



CALSTART Webinar: To CaaS or DIY

presented by  **Electrada**

What's the best solutions for your fleet transformation?

June 18, 2024

CALSTART.org

Today's Moderator



Mike Britt

*Senior Consultant, MG Britt Consulting Inc.
Former Director of Maintenance, UPS*

Zoom Webinar



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Today's Panelists



Alexis Reece
*Fleet Manager,
Ferguson Enterprises*



Thurman Register
*Senior Manager – Fleet,
Ferguson Enterprises*







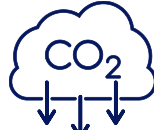
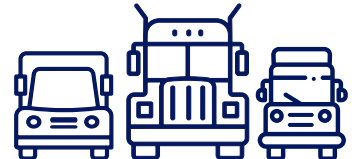










Jenn Fiegel
*VP Customer Success,
Electrada*



Chris Freitas
*Chief Commercial Officer,
Electrada*

The Electrada Difference

Electrada has become the leading provider of 360 CaaS solutions for commercial fleets across North America thanks to its deep industry partnerships, long-term relationships with key customers, strong financial backing, veteran leadership team, and operational know-how.

<h3>STRONG INDUSTRY PARTNERSHIPS</h3> <p>Ongoing relationships with marquee partners such as:</p>  <p>And long-term agreements with key customers including:</p> 		<h3>BROAD OPERATIONAL CAPABILITIES</h3> <p>Broad operational capabilities resulting in:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>96 Sites Electrified</p> </div> <div style="text-align: center;">  <p>5.6 Megawatts Under Contract</p> </div> <div style="text-align: center;">  <p>212 MT of CO2 Emissions Reductions</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Classes 1-8 of Vehicles Served</p> </div> <div style="text-align: center;">  <p>4.75M Clean Miles Driven Annually</p> </div> </div>						
<h3>STRONG FINANCIAL BACKING</h3> <p>With funding from the recognized leader in clean energy infrastructure investing:</p>								
<h3>TEAM EXPERTISE</h3> <p>Unparalleled senior leadership experience across all core components of electrification infrastructure:</p>	 Utility Operations	 Distributed Power	 Energy Analytics & Optimization	 Electrical Engineering	 Energy Asset Investment	 Power Markets	 Fleet, Logistics & Mobility	 Real Estate



Key Considerations for Fleet Electrification Planning

Commercial EV fleets need to deliver on Reliability, ROI, and Sustainability metrics to have successful fleet electrification programs



Essential Components of Successful Electrification Programs

In order to ensure proper reliability, ROI, and sustainability, EV charging infrastructure requires significant human and financial capital, deep-seated industry expertise, comprehensive hardware and software solution vetting, and detailed project management capabilities.



PROJECT PREPARATION & FUNDING

- Allocation and investment of **internal financial & human capital resources**
- **Budgeting**
- **ROIC** evaluation
- Grant and **incentive applications**



SITE & CAPACITY DESIGN

- Review **duty cycles** & prepare **load shape**
- **Procurement** for design & engineering firms
- Electrical **tariff & onsite energy generation requirements**



HARDWARE & SOFTWARE SELECTION

- **EVSE hardware** procurement
- **EMS & CMS software** provider procurement
- **Interoperability testing** with selected EVs, EVSE, software



CONSTRUCTION & UTILITY MANAGEMENT

- **Electrical contractor** procurement
- **Construction**
- **Project management**
- **EVSE hardware installation**
- **Utility permitting & coordination**



GO-LIVE PREPARATION

- **LCFS broker procurement** for **carbon credits**
- **Training** for drivers & techs
- **EMS / CMS software implementation**



ONGOING OPERATIONS & MAINTENANCE

- **O&M procurement**
- Ongoing **energy management**
- Monitor **reliability & performance**
- **ESG analytics & reporting**



DIY Results: Run on Less Electric Fleet Study

The “Run on Less – Electric Depot” study organized by NACFE and RMI in 2023 found that only 1 of the 8 participating EV charging DIY fleets had a positive ROI result for their EV fleet charging infrastructure.

In September 2023, NACFE (North American Council for Freight Efficiency) and RMI (Rocky Mountain Institute) organized the “Run on Less – Electric Depot” study featuring 8 depots of large fleet operators covering Class 2B to Class 8 BEVs operating in the U.S., Canada, and Mexico to explore fleet scaling considerations, facilitate industry partnerships, and analyze EV charging infrastructure performance at these locations.



RUN ON LESS STUDY: DIY EV FLEET RESULTS

COMPANY	SITE CHARGING INFRA. PLANNING	ENERGY USAGE PLANNING	OVERALL ROI RESULT
Company 1	⊖	⊖	Poor
Company 2	⊖	⊖	Poor
Company 3	⊖	✓	Poor
Company 4	⊖	⊗	Bad
	⊗	⊗	Bad
Company 5	⊗	⊗	Bad
Company 6	⊖	⊖	Poor
	⊖	⊖	Poor
Company 7	⊖	⊖	Poor
Company 8	✓	✓	Good

⊗ Highly Inefficient Planning

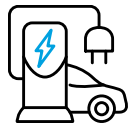
⊖ Inefficient Planning or Incomplete Data

✓ Efficient Planning



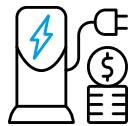
Core Components of Electrada's 360 Charging-as-a-Service

Electrada's CaaS offering offers the most reliable, de-risked, capital efficient solution on the market.



RELIABILITY

We guarantee high levels of reliability with **99% uptime** through our SLA and have one partner through this collaboration



FUEL CERTAINTY

Fuel **price certainty** through locked in electric fuel prices create reduced commodity volatility and increase in fuel savings



RISK MITIGATION

We provide all the upfront **capital** and take on all the risks in managing the charging infrastructure and utility assets



SAVINGS

We create and deliver both **maintenance and fuel savings** for the fleet customer



LONG-TERM PARTNERSHIP

We are aligned with the customer from the very beginning of this **long-term** transition to all electric vehicles



Fleet Charging Reliability: Key Elements of Electrada's 99% Uptime Guarantee

Reliability is designed into Electrada's offering from the onset of any project, covering all needed aspects to ensure 99% uptime, including 24/7 support, complete preventative maintenance, accelerated response times, connectivity standards, and onsite charger / part replacements.

24/7/365

Support available via
phone/web

100%

Preventative maintenance
coverage

<1 Hour

Response time via customer
support portal

5:1

L2 charger to spare ratio
stored in lockboxes onsite

<4 Hours

Onsite tech response time +
24/7 emergency dispatch

100%

Remote connectivity (wired,
multiple carriers, Starlink)

DC (FC)

Critical spare replacement
parts held in stock onsite

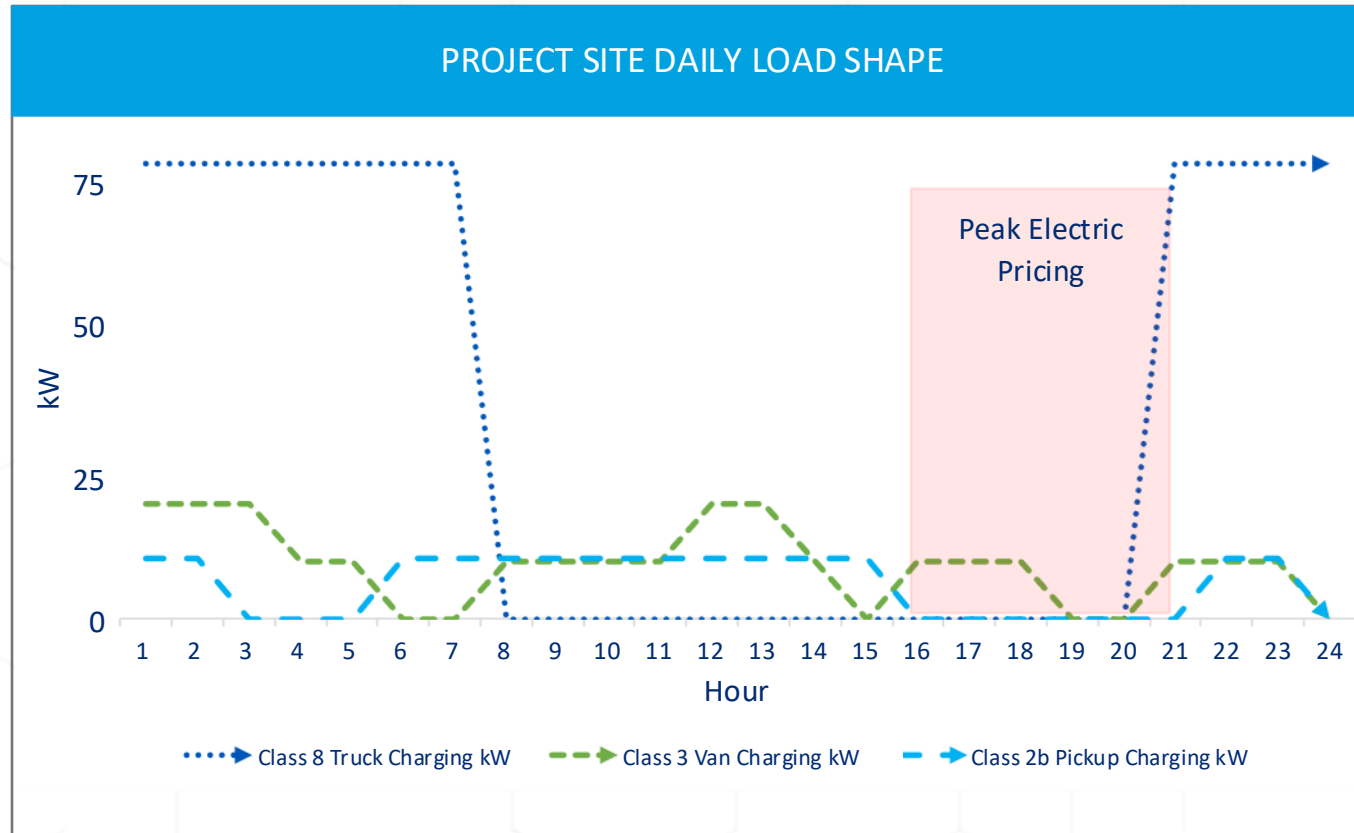
AC (L2)

Rip & replace for immediate
resolution, spare L2s in-stock



Fleet Charging Reliability: Electrada's Daily Action Plan

Electrada's operational blueprint ensures that we are monitoring and validating operational uptime from start to finish of each day.



DAILY SCHEDULED ACTIVITIES

- SOD (Start of Day)**
 - EV & EVSE connection checks
 - Prior day metrics
 - Charge schedule
 - Unplug Vehicle
- Intra-Day**
 - SOC (State of Charge) Route Management
- EOD (End of Day)**
 - Next Day Route Load
 - EV Readiness
 - EVSE Readiness
 - Plug in Vehicle

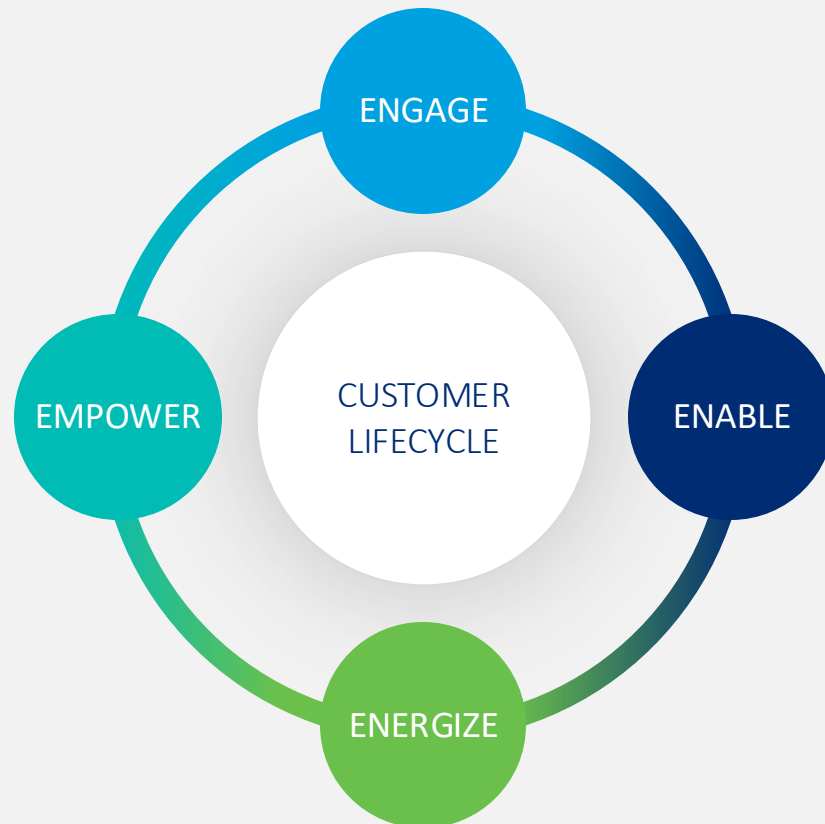
ONGOING RELIABILITY ASSURANCE

- Daily Monitoring 24x7x365
- Alerts + Remote/Onsite Support
- Preventative Maintenance
- Corrective Maintenance



Electrada's Customer Engagement Lifecycle

Electrada follows a customer-centric approach to each engagement, ensuring we meet the needs of our customers through all phases of a project.



THE FOUR S

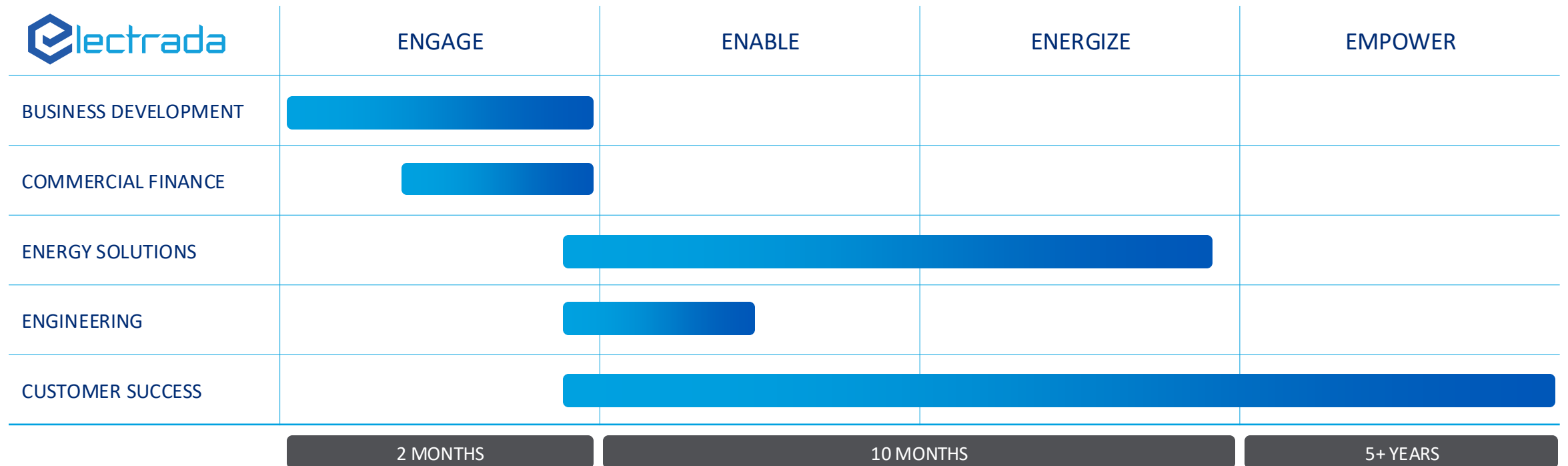
- ENGAGE** Origination of customer engagement driving CaaS model and ESA execution
- ENABLE** Solution design including site, platform and procedures aligning with customer use cases and success metrics
- ENERGIZE** Customer On-Boarding - solution deployment and commissioning with training to energize customer adoption across stakeholders and users
- EMPOWER** Engagement management with operations support and drive to solution adoption and account/portfolio expansion



Electrada's Functional Teams

Our team of experts will ensure your needs are covered from initial engagement through project launch and ongoing operational execution.

ELECTRADA PROGRAM PERFORMANCE MANAGEMENT





THANK YOU!

For more information about Electrada,
visit electrada.com