SIEMENS

Start ›

Charging the depots of the future

Intelligent, efficient, reliable and future-proof

siemens.com/evdepot

Stages of an exciting journey

- Your journey to successful electrification
- Intelligent planning
- Building up a smart charging infrastructure
- Efficient management of charging operations
- Rely on us – we care
- Embrace the transition together

Your journey to successful electrification

The electrification destination is sustainable and efficient operation of your electric vehicles. We are here to make your journey smooth, pleasant and successful.

back

read more

Bus fleets

Municipal fleets

Commercial fleets

Your journey to successful electrification

Charged with passion

To electrify your fleet is an exciting and at the same time challenging journey. We at Siemens are committed to take the extra mile, and to go on this journey with you to create tailor-made solutions for every type of fleet, for every depot.

Intelligent planning

Every successful journey begins with thorough planning. Depot concept development, consultancy about grid connection and financial solutions, followed by customer specific simulations – and you are all set to go.

Right charging infrastructure

Depending on your electrification needs, we offer you the necessary hardware, should it be about AC or DC charging.

Depot grid connect

Everything from a single source – with our mid- and low-voltage portfolio as well as integration of photovoltaics or battery storage, your depot electrification will be carried out successfully.

Digital solutions

Be sure that charging operations of your fleet will run smoothly and efficiently.

With us you get a dedicated digital solution for whatever need you have during your electrification phase.

Connected services

With our cloud-based and comprehensive classical services, your eVehicles will be well cared for and available whenever you need them.

Intelligent planning of the electric infrastructure

Upfront long-term planning of your depot(s) is essential to ensure effective transition and efficient operation.

back

read more

Intelligent planning of the electric infrastructure

Build a reliable basis of your transition with effective upfront planning

Analyzing and aligning all relevant parameters – such as route data of your fleet, available energy at the grid edge, existing IT infrastructure, physical space and boundary conditions etc. – requires support of a strong partner.

Siemens supports you in elaborating the most effective transition plan and the most reliable operational package.

Your benefits

- Effective/easy and secure transition to an electrified depot
- Smart depot layout based on charging simulation of existing and new sites
- Future-proof technology setup
- Efficient, safe and reliable operation of your charging infrastructure
- Optimized costs (CAPEX and OPEX)

Building up a smart charging infrastructure

Electrifying a depot is more than installing a charger.

Learn more about the depot eco-system and how Siemens can ensure a smart infrastructure for your fleet.

back

read more

Building up a smart charging infrastructure

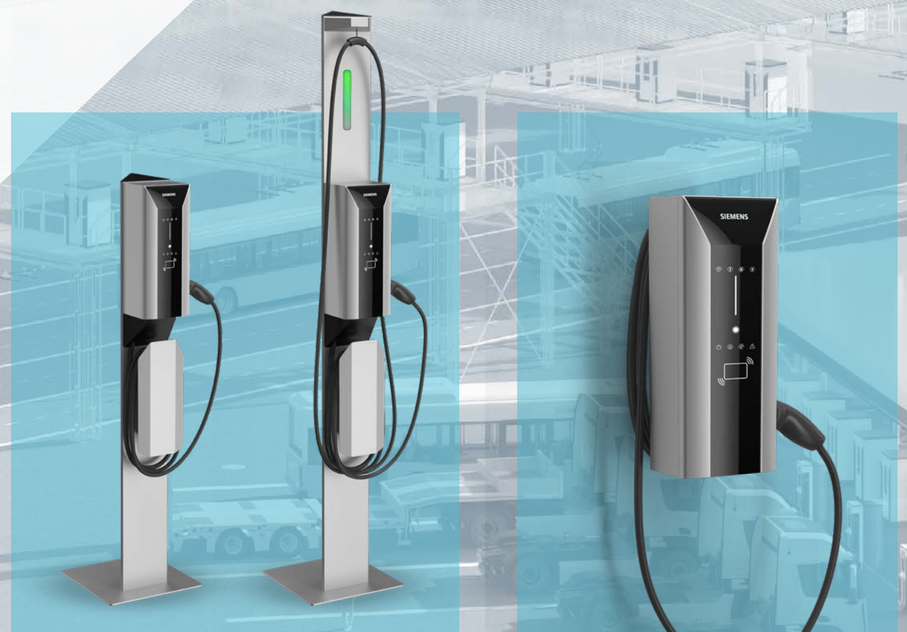
Right hardware to charge your electric fleet

DC and AC charging – both can be deployed in a depot. Siemens has the right charging equipment to provide power to any electric vehicles, be it public buses, trucks, duty vehicles or electric cars.

SICHARGE UC family and VersiCharge – two product types that you need to efficiently run any depots.

SICHARGE UC product family for DC charging*
For public buses, trucks and heavy duty vehicles

Learn more ›
siemens.com/sichargeuc



VersiCharge AC series*
For AC charging, whenever you need it

Learn more ›
siemens.com/sichargeuc

*IEC Standard

Your benefits

SICHARGE UC product family for DC charging
Flexible and space saving with
- Various connection options
- Robust, durable design for outdoor usage
- Optimized CAPEX and OPEX
- Interoperability and future-proof
- Up to 1,000 V

VersiCharge AC series
Modular and flexible configuration
- Smart load management and monitoring options
- Integrated authentication, metering and billing functions
- Scalable design with smart building integration

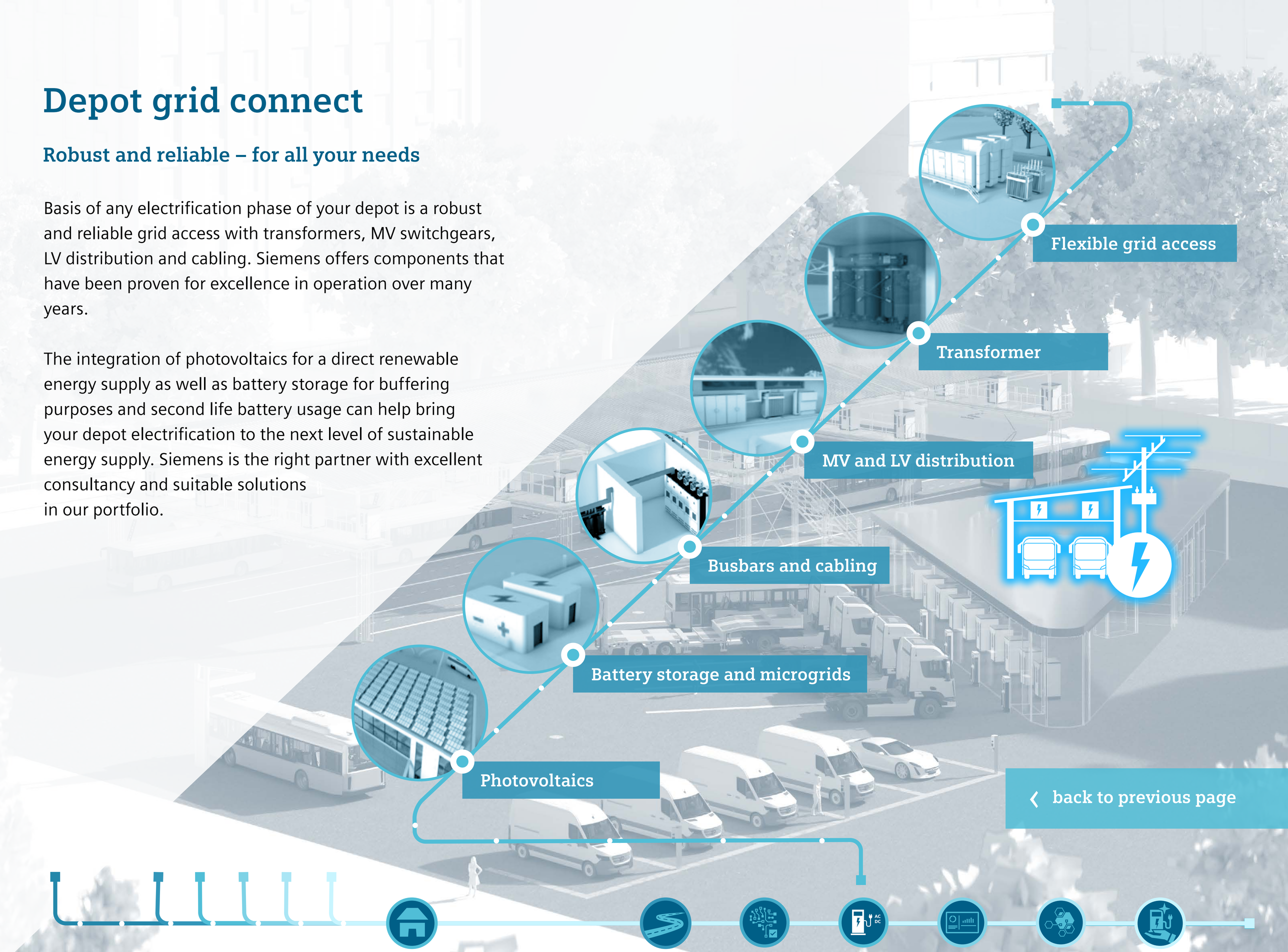
continue on next page ›

Depot grid connect

Robust and reliable – for all your needs

Basis of any electrification phase of your depot is a robust and reliable grid access with transformers, MV switchgears, LV distribution and cabling. Siemens offers components that have been proven for excellence in operation over many years.

The integration of photovoltaics for a direct renewable energy supply as well as battery storage for buffering purposes and second life battery usage can help bring your depot electrification to the next level of sustainable energy supply. Siemens is the right partner with excellent consultancy and suitable solutions
in our portfolio.



back to previous page

Efficient management of charging operations

Smooth, reliable and efficient operation of your eFleet requires an intelligent management of the entire eco-system. Our software suite offers everything you need to manage charging in your depot.

back

read more

Efficient management of charging operations

Digital solutions for best-in-class efficiency

Siemens is releasing a focused portfolio of digital solutions to make your life easier by increasing uptime, reducing CAPEX and OPEX as well as integrating charging and depot management.
The CONNECT package, supporting the management of chargers, is the first of a series of software modules to be released. We are working on further solutions to support the operation of your fleet and your whole depot, including controlling your energy consumption and costs.

now

CONNECT

- **Reporting and monitoring**
  View dashboards of your system status
- **Notifications and Remote Reset**
  Stay informed about status and events
- **Smart Charging**
  Control your chargers to manage the load

coming soon

CONTROL

Robust energy optimization
Optimized charging based on vehicle/route scheduling, power constraints, energy prices

- Live monitoring of planned versus actual
- Adaptive optimization to deviations

Your benefits

Transparent operations
- Fact based decisions
- Comprehensive statistics
- Real time tracking of KPIs

Efficient usage of grid connection
- Infrastructure protection
- Smart charging
- Load limitation

Reducing your energy costs
- Charging at load tariffs
- Dynamic scheduling
- Configurable strategy

Increased availability
- Monitoring of chargers and charging processes
- Event driven notifications

Smooth integration
- Existing and new depots
- Open interfaces
- Communication via OCPP

continue on next page ›

Your first digital step in fleet electrification

Higher performance with the CONNECT package

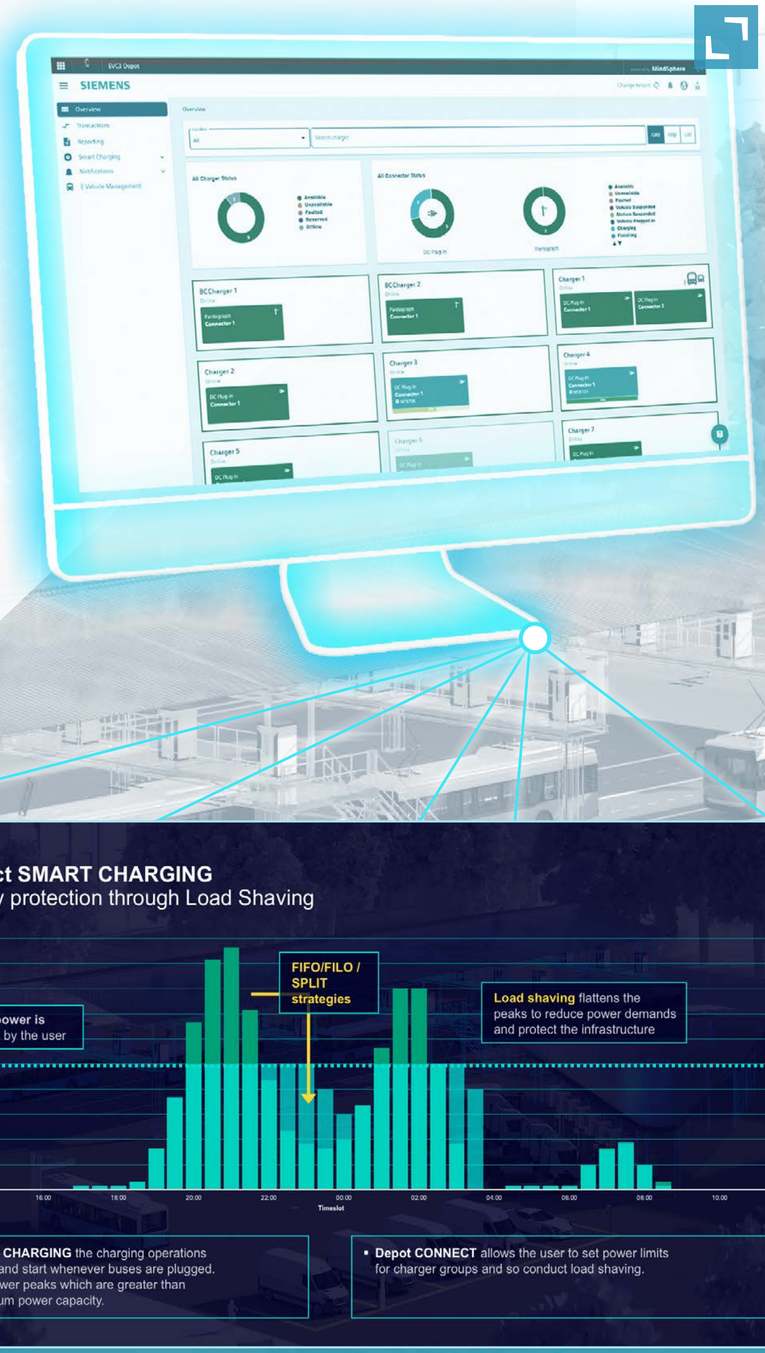
Profit from lower costs and a comprehensive solution for operation, protection and maintenance of your charging infrastructure.

Reporting and Monitoring
View dashboards of your system status
- Historical reporting and statistics
- Troubleshooting and detailed views

Notifications and Remote Reset
Stay informed about status and events
- In-App and email event driven notifications
- Remote charger resets

Smart Charging
Control your chargers to manage the load
- Assign control groups power constraints (hourly, daily and weekly basis)
- Control the charging in a group according to preset strategies, e.g. **First-In-First-Out, First-In-Last-Out, or SPLIT**

siemens.com/emobility ›



click enlarge button for detailed view

Your benefits

Transparent operations
- Stay informed at all times
- Understand your charging operations
- Track KPIs in real time

Reducing your energy costs
- Reduce power requirements
- Charge at low-cost hours
- Tailor charging strategy

Increased availability
- Monitor your charging operations
- Reduce maintenance with Remote Reset
- Improve response time with event driven notification

Smooth integration
- Manage charging in existing and new depots
- Seamlessly integrate systems with API interfaces
- Ensure interoperability with OCPP communication

‹ back to previous page

Rely on us – we care

... and we are only satisfied when you are, not only during the initial installation of our hardware and software, but especially with a view of future challenges. Our Care packages offer tailored services to keep your operation up and running.

back

read more

Rely on us – we care

With tailored services

We offer you world-class services and support throughout the lifecycle of your charging equipment, thus assuring the maximum uptime and highest availability of your fleet.

Training

Corrective maintenance

Preventive maintenance

Support and Consulting

Spare Parts

Digital Services

With our Care package, enjoy features like:

- Connectivity independent of the OCPP channel
- On-demand remote analysis and diagnosis
- FW updates OTA
- Included within the warranty period

With our Care Plus package, enjoy all Care digital services and even more:

- Proactive remote monitoring, analysis and response
- Priority for firmware update

Care and Care Plus

Taking care about your chargers with our Care packages as part of our digital services.

Embrace the transition together

Each and every company is different. Your electrification needs are also unique.

Let us take you behind the curtains and show how we work with various companies to embrace the transition together towards an electric future.

back

read more

Embrace the transition together

Profit from our tradition of innovation

Today, it’s all about electrification and an all-electric future. Many companies have already embraced the transition or are in the process of embracing it. With our experience and expertise, you can be sure that your journey will also be as successful as you wish.

Should it be about comprehensive planning and simulation, providing the right hardware and managing your operations, we will be there on your side all along this exciting journey.

Nuremberg (Germany)

Our customer is a local German public transport company. Electric buses are key to reducing air and noise pollution in cities, and thus improving the quality of life.

Press release ↗

Click here for more details

Genoa (Italy)

Another European city, Genoa continues its journey of electrifying the public transport system, aiming to create an energy-efficient and sustainable model of urban mobility.

Press release ↗

Click here for more details

Auckland and Christchurch (New Zealand)

A country already boasting more than 80 percent renewable electricity generation wants to further drive decarbonization.

Press release ↗

Click here for more details

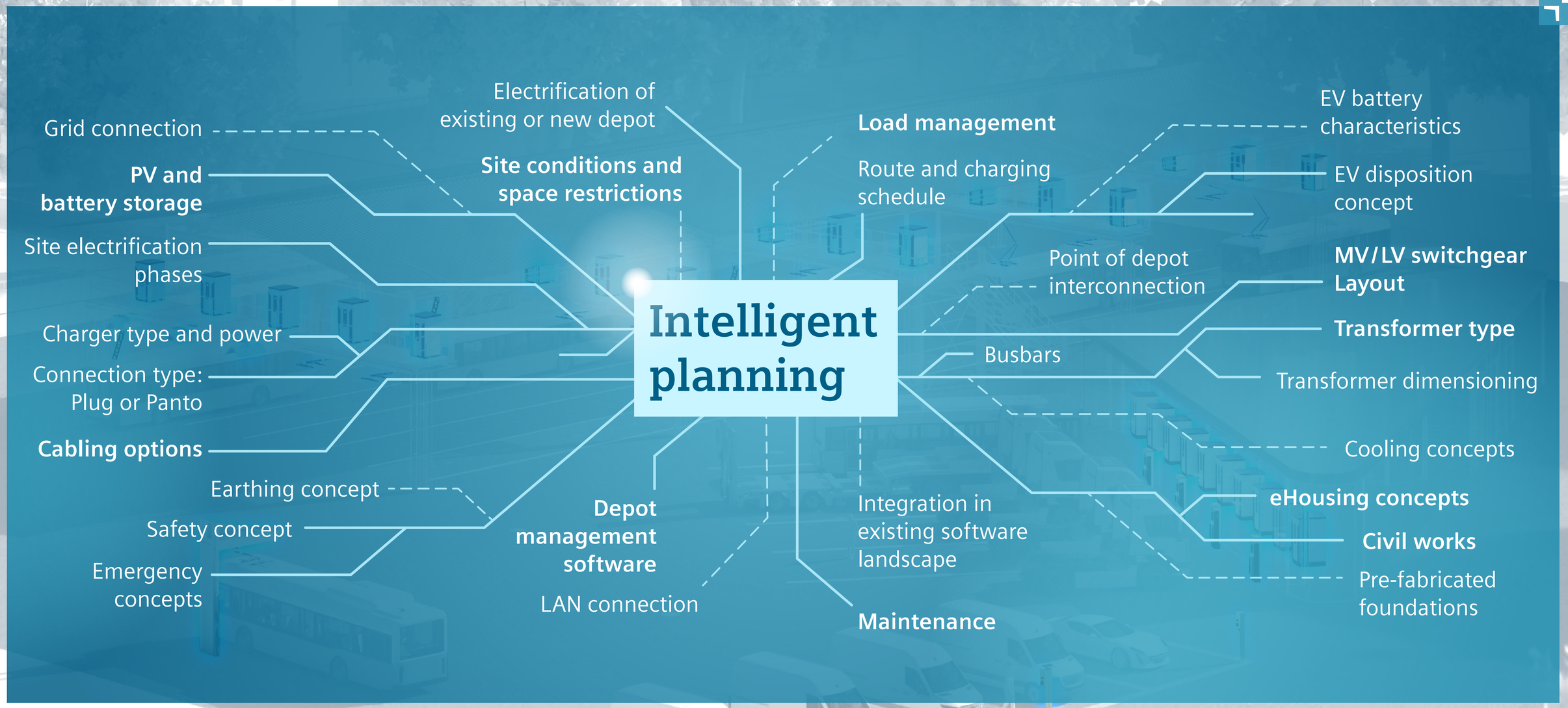
Published by
Siemens AG
Smart Infrastructure
Distribution Systems
Mozartstrasse 31c
91052 Erlangen
Germany

For more information,
please contact our
Customer Support Center:
Phone: +49 180 524 70 00
Fax: +49 180 524 24 71
(Charges depending on provider)
E-mail: support.energy@siemens.com

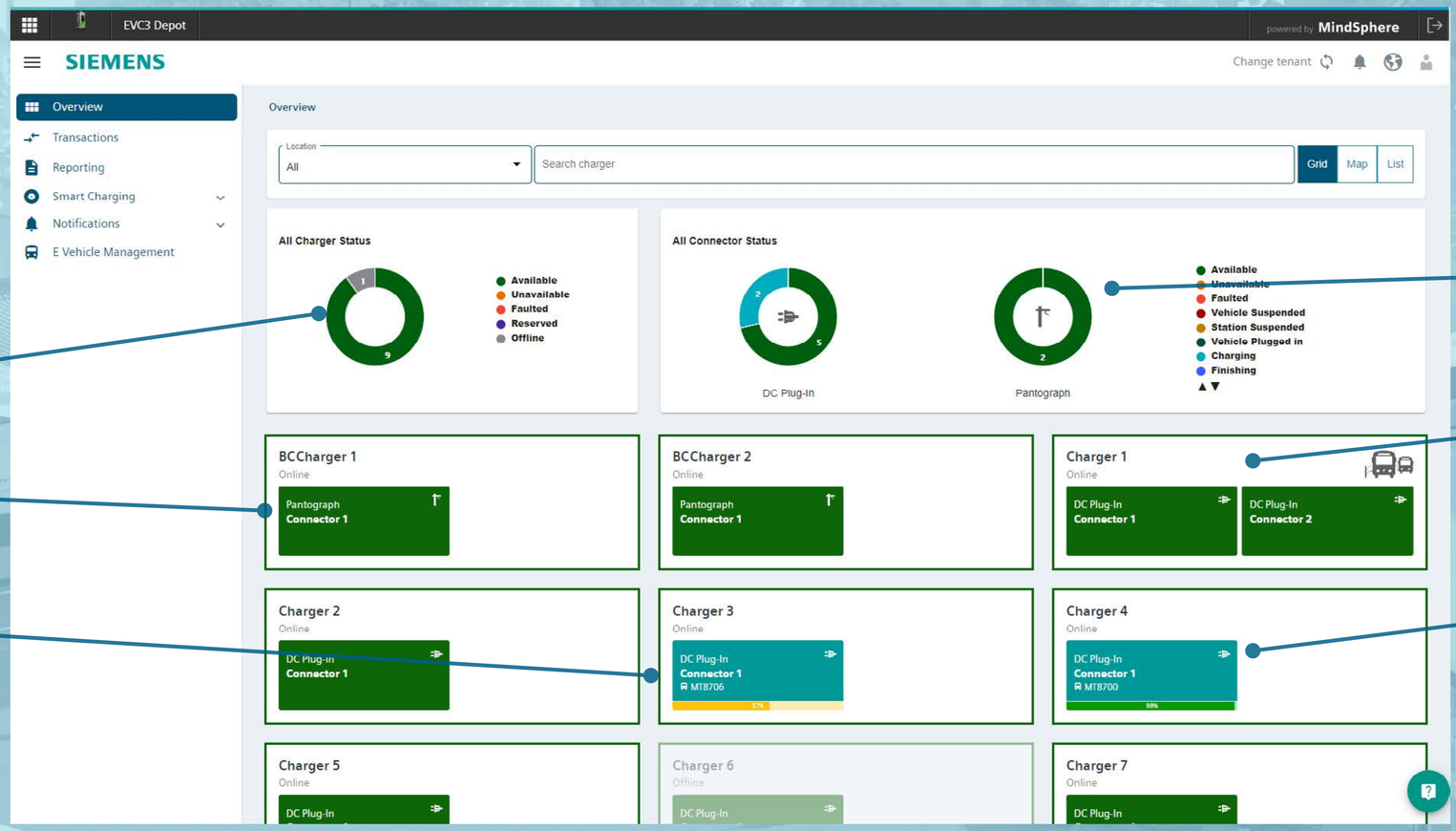
Article No. SIDS-B10061-00
TH 260-200402 BR 0221

Intelligent planning of the electric infrastructure

Build a reliable basis of your transition with effective upfront planning



Overview – central location to monitor status of the chargers



Charger status

Type of connector

Vehicle identifier

Connector status

Sequential charger

State of charge of the vehicle

Efficient management of charging operations

Depot Connect SMART CHARGING

Power capacity protection through Load Shaving

- **Without SMART CHARGING** the charging operations are uncontrolled and start whenever buses are plugged.
- This results in power peaks which are greater than the depot maximum power capacity.

- **Depot CONNECT** allows the user to set power limits for charger groups and so conduct load shaving.

Nuremberg (Germany)

Electric buses are key to reducing air and noise pollution in cities, and thus improving the quality of life. Just having one eBus traveling approximately 200 km per day can save about 60 tons of CO_2 per year. Siemens supports sustainable urban transport with eBus charging infrastructure in Nuremberg.

Scope of solution:

- Charging technology for 39 parking spaces at innovative eBus depot of VAG
- Parallel charging of 20 buses with up to 150 kilowatts with our Sicharge UC portfolio
- Medium-voltage connection for supply with 100 percent green electricity
- Digital solutions to optimize charging activities, charging operations and energy consumption. The e-Depot will be equipped with integrated dispatching system for charging operations.
- eBus port is planned to be ready for commercial operation starting mid 2021

Press release ↗

Genoa (Italy)

With this project Genoa continues its journey of electrifying the public transport system, aiming to create an energy-efficient and sustainable model of urban mobility.

Siemens Smart Infrastructure will provide the charging infrastructure for 10 electric buses. The space-saving design makes it possible to subsequently deploy up to 60 charging units in the bus depot for as many electric buses – a future-proof modular approach.The Siemens charging infrastructure is scheduled to be commissioned by the summer of 2021.

Scope of solution:

- Compact, space-saving design of the depot charging infrastructure
- Smart charging with power of up to 100 kilowatts (kW) per bus
- Electric buses equipped with 200 kWh battery pack
- Combined with Siemens smart charging software, all the charging operations will be intelligently optimized in order to minimize the overall energy consumption and peak loads of the depot.

Press release ↗

A more sustainable public transport in Genoa with charging infrastructure of Siemens and electric buses of Rampini

Charging
with a space-saving and integrated solution in AMT's depot Cornigliano

10 plug-in charging systems for overnight charging at **100 kW**

10 electric Rampini buses E80 with battery packs of **200 kWh**

Commissioning: **2021**

Auckland and Christchurch (New Zealand)

A country already boasting more than 80 percent renewable electricity generation wants to further drive decarbonization.

The Siemens SICHARGE UC range grants bus operators optimal flexibility when planning electric bus depots, by providing highly efficient infrastructure that is designed to be future-proofed against rapid advances in battery technology. It also enables bus operators to economically expand charging infrastructure with up to five dispensers plus a pantograph per charging centre.

Scope of solution:

- DC fast charging technology for 34 buses at depots in two cities with an overall power capacity of around 3.7 Megawatt
- Flexible charging systems to easily expand the infrastructure and adapt to future battery voltage levels of up to 1,000 Volt
- Integration with one of the world's major bus suppliers
- Siemens Charging Management Software to centrally monitor all charging infrastructure across two cities and easily report on key metrics including electricity savings. Smart management functionality to schedule charging intelligently and take advantage of lower overnight tariffs.

Press release ↗

© JW Diesel

Your journey to successful electrification

Charged with passion

Bus Fleets

Electrified bus fleets need a mixture of overnight charging in the depots and on-street opportunity charging at stations distributed in the city.

Municipal Fleets

Consisting of a combination of heavy and light duty vehicles, a municipal fleet has varying needs in the very same depot – meaning AC and DC charging simultaneously.

Commercial Fleets

Usually dealing with last-mile delivery, the light vehicles of a commercial fleet need both opportunity charging and overnight charging – the latter done in depots.