



SIEMENS

www.siemens.com/drivergy

Welcome to the world of electromobility!

Drivergy puts electricity on the road

Answers for the environment.

5:00 a.m.



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The future has begun

5:00 a.m. – The city awakens, and with it a new day in the age of electromobility. Come with us on a journey to a future marked by urbanization, where cities are the center of thousands of people's lives, the place where they work, communicate, relax, and come together.

Organizing all this to meet the cities' environmental needs and the growing mobility demands of their residents requires new infrastructures. Creating and designing these infrastructures is one of the challenges that will make our cities pioneers in future technologies – technologies such as electromobility. It combines CO₂-free transport with intelligent services, creating a higher quality of life and an attractive, green city.

Behind all this is an integrated suite of consulting, hardware, and software that comprehensively covers all aspects of electromobility. Join us as we move toward the future. As an experienced partner, Siemens already offers the right solutions today with Drivergy, the integrated electromobility platform.

- Be an attractive industry pioneer – an effective contribution toward reducing CO₂ emissions
- Discover new business opportunities – through intelligent use of charging time
- Investment protection through future-safe technology from an experienced partner – from energy supply and grid infrastructure with IT and low-voltage switchgear to the smart grid of the future
- Integrated modular solutions to meet all requirements – from charging stations for DC and AC and inductive charging to a powerful software suite for managing charging infrastructure, loads, and customer data, and all the way to reliable charging infrastructure components
- Proven support – from comprehensive service to tailored operating models

6:30 a.m.

Convenient and economical: Home charging

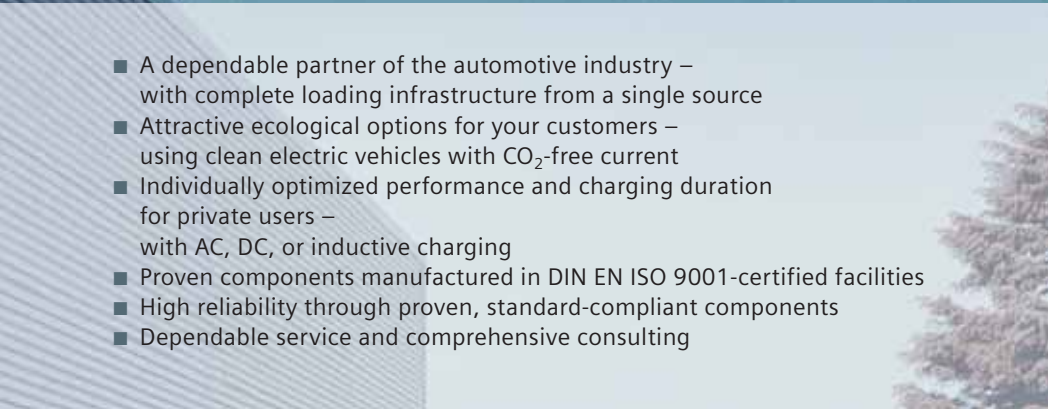
6:30 a.m. – Drivergy makes sure you're ready to go in the morning. When you enter your garage, your electric car is fully charged. It was connected throughout the night to the grid via a wall box, charging while you were asleep. Siemens technology automatically charged the car using inexpensive current from wind energy, making electromobility transport even more economical while also helping to stabilize the power grid.

You thus benefit ecologically as well as economically from the integrated electromobility platform Drivergy. And for your next car, you may not want to bother with a power cable at all. That's not a problem – you can charge your car inductively in your garage, simply by parking it above an inductive charger. Drivergy offers the equipment you need.



Your benefits

- A dependable partner of the automotive industry – with complete loading infrastructure from a single source
- Attractive ecological options for your customers – using clean electric vehicles with CO₂-free current
- Individually optimized performance and charging duration for private users – with AC, DC, or inductive charging
- Proven components manufactured in DIN EN ISO 9001-certified facilities
- High reliability through proven, standard-compliant components
- Dependable service and comprehensive consulting



9:00 a.m.





Advantages for everyone: Semi-public charging

9:00 a.m. – As an innovative organization, your company is fully behind future technologies like electromobility. That's why pioneering charging points from Siemens are installed in your parking lot. In the background, the software suite ensures safe, efficient charging and also provides attractive services like the ability to reserve charging points.

This means that your company keeps its own electric vehicle fleet charged while also enabling employees to charge their electric cars during working hours. It pays off for you, because even when the cars' batteries are full, they serve as a reserve power supply that is quickly available during peak load periods, and can feed power back into the grid as needed. The price difference between expensive peak load current and less expensive night current is credited to drivers' personal accounts.



Your benefits

- Image boost from sustainable, CO₂-free mobility
- Siemens as an experienced partner by your side – from energy supply to smart grid tie-in to building technologies
- Economical, reliable overall hardware and software solutions – from standalone or satellite systems to charging infrastructure management to the employee portal
- Future-safe, dependable technology – from components to systems, compliant with all applicable standards and requirements
- Comprehensive service – from initial consultation to successful operation, including customer-friendly operating models

5:30 p.m.

The smart way to go: Public charging



5:30 p.m. – The city lives from and with its infrastructure. Every day, thousands of people drive to stores, malls, offices, and public places. Customer- and visitor-friendly parking spaces with modern charging facilities ensure that the city remains an attractive place for business and free-time activities.

Conveniently charge your electric car while you shop. Our satellite system is the first in the world to combine the function of high-end parking ticket machines with electric charging – an interesting offering for parking lot owners. At other public parking places, an agreement with your electric utility lets you charge your car at municipal charging points. Just log in with your RFID-card. The costs for the current you use will be added to your monthly power bill.

Siemens charging infrastructures can be tailored to any requirements. They have proven their reliability in the interplay of charging points, satellite systems, and software suite. If you need to charge up while you're on the road, just stop by a modern electric filling station with rapid DC charging points. Here, too, Siemens offers the right hardware and software solutions.

Your benefits

- A green, sustainable city with higher quality of life – through lower CO₂ emissions and less traffic noise
- A more attractive city – for potential business development, major regional events, and tourism
- More attractive for customers – through additional services for eDrivers in malls, stores, and parking lots or garages
- Flexible customer applications – thanks to modular, future-safe hardware and a powerful software suite
- Economical combination – parking ticket machine and charging point in one system
- Economical operation – thanks to robust, low-maintenance technology and remote maintenance options
- High reliability through proven, standard-compliant components
- Customer-friendly operating models and high consulting expertise – for your own individual entry into electromobility



8:00 p.m.

Always ready: Fleet charging

8:00 p.m. – The new mobility is just as integrated as the technology platform behind it. It offers an intelligent mix of different modes of transportation, which can be combined as needed. Well thought-out combined solutions can become an important part of modern transportation concepts, both private and commercial. Drivergy, the Siemens electromobility technology platform, offers ideal solutions that combine great convenience with reliability.

For example, when you want to take a trip to another city to meet friends, you might travel by train. Park your electric car at the train station and let it charge while you're away. The train gets you to your destination safely, conveniently, and ecologically. When you reach your destination station, continue your trip quickly and easily with a rental eCar that you ordered online. It's waiting for you at the station, charged and ready to go. Alternatively, you can take one of the many environmentally friendly eTaxis waiting there. At the taxi stand and on the rental car parking lot, intelligent Siemens fleet charging technology ensures vehicle readiness and thus customer mobility at all times.

The Drivergy technology platform offers complete solutions centered around different needs, from standalone and satellite systems with AC and DC charging to inductive technology. The Siemens software suite provides reliable management of the charging infrastructure, as well as many new services. For you, it simply means that when you return to your hometown, your own car is waiting at the station, fully charged for the trip back to your home.



Your benefits

- Unique image for your city – through the intermodal linkage of public and private transportation, using electric vehicles
- Environmentally friendly, forward-looking vehicle fleets – for the public sector and private businesses in your city
- Good for the environment – through reduced CO₂ emissions and less traffic noise
- Integrated solutions for fleet and public charging from a single source
- High flexibility through a modular, coordinated system – including hardware as well as the software suite with its customer-friendly services, such as charging point reservations, customer account data administration, and payment and billing modalities
- High reliability through proven, standard-compliant components
- Investment protection through robust, low-maintenance technology and remote maintenance options
- Easy entry into electromobility – through customer-friendly operating models from an experienced partner



Electromobility: A Siemens focus for more than 125 years

Siemens has made major contributions to the world of electromobility right from the outset – for instance with the first practical electric locomotive for passenger trains, which Werner von Siemens presented at the Berlin Trade and Industry Exhibition of 1879. Siemens also developed the world's first electric streetcar, which took to the tracks in 1881 in Berlin, and the first overhead wire electricity feed.

Siemens was also a leader in automotive design at the beginning of the last century. In 1905 the company launched the "Viktoria," Germany's first series-production electric car, which was used as a taxi and delivery vehicle.

As an important technology partner, Siemens maintains its leading role in electromobility still today – as a developer and builder of innovative trains for local and long-distance routes, as a developer of drives and vehicle components, as an experienced partner for the energy industry, and as a manufacturer of reliable, robust infrastructure components.



The spirit of innovation on wheels

Siemens is helping lead the way to the future of electromobility with a variety of pilot projects. One of these is the EU Green eMotion project, which Siemens is coordinating. The goal of this project is the Europe-wide standardization of interfaces for vehicles and infrastructure, as well as billing methods.

In addition, with its internal Project 4-S (4 Sustainelectromobility), Siemens is researching user behavior and its consequences for future charging infrastructure – including car sharing. For this project, Siemens is using its own charging points and software suite. In another project, Source London, the Charge eMosphere software suite administers and manages charging points from different manufacturers, and provides a user-friendly customer portal.

In the Munich model region, Siemens worked with BMW AG and Munich's municipal utility (SWM) on a joint project involving the operation of 40 E-MINI vehicles over a period of 10 months. In addition, a fast charging system was developed together with BMW.

Driven by Siemens Drivergy

Individual electromobility is a question of the system. Many factors interact to play a role, and addressing them requires a comprehensive solution approach. To meet this challenge, Siemens has bundled solutions with the Drivergy electromobility platform. We put electricity on the road – welcome to the world of electromobility!



Climb in!

The products and solutions in our Drivergy electro-mobility platform make it easy to design your individual electromobility solutions – whether for home, fleet, or public parking spaces.

Drivergy is modular, and offers not only tailored technology and charging infrastructure expertise, but also a range of operating concepts. Put your trust in our experience and come along with us on the road toward electromobility.

More information:
www.siemens.com/drivergy



Charge WB100A AC wall box



Charge CP500AAC charging point

Drivergy: The basis for environmentally friendly, individual mobility

The right charging infrastructure for every application



Compact wall boxes

For private parking lots or small parking garages, for single-phase or three-phase charging

Simple vehicle charging, for example overnight at home.



Modular charging points

Charging based on need, in a robust housing, for private, semi-public, and public areas

Charging points tailored to your needs, with RFID-identification or parking ticket machine linkage, single- and three-phase loading or rapid charging, up to simultaneous charging of two electric vehicles.



Satellite system

For wide area applications in public and private parking lots

Satellites charge multiple vehicles simultaneously – Charging is controlled and billed by a central controller, which also bills parking fees if desired.



Contactless inductive charging

For example at home, for taxis and buses, or at a company parking lot

Charging without cables or contact, by induction. Simple, fast, safe.



Swapping station

Ready to go right away, with fast battery change!

The fast solution for vehicle fleets – just switch out the empty battery for long range, without waiting times. The batteries can also be used as buffer storage for renewables such as wind energy.



Built-in reliability for your success



Charging infrastructure components

High reliability through proven switchgear and standard-compliant charging controller

Our charging infrastructure uses protective devices, switchgear, measuring and monitoring equipment, and functional units that are also available individually.



Sittraffic EPOS-P AC satellite system



Charge eMosphere software suite



Charging infrastructure components



The intelligence behind electromobility



Software suite

Make sure you're connected

The modular design of our software suite makes it the first choice for integrated, economical electromobility solutions – from charging infrastructure administration to load management to customer data management and fleet management.



Charging infrastructure administration

Simple, reliable, fully compatible charging infrastructure

A central operating platform for problem-free coordination of charging processes for a wide variety of charging points, ensuring stable grid access.



Load management

Safe, reliable power supplies for your charging stations

For effective energy distribution between multiple charging points, as well as optimum stability and utilization of the local grid.



Customer data management

Your route to a flexible, user-friendly customer portal

Convenient charging point reservations and administration of customer account data, as well as payment and billing modalities.



Fleet management

Modular functionalities for your fleets

Car sharing for electric vehicles enables the modular linkage of fleet, parking space, and charging infrastructure, as well as environmental zone management, thus contributing to efficient and sustainable mobility.



On-board-unit management

Dependable interface to on-board-units

Back office for data transferred from on-board-units via GPS and GSM, for implementing track and trace solutions.

A strong partner by your side



Support

From planning to commissioning, and maintenance to operating models

As one of the world's leading technology companies and system integrators, we offer a reliable, expert service organization. Custom-configured operating models round out our offerings, and give you the assurance that comes only from working with an experienced partner.

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