



What the Electric Car has been waiting for.

EV Infrastructure Solutions



imagination at work

The Electric Vehicle Picks Up Speed

A Technology Whose Time Has Come

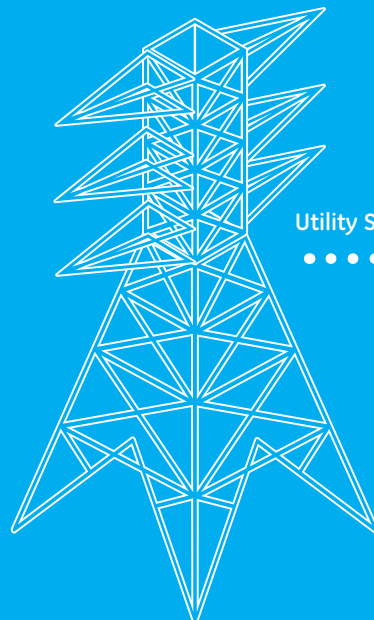
After decades in development, a number of powerful forces are coming together to launch a fleet of electric vehicles (EVs) on our nation's highways.



For every 10,000 gas-powered cars replaced by electric vehicles (EV), CO₂ emissions will be reduced by 33,000 metric tons per year.

An EV Infrastructure That's Equal To the Demand

For the nation to reap the benefits of EVs, it is not enough to develop more efficient batteries or motors. EVs must be supported by an energy infrastructure capable of bringing power from the utility to the charging station safely and reliably.



Utility Supply



Utility Transformers



Switchgear

A Total EV Infrastructure Solution

The Broad-based Expertise to Make the Electric Vehicle a Practical Reality

GE has the full range of electrical distribution products required to support EV deployment and access to the distributors, contractors, and financing options that can make it a reality.



The Electrical Infrastructure

The charging stations where consumers power their EVs are just the most visible element of the extensive infrastructure needed to support the transition to energy-powered automobiles. In addition to its EV charging stations, GE offers a wide range of large- and small-scale electrical distribution products including transformers, switchgear, switchboards, and residential load centers needed to ensure end-to-end system protection and reliability.

GE's 100 years of innovation in the design and manufacture of electrical distribution equipment means that you can depend on GE products to help move power to EVs as efficiently and as safely as possible— and to take full advantage of smart grid design and other emerging technologies.



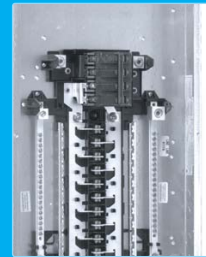
Switchboards & Panelboards



Submetering



General Purpose Transformers



Load Centers



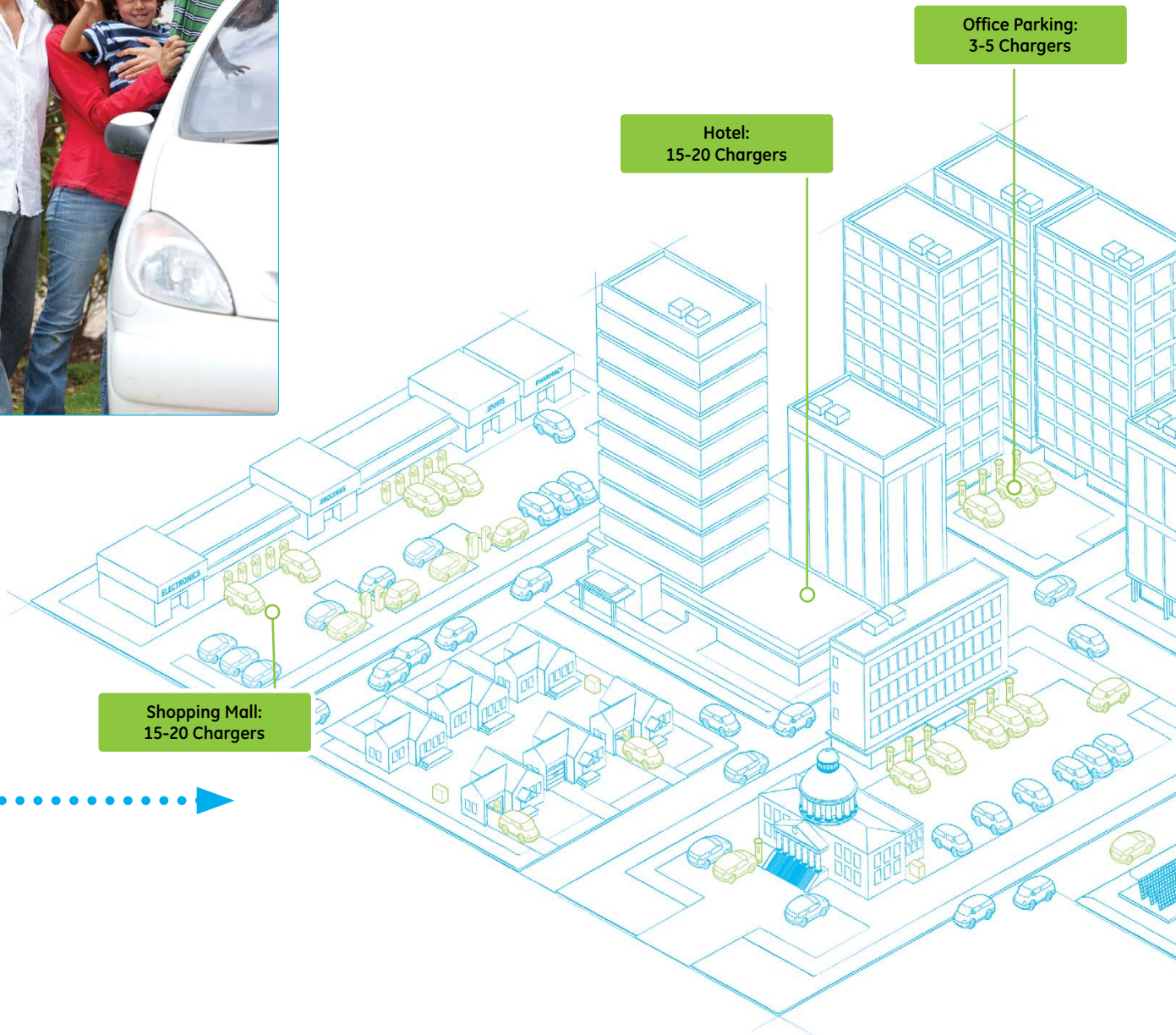
EV Charger Station

The Expanded EV Pipeline

Driven by Growing Consumer Demand

Over the next five years, virtually every automobile manufacturer in the world plans to introduce a plug-in hybrid or battery electric vehicle. They will convert existing models and introduce new models.

Interest in EVs, particularly among environmentally conscious consumers, is growing rapidly, but they are not alone. Early adopters are drawn to advances in technology that are making EVs and plug-ins increasingly practical, while frugal travelers see EVs as a hedge against gasoline price increases. At the same time, there is a growing sentiment that the United States must reduce its dependence on foreign oil.



The Network of Distributors and Contractors

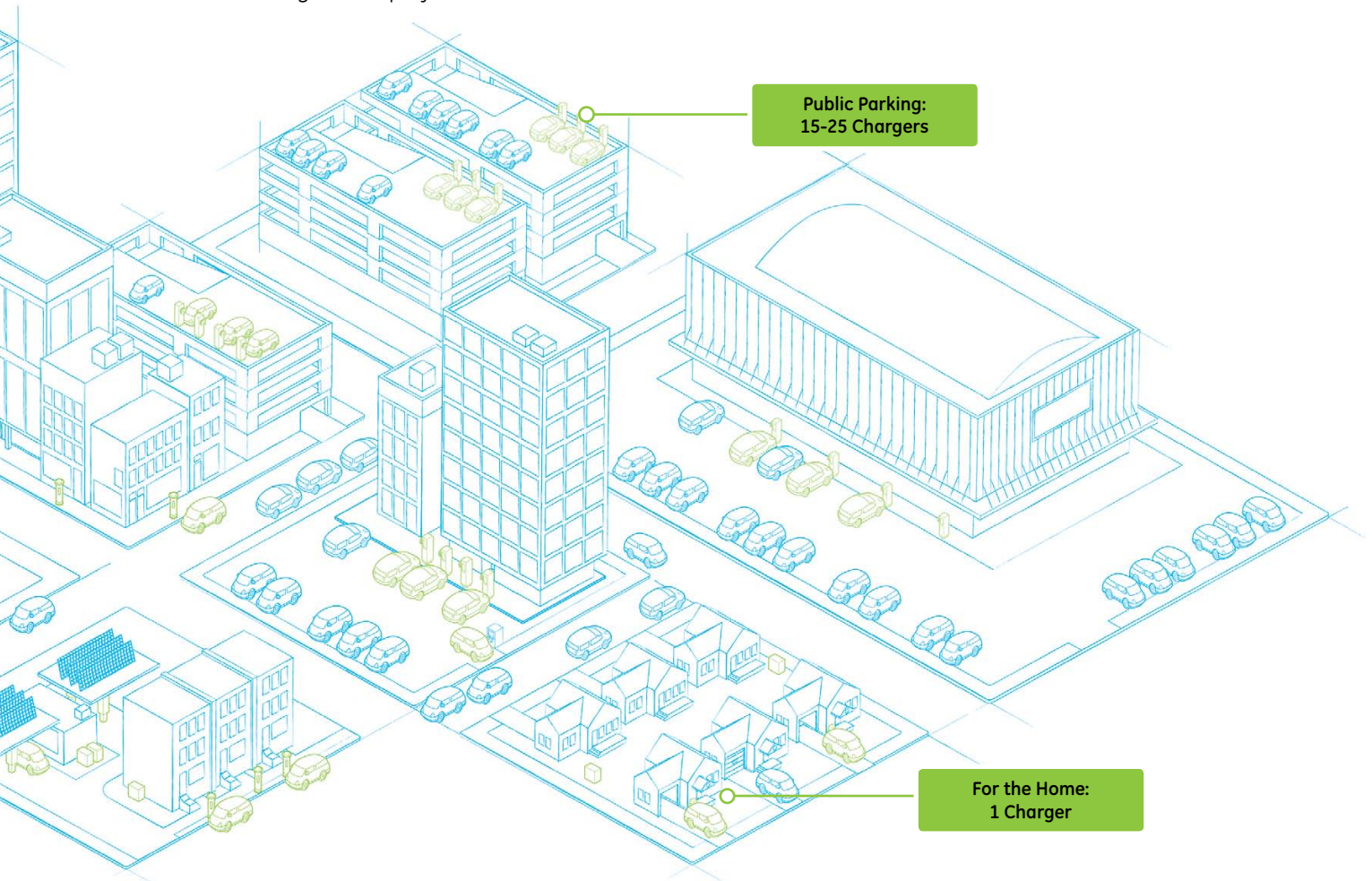
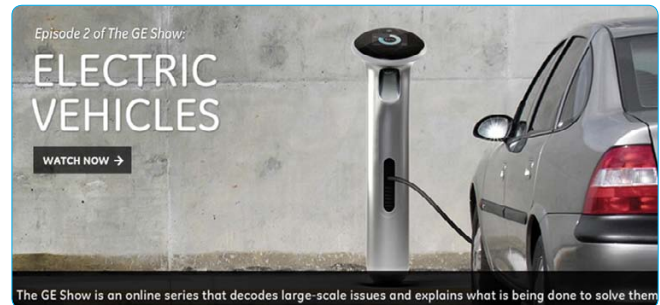
GE has created a team of distributors and contractors with the expertise to help you design your entire EV infrastructure and the capacity to help you build it. This network consists of 500+ authorized distributors in 1,400 locations around the country as well as our existing contractor customers selected for their dedication to service and the quality of their work.

Consumer Support and Financing

To help consumers upgrade their residences for fast home-charging, GE has partnered with ServiceMagic to connect consumers with service professionals. ServiceMagic will engage certified residential electricians qualified to install the EV Charging Station, and, in conjunction with GE Capital, will offer flexible financing for the project.

Education and Marketing

GE is taking an active role in overcoming the barriers to widespread EV adoption, educating stakeholders about its advantages, and highlighting the innovative products and services that the company is creating to accelerate the transition. Our education and marketing campaign consists of TV commercials, advertisements, articles, webisodes, and more.



The EV Charging Station from GE

Moving Power from the Grid to the Road

As plug-in electric vehicles begin hitting the road, GE's EV Charging Station stands ready to serve the millions of cars that will be plugging-in instead of fueling-up.



Level 2 charging is capable of reducing charge time from 12 to 18 hours to four to eight hours.

Setting the Standard for User-Friendly Design and Reliability

With the EV Charging Station, GE builds on a century of innovation in designing and manufacturing electrical distribution systems. GE's EV Charging Station enables fast Level 2 charging whether it's installed at home or in public locations. The EV Charging Station's modular design allows for easy upgrades as owner's needs change and more options become available.

The EV Charging Station is ideal for various locations. It can also help developers of commercial properties achieve higher LEED status for setting aside parking for low-emission vehicles and reducing conventional commuting trips. The EV Charging Station is also well suited for residential settings, where its user-friendly design makes it an excellent choice for consumers wanting a durable, at-home solution.

EV Charging Station Features

The EV Charging Station benefits from knowledge and experience gained in GE's 40 years of manufacturing RV pedestals.

Standard Features

- A holder keeps the cord organized and out of the way
- LEDs display charger status
- Vacuum Fluorescent Display (VFD) screen shows greetings, instructions, and charging station messages
- Outlet automatically recloses
- Vehicle ground monitoring circuit protects the user
- Single-phase metering can be viewed on the VFD
- A building ventilation interface signal can be provided to operate facility and garage fans when required



Radio Frequency Identification (RFID) Option

The ISO 15693 compliant RFID reader can be used with GE-provided key cards. Users pass their cards in front of the RFID reader on the EV Charging Station, which sends their identification via Ethernet to the RFID software application running on a remote desktop, which then issues an authorization to start charging.

The RFID software application, running on Windows XP or Windows 7, enables electric vehicle supply equipment (EVSE) operators to add, remove, or suspend user authorization. In addition, it offers the following benefits:

- Collects data on EVSE usage, which it stores in a relational database
- Generates reports on EVSE usage
- Monitors the status of communication with the EV Charging Station

Administrator Main Screen Welcome, Magda

Home

Drivers Management

- Add
- Edit
- List
- Transaction

Administrator

- Data Clean Up
- Application Users
- EVSE Status

Help

Logout

EVSE Status

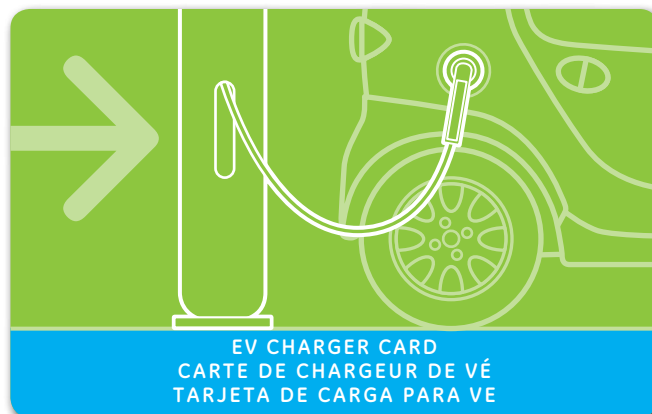
Status	Charging Station ID	Last Connectivity Date	Last Connectivity Time	Connectivity Frequency
●	123	12.09.2011	16:30	300
●	124	12.09.2011	14:30	300
●	125	12.09.2011	12:30	300
●	120	12.09.2011	11:30	300
●	121	12.09.2011	16:30	300
●	128	12.09.2011	11:30	300
●	126	12.09.2011	10:30	300
●	127	12.09.2011	09:30	300
●	119	12.09.2011	16:30	300
●	118	12.09.2011	16:30	300

Download

Active Driver's List

First Name	Last Name	Card Number	Card Status	Status Last Changed	Email	Department	Phone Number
Rainer	Zufall	303-5A5-7647	Active	Fri Jun 11 00:00:00 IST 2010	rainer.z@gs.com	IT	12345670
Rainer	Babbel	303-5B5-7647	Active	Fri Jun 11 00:00:00 IST 2010	rainer.b@gs.com	IT	12345671
Marie	Darms	303-5C5-7647	Active	Fri Jun 11 00:00:00 IST 2010	marie.d@gs.com	Finance	12345672
Hnlger	Arlamc	303-5D5-7647	Active	Fri Jun 11 00:00:00 IST 2010	hnlger.a@gs.com	Strategy	17345673
Juliane	Adams	303-5E5-7647	Active	Fri Jun 11 00:00:00 IST 2010	juliane.a@gs.com	HR	12345674
King	Adams	303-5E5-7648	Active	Fri Jun 11 00:00:00 IST 2010	king.a@gs.com	IT	12345675
John	Babbel	303-5E5-7649	Active	Fri Jun 11 00:00:00 IST 2010	john.b@gs.com	Admin	12345676
Poll	Adams	303-5E5-7640	Active	Fri Jun 11 00:00:00 IST 2010	poll.a@gs.com	IT	12345678
Jimmy	Adams	303-5E5-7641	Active	Fri Jun 11 00:00:00 IST 2010	jimmy.a@gs.com	IT	12345679
Symonds	Andrew	303-5E5-7642	Active	Fri Jun 11 00:00:00 IST 2010	Symonds.a@gs.com	Marketing	12345680

Download



Mounting Options



The **single-pedestal mounting option** is ideal for lots and on-street parking, where user access is at a premium.



The **double-pedestal mounting option** enables two charging stations to occupy the space of one.



The **pole-mounting option** is the best choice where sidewalk space is limited.



The **wall-mounting option** fits in residential as well as public parking garages.

Type	Enclosure	Output	Number of Connectors	Single Phase Integrated Meter	RFID	Catalog Number
Single Pedestal	NEMA 3R	208-240V 30A 1 phase	1	Yes	No	EVSN3
					Yes	EVS RN3
Double Pedestal	NEMA 3R	208-240V 30A 1 phase	2	Yes	No	EVDN3
					Yes	EVD RN3
Pole	NEMA 3R	208-240V 30A 1 phase	1	Yes	No	EVPN3
					Yes	EVPRN3
Wall	NEMA 3R	208-240V 30A 1 phase	1	Yes	No	EVWN3
					Yes	EVWRN3

Standards and Approvals

- SAE J1772
- NEC 625
- UL 2231, 2251, 2594
- NEMA and NIST
- cUL 2594 and 2231

Coming Soon: GE WattStation™

In collaboration with renowned industrial designer Yves Behar, GE has developed the WattStation™, a stylish, highly functional, easy-to-use Level 2 charging station for commercial and residential applications.



GE Energy Industrial Solutions
41 Woodford Avenue
Plainville, CT 06062
www.geindustrial.com

© 2010 General Electric Company



WattStation™ is a trademark of General Electric Company.

Information provided is subject to change without notice. Please verify all details with GE. All values are design or typical values when measured under laboratory conditions, and GE makes no warranty or guarantee, express or implied, that such performance will be obtained under end-use conditions.