
Software • EV • Fleet

Investors

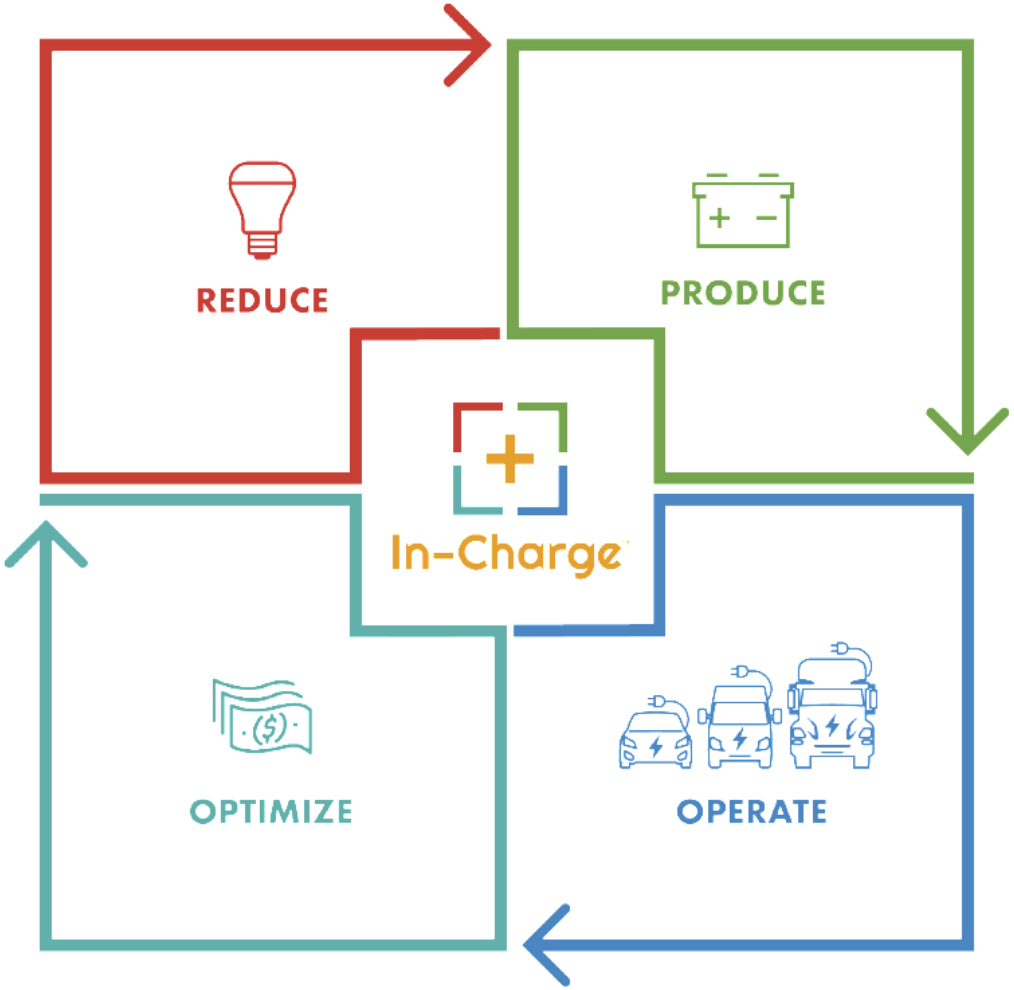
MACQUARIE

Macquarie Capital has deep sector expertise in infrastructure and energy, real estate, aerospace, financial institutions, telecom, media and technology across the US with **417 transactions completed, valued at $339 billion in the year ended March 31, 2019**

ABB

ABB is a technology leader with a history of innovation spanning more than 130 years, **ABB operates in more than 100 countries with about 147,000 employees and revenues of over $37B.**

In-Charge Energy At-A-Glace – Differentiation and Approach



- ✓ *Most Experienced Team in EV Infrastructure Services*
- ✓ *Proven Approach to Deployment & Value Creation*
  - Reduce – utilize Energy Conservations Measures (ECMs) to free up power
  - Produce – charging stations, solar, batteries for EV charging
  - Operate – fleet-focused software for managing charging and energy use
  - Optimize – reduce energy costs, plan upgrades, efficiently maintain stations
- ✓ *Deep Partnerships with the Top brands in Electrification*
- ✓ *Product Development and Deployment to Serve Fleets*

Types of EV Chargers to Consider

DC High Power	DC Fast	DC Fast Destination	AC Destination
175-350kW	50kW to 180kW	11kW to 24kW	19kW
500A	125A to 2*200A	37A to 60A	80A
10-20 minutes	10-90 minutes	1-3 hours	4-16 hours

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Infrastructure Considerations

- ✓ Utility upgrades take time 6 Months – 2 Years
- ✓ Costly upgrades may not be covered by rebates alone
- ✓ Alternative charging strategies should be considered
- ✓ Creative financial solutions may be necessary

Future-Proofing Your Facility

- Trenching can be expensive and disruptive; avoid doing it a second time
- Add spare conduit, wire, circuits during installation now to save money later
- Future charging station adds will be less expensive and faster to complete
- Sample spare conduit pricing:
  - With equipment and labor, a 50’ asphalt plus sidewalk trench & repair could top $5,000
  - An additional $500 (up to about $10 per foot) adds spare pipe to avoid retrenching later
- Further options include installing spare wire and circuits with the conduit to make “ready” for future charging stations. Costs will vary

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The Remote Site Survey

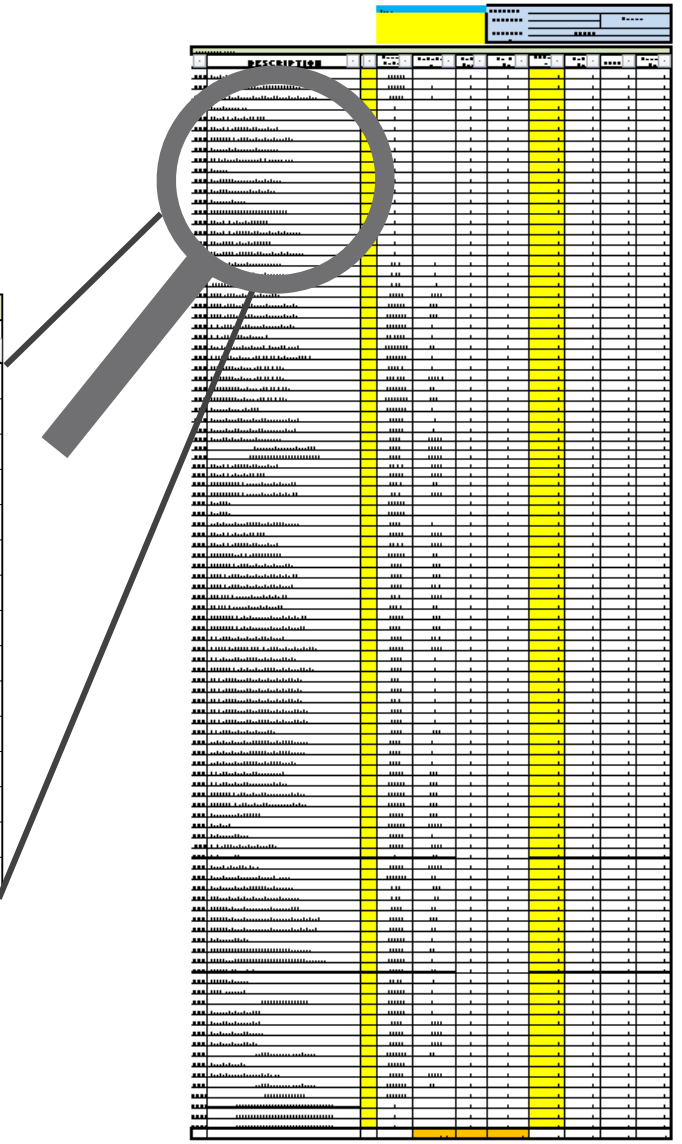
- Record proposed install location data
  - What charging equipment
    - Level 2
    - DC Fast Charger
    - Pedestal or wall mount
  - Images
    - Main Electrical
    - Electrical Panel/Breaker
    - Spare Breakers
    - Sketches/Drawings
    - Site Plan
    - Electrical Drawing
  - Utility Bills – July/August/Sept
    - Peak kW demand

Turnkey Installation Estimator

Create infrastructure quotes that are specific to each site using standardized products and proven designs

ESTIMATOR V_5-28-20

ITE	DESCRIPTION	Q1	Material Sell Per item	Labor Per ite	Labor Dollars	Assembly S	Additional Subcontractor	Labor Cos	MATERIAL COST	Line Item Cost
DES	Project Management	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	1- Pole 20 Amp [Standard 10kAIC]	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	1- Pole 20 Amp [22kAIC or Obsolete Brand]	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	CUSTOM 20 Amp 1 Phase Circuit /Conduit and Wire	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	Painting of Parking space (Green stripping)	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	120 Volt Duplex Receptacle 20 Amp surface mount	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	Signage	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	Bollards 4"x36" Steel capped top boltdown	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	Bollards 4" Steel capped top direct burial	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	Concrete wheel stops	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ELS	CUSTOM SIGNS, LIGHTING, MISC OUTLETS	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ESU	3- Pole 100 Amp [Standard 22kAIC]	0	$ -	0.0000	$ -	$ -		$0.00	$0.00	$0.00
ESU	3- Pole 100 Amp [42kAIC or Obsolete Brand] with outage	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ESU	3- Pole 225 Amp [Standard 22kAIC]	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00
ESU	3- Pole 225 Amp [42kAIC or Obsolete Brand] with outage	0	$ -	0.0000	$ -	$ -	$ -	$0.00	$0.00	$0.00



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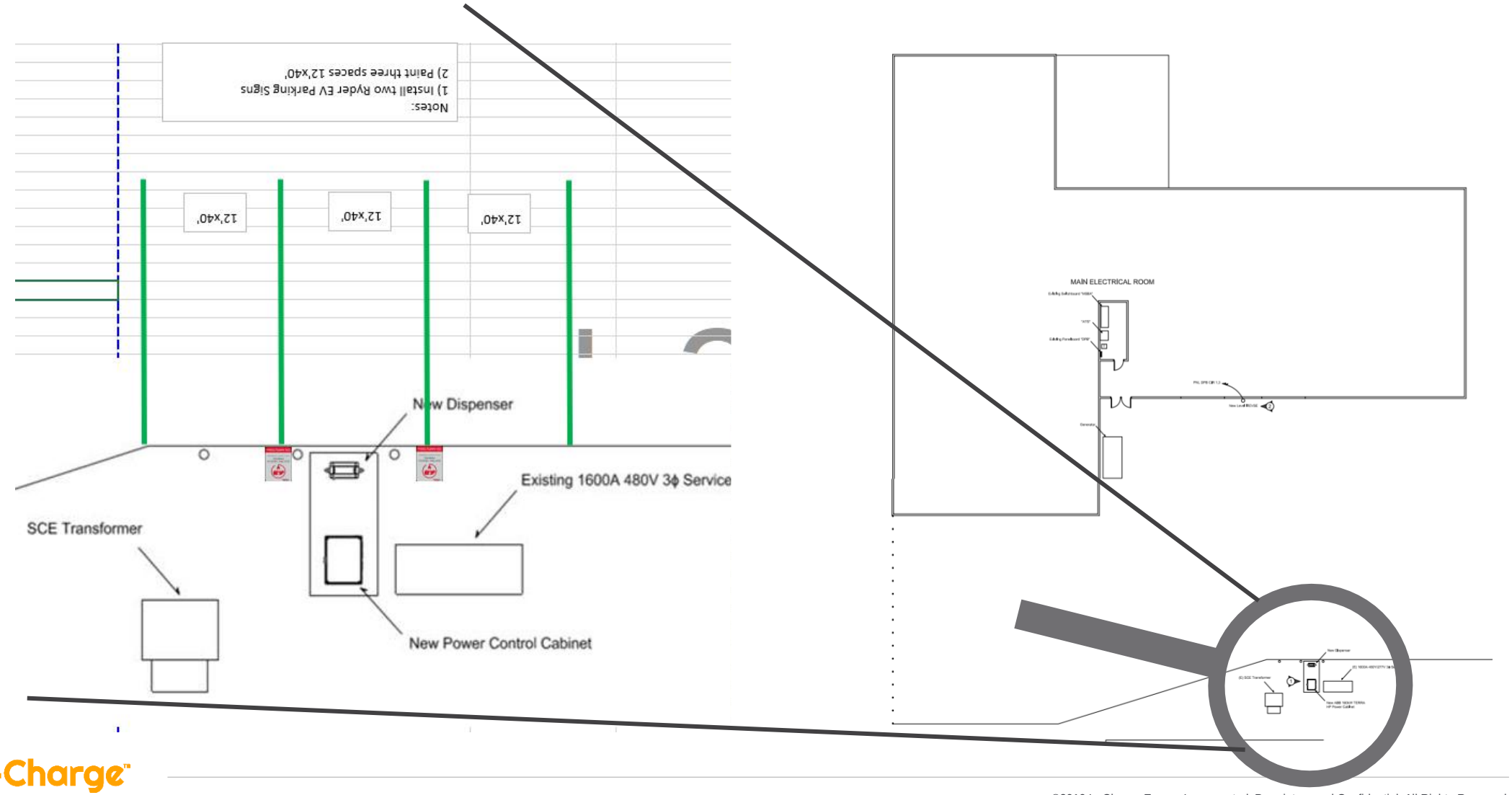
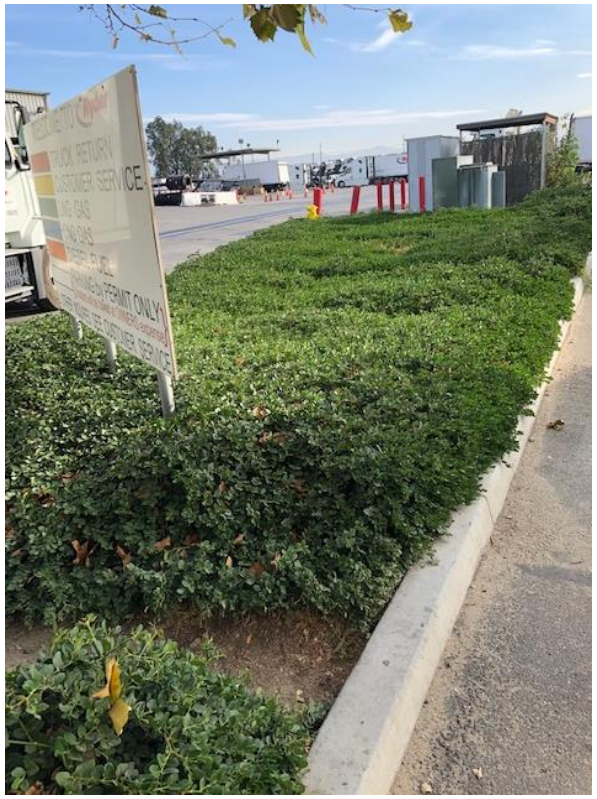
Sample Project – Fontana CA

Site Drawing



Sample Project – Ryder Truck, Fontana, California

Site Consultation



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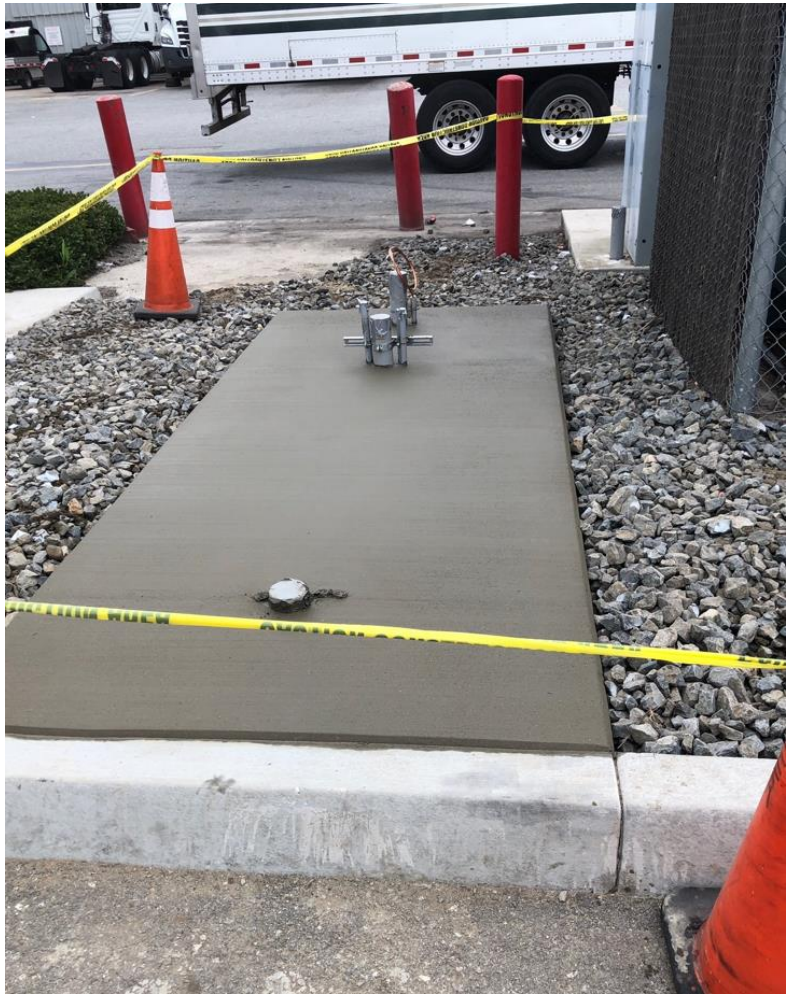
Sample Project – Ryder Truck, Fontana, California

Site Construction



Sample Project – Ryder Truck, Fontana, California

Installed

150kW DC Fast Charger

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Sample Project – Ryder Truck, Fontana, California

In Operation

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Full-Service EV Charging Tax and Credits Benefits Management

- ✓ Federal and State tax credits and rebates
- ✓ Environmental credits and reporting
- ✓ LCSF Credits (California)

Bonus Depreciation

You can fully depreciate your EV Chargers in the 1st year.

Tax Credits

33% Tax Credits for EV charging

Rebates

Varies by State

When you add these components together you can cover most if not all of the cost on an EV Charger.

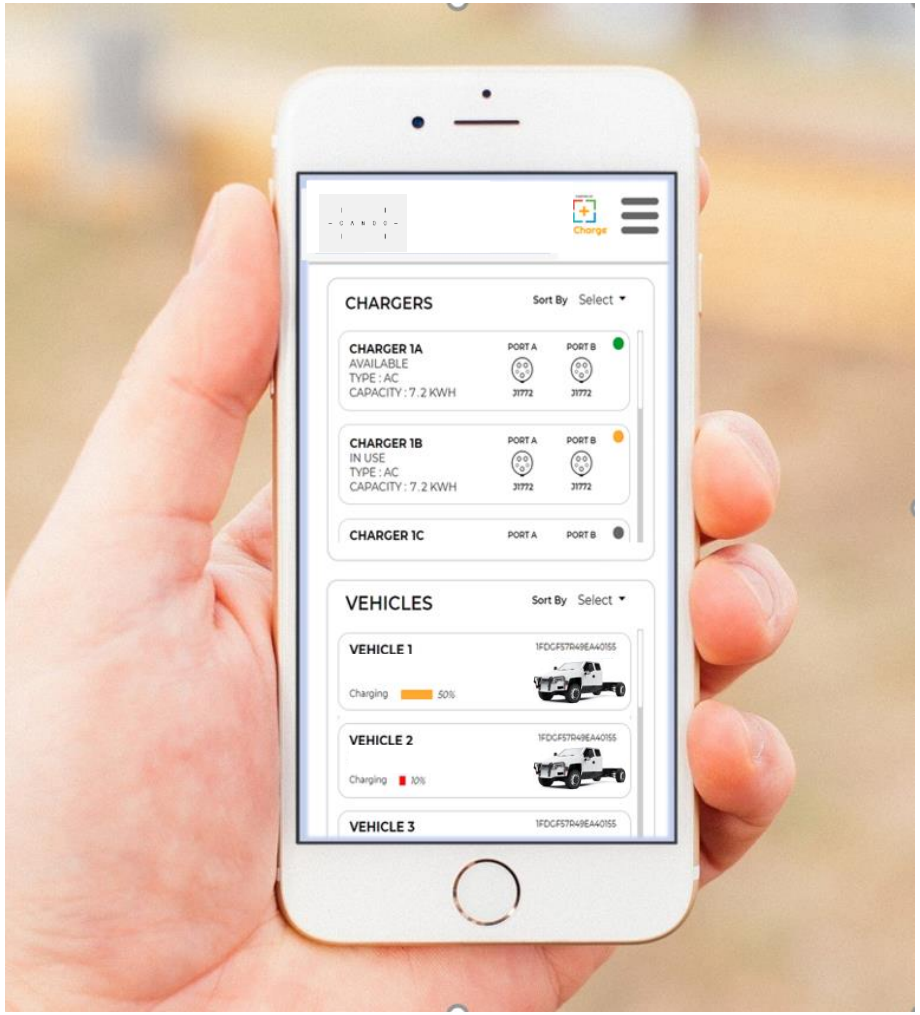
In-Charge™

Software Solutions Custom-Designed for Commercial Users

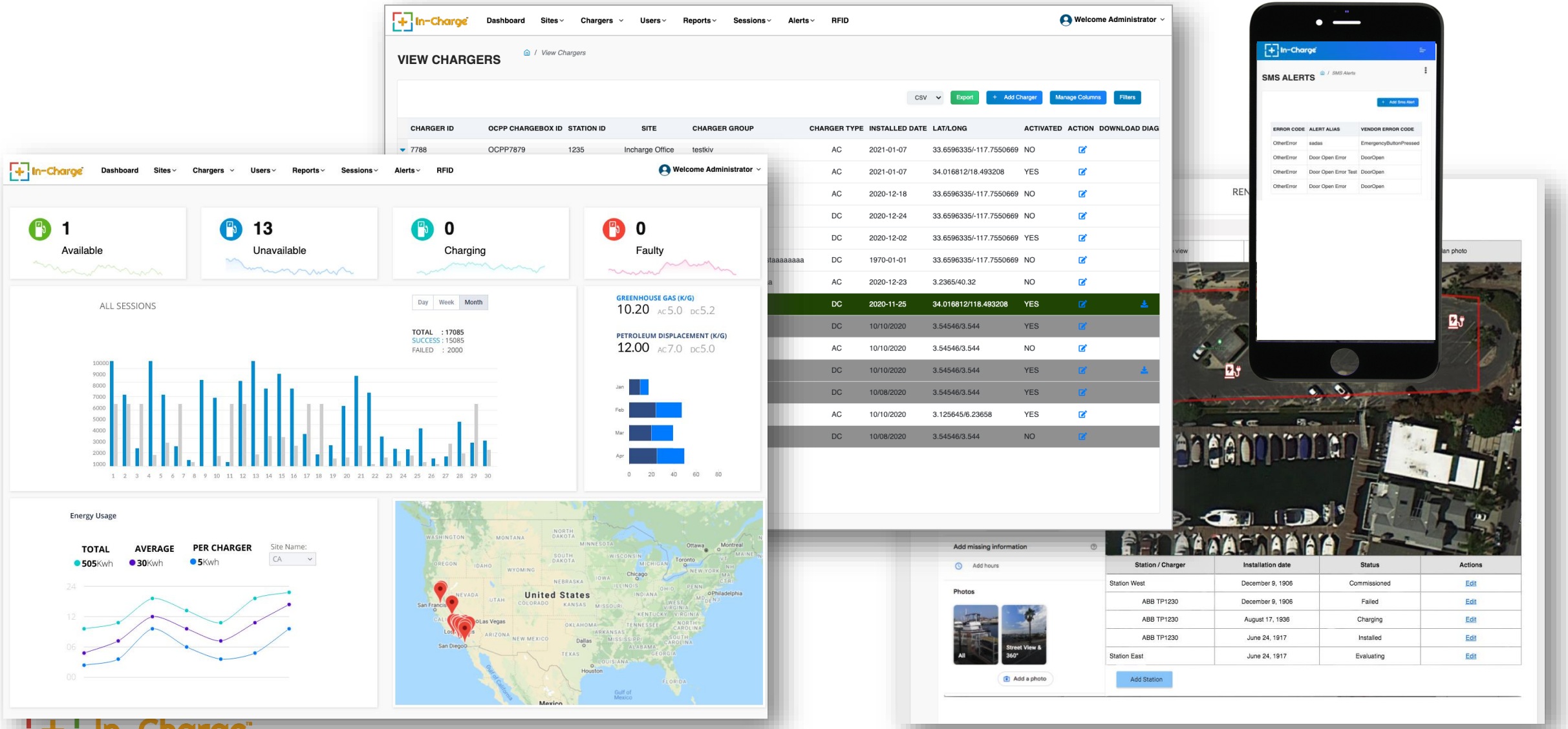
- Many platforms in the market
- None specifically designed for fleet delivery vans
- Many platforms are over / under featured:

  - Payment processing
  - Not able to operate on variety of hardware
  - Expensive monthly fees
  - Not capable of necessary features

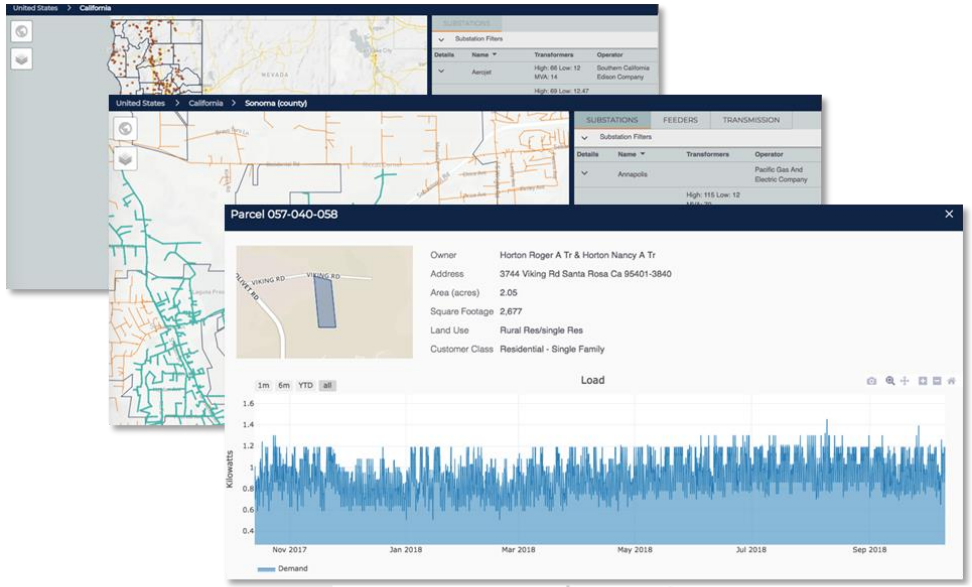
- *Open Source* platforms are best
- Simple to view and use is best

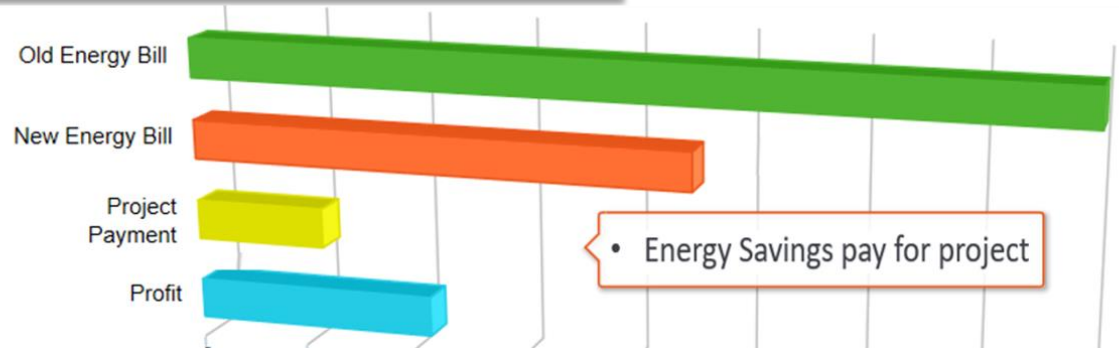


Simple Dashboards Driven by APIs



Energy Conservation Measures to Maximize Existing Energy Capacity





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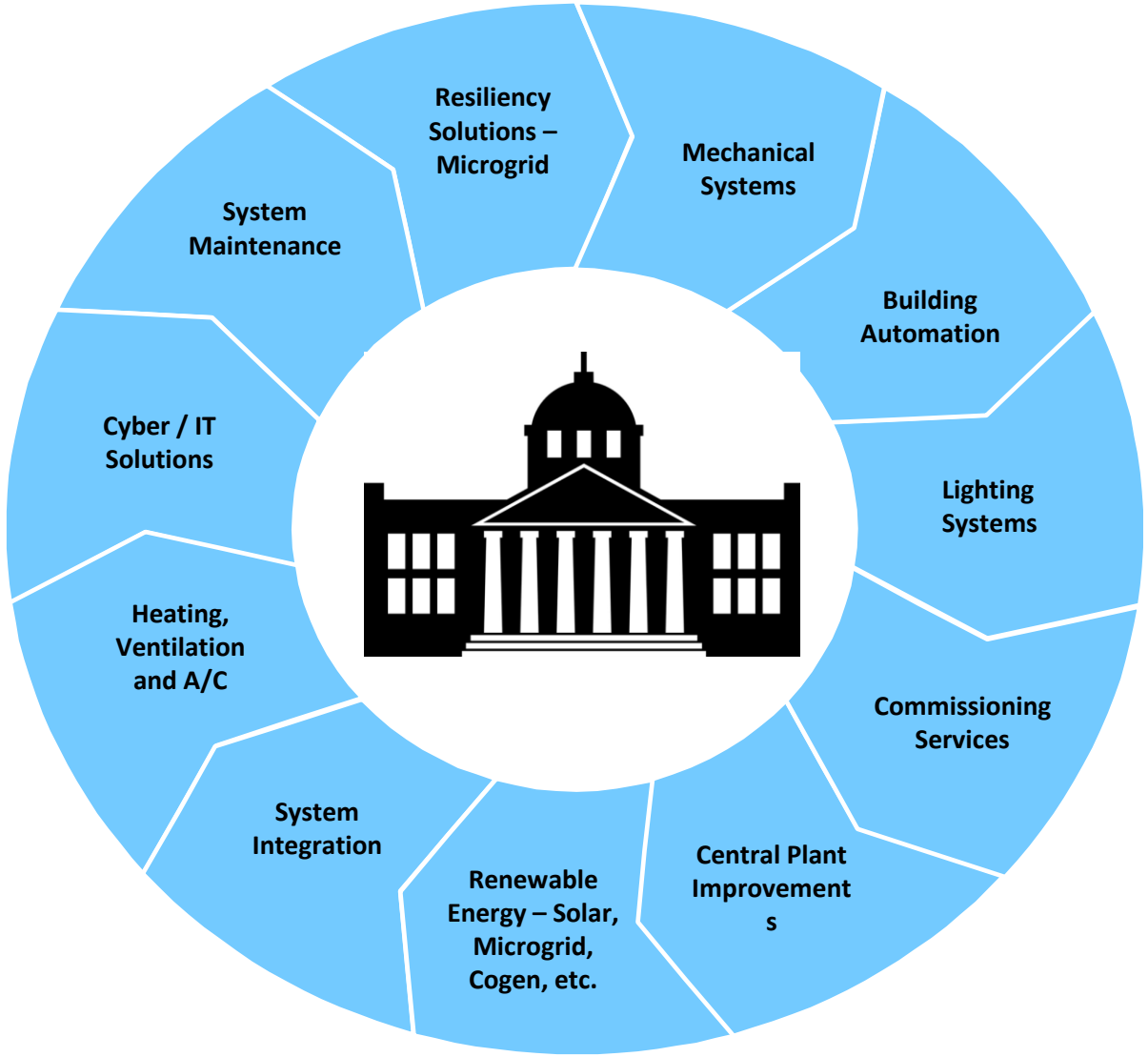

- **Facility Improvements**
  - Makes the necessary improvements throughout the facility that otherwise won't / can't be done
  - Protects your facility against unplanned failures – HVAC, lighting systems
  - NO CHANGE ORDERS!!
- **Immediate Budget Impact**
  - Program Pays for itself
  - No Capital Burden – Program is funded through existing funds
  - Produces a POSITIVE CASH FLOW
  - Local Utility and Federal Tax Incentives payable to Building Ownership
- **Provides path to meeting Corporate Sustainability Objectives**
- **Program is recommended by:**
  - US Federal Government
  - Most State Legislatives
  - Utilities

Financial Solutions for Critical Systems

Long term fixed capital for infrastructure improvements	**Reduce energy costs and utilization**	**Gain access to renewable/clean energy**	**Independence from relying on outdated municipal grids or the utility companies**
Capital for build out of new technology, critical facility systems, and unfunded improvements	**Increase the ability of being a dominant player in their market**	**Resilience given cyber security and catastrophic geographic issues**	**Invest in socially responsible project with long term energy savings**
Confidence in lower energy costs with reduced year to year volatility	**Always on power confidence**	**Create partnership with core communities**	**Distributed energy solution**

Macquarie Capital at a glance

Macquarie Capital offers global corporate finance, investing and development capabilities underpinned by deep specialist expertise across a range of sectors

Macquarie Capital

Sector coverage

- Infrastructure
- Green Energy
- Technology
- Telecommunications & Media
- Resources
- Real Estate
- Industrials
- Healthcare
- Financial Institutions
- Consumer, Gaming & Leisure
- Services
- Aerospace, Defence & Government Services

Macquarie Capital by the numbers[1]

376

transactions worth more than **$A318b**

Service offerings

- Mergers & Acquisitions
- Private Capital Markets
- Project Finance
- Principal Finance
- Debt Capital Markets
- Equity Capital Markets
- Equity Brokerage

Advisory | Investing & Financing | Capital Markets | Equities

1. Macquarie Group structure current as at 30 September 2020. Dealogic for Macquarie Group completed M&A, investments, ECM and DCM transactions converted as at 31 March 2020. Deal values reflect the full transaction value and not an attributed value.

About Macquarie Group
Green Investment Group

Macquarie has a purpose-built team (Energy Tech), embedded within an organization with relevant expertise across the value chain

GIG's Global Energy Technology team is purpose-built for its track record

Relationships across ecosystem

25+ years in OEMs

10,000+ Charging Stations

Macquarie invests in companies across the EV value chain

In-Charge

Arcadia

FREEWIRE

GIG partners to deliver distributed energy services

Green Investment Group

SIEMENS
Ingenuity for life

CALIBRANT ENERGY

25+ GW of renewables[1]

GIG is a global leader in renewable project development, finance, PPAs

475,000+ vehicles financed

Macquarie has internal vehicle finance capabilities

15+ years

in energy, renewables and sustainability

Macquarie has internal trading and hedging capabilities

Charging and Fleet Solutions

Full suite of financial solutions to grow your transportation electrification initiative.

1. Equipment Lease

- Where minimal / no site or interconnection upgrades required
- Equipment lease for charging equipment (L2 and/or DC)
- Vehicle can be financed on a separate contract, tenor matched
- Standard equipment warranty / SLA

01

2. Charging as a Service (CaaS)

- All requisite infrastructure, service, and availability commitment structured as a fixed monthly fee
- Includes site / interconnection upgrades, L2 and/or DC chargers, balance of system, redundant equipment, spare parts, custom SLAs
- 10 to 20 year term
- Energy paid separately, or bundled
- Energy management services from basic forecasting and monitoring to advanced management

02

3. Fleet as a Service (FaaS)

- Turn-key solution encompassing full service vehicle lease and charging as a service bundled into an integrated solution.
- Full service lease provided by a Macquarie partner
- Tenor for CaaS will typically exceed vehicle lease

03

Development of EV depots

- Brownfield or greenfield development of charging depots
- Can include re-development and/ or asset capitalisation of existing client depots
- Can be for exclusive use by client fleet, or where client acts as anchor tenant, with other customers on-site
- Enables TSP model where all vehicles return to depot

04

DASHBOARD | SITES | DRIVERS | VEHICLES | BADGE | STATEMENT | Lofland

Vehicle: 7THR029

Charging

4hr 34min remaining

83%

Rated range **220** mi

Drivers

Jason Gutierrez
Arrive Time: Nov 12, 2:55PM

92.3
Driver's Score

30% effectiveness of regenerative braking

5.27 kWh — Consumption
1.62 kWh — Regenerated

Distance: **43 mi**
Avg. Speed: **42 mi/h**
Duration: **1hr 04min**
Max Speed: **74 mi/h**

Jason Gutierrez
Arrive Time: Nov 12, 12:03 PM

72.8
Driver's Score

14% effectiveness of regenerative braking


In-Charge™
Thank You
Microgrid Corporation and today's attendees
We look forward to follow-up with you.