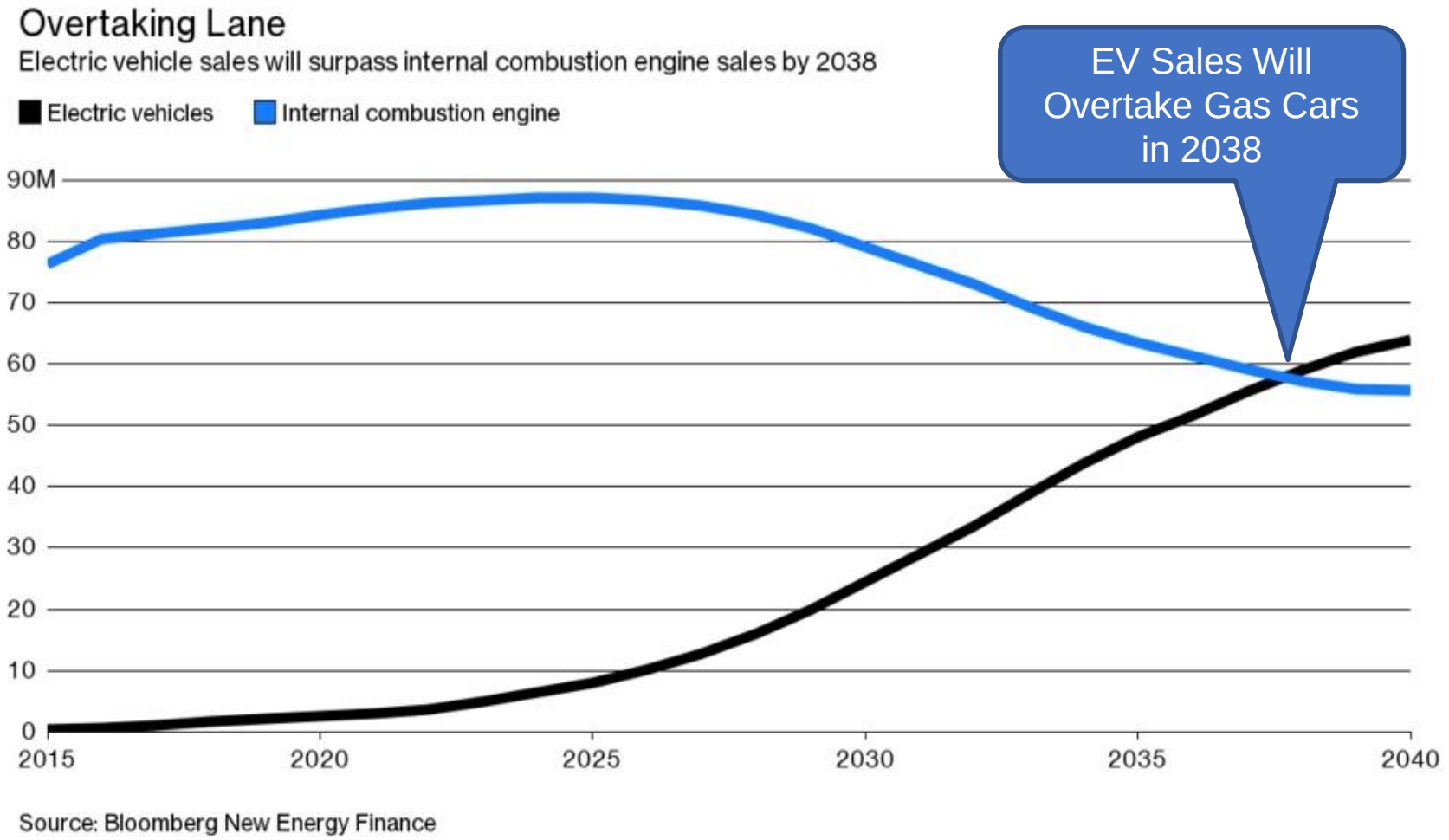
No Cost | No Risk EV Charging Station Program

EMS
Energy Management Solutions, Inc.

carbon
SOLUTIONS GROUP™

DRIVING DECARBONIZATION

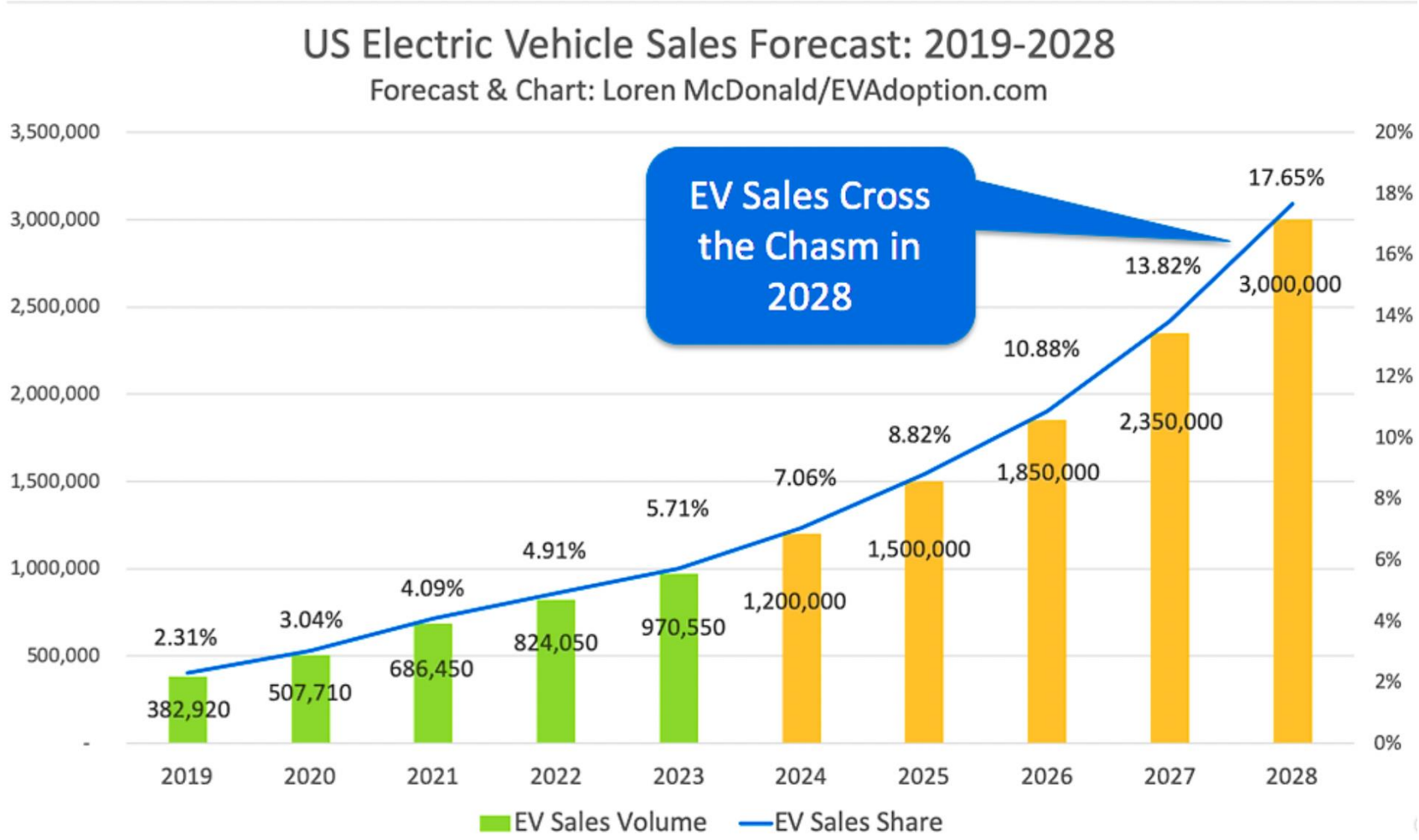
EV Trends



EMS Energy Management Solutions, Inc.

carbon SOLUTIONS GROUP™

EV Mass Adoption



EMS Energy Management Solutions, Inc.

carbon SOLUTIONS GROUP™

EV OEM Market

General Motors plans to exclusively offer electric vehicles by 2035

Volvo Cars to go all electric

Hyundai Unveils EV Platform, Will Have 23 Global Electric Vehicles by 2025

Nissan wants all new car models to be electric by early 2030s, carbon neutrality by 2050

Volkswagen significantly raises electric car production forecast for 2025

Jaguar Land Rover announces electric car investment

BMW plans to double battery electric car sales this year

7 New Cars Coming in Ford's Electric Vehicle Push

Kia teases new electric crossover, details seven-year EV plan

Subaru's first electric model to drop in 2021

"Fastest car ever": Musk says Tesla Model S Plaid now in production

PORSCHE VOWS HALF OF ITS NEW LUXURY VEHICLES WILL BE ELECTRIC BY 2025

Audi announces an acceleration of its electric vehicle investments to $12 billion through 2025

Free EV Charger Program Summary

- No Cost – No Risk
- Receive Monthly Rental Income
- Profit Sharing
- Level 2 and DCFC (Fast Charger) Stations
- Free Upgrades and Expansions
- Meet Sustainability & Carbon Reduction Goals
- Co-Branding
- A Complete Turn-Key Solution
- Electric Vehicle Leases

EMS
Energy Management Solutions, Inc.

carbon
SOLUTIONS GROUP™

XYZ Company Example

$874,000 Revenue Potential Over 20 Years

Charger Type	Number of Charging Stations	Monthly License Fee	Annual Fixed Revenue	Bonus @ 20% Utilization	Total Annual Revenue	20-year Cumulative
Level 2	39	$20	$9,360	$8,775	$18,135	$362,700
DCFC 24kW	9	$25	$2,700	$3,375	$6,075	$121,500
DCFC 180kW	10	$100	$12,000	$7,500	$19,500	$390,000
Total	58	$145	$24,060	$19,650	$43,710	**$874,200**

---

14 Charging Station Locations Across the City

EMS Energy Management Solutions, Inc.

carbon SOLUTIONS GROUP™

XYZ Company Example

$4,023,976 Cost Savings

The total cost savings including the charging stations, electrical equipment, initial construction, maintenance and networking fees over ten years.

Charger Type	Number of Charging Stations	MSRP	Op. Costs 10-years	Estimated Installation Costs	Total Costs
Level 2	39	$320,190	$594,984	$468,000	$1,383,174
DCFC 24kW	9	$152,730	$304,002	$405,000	$861,732
DCFC 180kW	10	$595,410	$457,380	$650,000	$1,702,790
Total	58	$1,068,330	$1,356,366	$1,523,000	**$3,947,696**
Existing Level 2	10	n/a	$76,280	n/a	**$76,280**
10 Yrs. Total		**1,068,330**	**$1,432,646**		**$4,023,976**

EMS Energy Management Solutions, Inc.

carbon SOLUTIONS GROUP™

About Us

Energy Management Solutions (EMS)

- Independent Provider of Energy Management Products & Services
- Identify, prioritize, and implement strategies that will conserve energy, lower utility bills, and improve clients' bottom line
- EV Charging Stations | Supply Solutions | Rebates & Incentives | Demand Solutions | Renewable Energy | Environmental Attributes | etc..
- Founded in 1998. Headquartered in Minneapolis
- Offices in Columbus and Tampa

Carbon Solutions Group (CSG)

- Owner/Operator of Distributed Energy Assets – Solar, Battery Storage and Electric Vehicle Charging Stations
- Aggregator and Marketer of Distributed Energy Environmental Attributes – Renewable Energy Certificates & Carbon Offsets
- Founded in 2006. Headquartered in Chicago
- Offices in San Diego and Portland

EMS
Energy Management Solutions, Inc.

carbon
SOLUTIONS GROUP™

Who We Work With

Chevron

CITY OF PALM SPRINGS CALIFORNIA INCORPORATED 1938

UBER

NISSAN

CITY OF BOULDER

CUSHMAN & WAKEFIELD®

EMS
Energy Management Solutions, Inc.

Low-Rate & Long-Term Approach

Expertise & Incentives

- Our EV infrastructure design and engineering expertise allow us to get it right the first time
- We incorporate multiple incentives including tax credits, accelerated depreciation, and low-carbon fuel standard incentives

Aggregate Revenue

- Our forward-looking approach centers on low rates, investing in partnerships, and engaging communities
- We generate revenue from charging a small markups on electricity and leveraging our knowhow in aggregating and monetizing carbon credits

EMS
Energy Management Solutions, Inc.

carbon
SOLUTIONS GROUP™

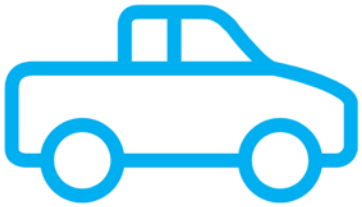
Recent work with Public Sector

- **City of Grand Terrace** | Completed project with rebates. Level 2 and DC fast charging stations.
- **City of Boulder** | Current project with rebates. 4 DC fast chargers
- **County of San Diego** | Current project. No rebates. 4 DC fast chargers
- **City of Anaheim** | Current project. No rebates. 2 DC fast chargers
- **City of Palm Springs** | Awarded contract. Up to 4 DC fast charging stations per site. 15 sites total. Potential rebates available.
- **City of Oakland** | Awarded contract. 2 DC fast charging stations in disadvantaged communities. Potential for community rideshare opportunity with fleet vehicles provided by CSG.

EMS
Energy Management Solutions, Inc.

carbon
SOLUTIONS GROUP™

Zero-Emission Vehicle Market Strategy



100% of in-state sales of **new passenger cars and trucks** will be zero-emission by 2035.

100% of **off-road vehicles** and equipment will be zero-emission by 2035.

100% of **medium- and heavy-duty vehicles** in the State will be zero-emission by 2045 and by 2035 for drayage trucks.

EMS
Energy Management Solutions, Inc.

EV Charger Program
Property Owner Benefits

Eliminate risk and capital cost of EV charging infrastructure

Eliminate electricity costs for EV charging stations

Eliminate operating costs including network fees, maintenance, and upgrades

Advance scope 3 sustainability objectives providing zero-CO_2 electricity

Attract unique EV drivers and creates new marketing opportunities

Gain long-term revenue streams from the EV charging stations

San Clemente Project
Commercial Shopping Center

- 45+ stores, 350,000 sq. ft. commercial space
- 10 EV Parking Spaces
- 6 universally compatible chargers installed
- Small charger footprint: 4.5 sq. ft.
- CSG managing entire project
- Infrastructure upgraded at no cost
- Dwell Time – Additional Revenues

EMS
Energy Management Solutions, Inc.

carbon
SOLUTIONS GROUP™

Equipment: Level 2 Charging Station

ChargePoint CT4000 Dual Port 7.2 kW	
25 Miles of Range Per Hour (RPH)	✔
Electrical Input: 208/240V AC, (split phase, 240V AC, 30A per port)	✔
Electrical Output: 2 x 7.2 kW	✔
Remote Communication Software for Equipment	✔
Energy Star Certified	✔
Custom-Branding	✔
Network to Communicate Via Cellular Network	✔
24/7/365 Continuous Remote Monitoring and Diagnostic Updates	✔

carbon SOLUTIONS GROUP™

Equipment: DC Fast Charging Station

ABB Terra DC Wallbox 24 kW	
85 Miles of Range Per Hour (RPH)	✔
Electrical Input: 150 - 920V AC, (single phase; 208V, 60A per port); (single phase; 240V DC, 60A per port)	✔
Electrical Output: 19.5 kW/22.5 kW	✔
Remote Communication Software for Equipment	✔
Energy Star Certified	✔
Custom-Branding	✔
Network to Communicate Via Cellular Network	✔
24/7/365 Continuous Remote Monitoring and Diagnostic Updates	✔

- **Pedestal mounted option available***

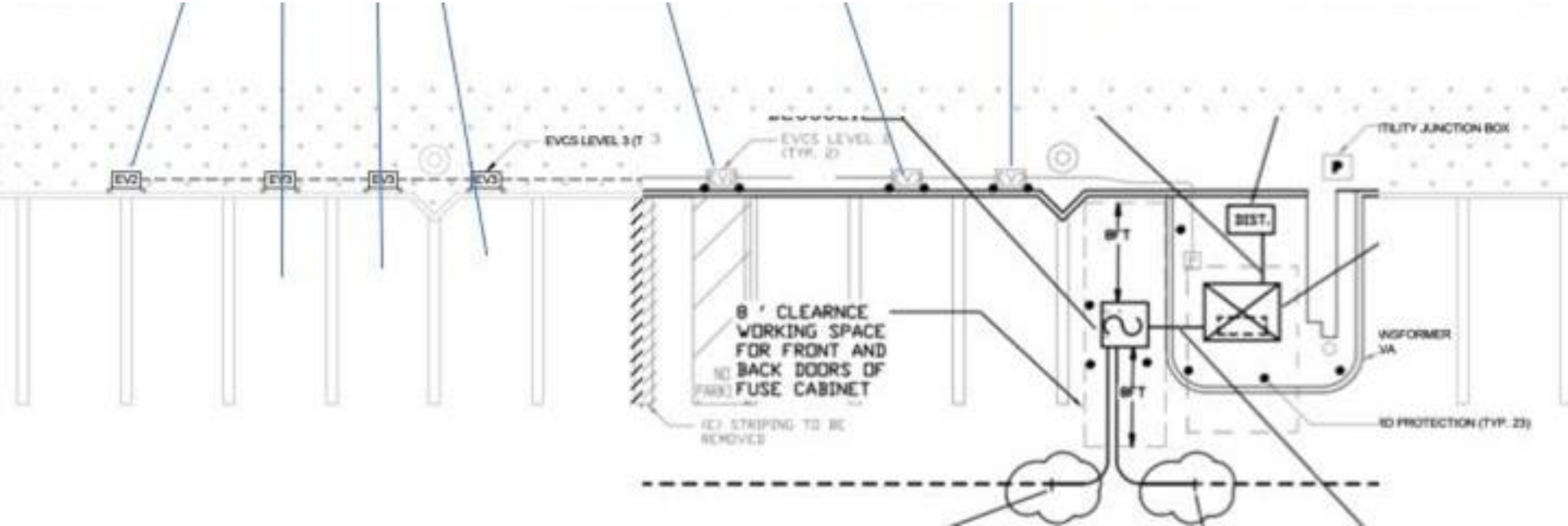
carbon SOLUTIONS GROUP™

Equipment: DC Fast Charging Station

ChargePoint CPE250 62.5 kW	
250 Miles of Range Per Hour (RPH)	✔
Electrical Input: 150 - 920V DC (three phase 408/277V	✔
Electrical Input: 62.5 kW (400V AC, 3-phase, 96A, 50 Hz 480Y/277V AC, 3-phase, 80A, 60 Hz)	✔
Remote Communication Software for Equipment	✔
Energy Star Certified	In process
Custom-Branding	✔
Network to Communicate Via Cellular Network	✔
24/7/365 Continuous Remote Monitoring and Diagnostic Updates	✔

carbon SOLUTIONS GROUP™

EV Charging Design

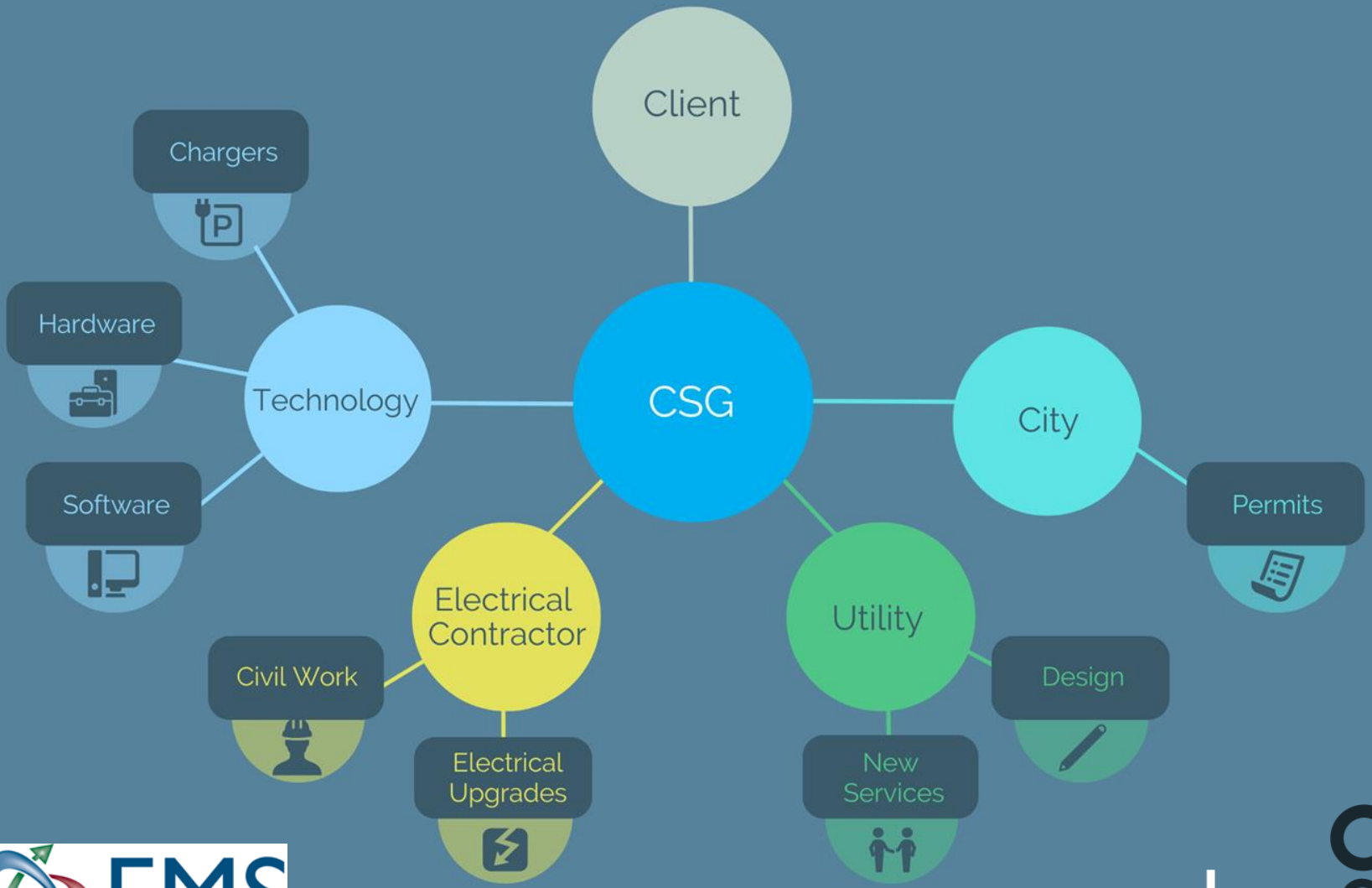


Installed & Pipeline Projects

Geographic Restrictions	Any State - Anywhere
Building Type Limitations	No Limitations - Corporate Buildings, Retail Locations, Distribution Centers and More
EV Market Presence	5 Years
EV Team	12 Dedicated Personnel
EV Equipment Locations	Fully Operational Chargers In California; Under Development Locations Include CO, IL, MN, OH, FL, VA, and WA
Clients	14 Fully Energized; 50+ Under Development
L2 EV Charging Stations	40 Fully Energized; 120 Under Development
DCFC EV Charging Stations	36 Fully Energized; 86 Under Development

carbon SOLUTIONS GROUP™

CSG Project Management



EMS
Energy Management Solutions, Inc.

carbon SOLUTIONS GROUP™

Development Timeline

Phase	Weeks
License Agreement	2 - 8
Draft Design & Engineering	2 - 4
Utility Design	4 - 16
Permitting	4 - 16
Construction	4 - 8
Start to Completion	**20 - 48 weeks**

carbon SOLUTIONS GROUP™

Additional Questions

Jody McDevitt
Director of Sales
Energy Management Solutions, Inc,
612-503-7169 mobile
jmcdevitt@emsenergy.com

carbon SOLUTIONS GROUP™