ROLEC*EV*

BUSINESS

Electric vehicle charging solutions

ROLEC*EV*

As the UK prepares for a net-zero future, Rolec plays a pivotal role in ensuring that both EV drivers and businesses are equipped for the nation's electrification plans. With over 10 years of experience in the electric vehicle charging industry and over 280,000 public and private chargepoints manufactured and installed, Rolec continues to serve the industry with its innovations in charging hardware and software.

Whilst offering the UK's largest range of AC fast & DC rapid charging points, Rolec can ensure every customer benefits from first-class and quality products, suited to their requirements. From EV charging solutions for the home, commercial locations, workplaces and fleets, Rolec has the reputation for delivering cost-effective, scalable solutions to suit all budgets and requirements.

Types of electric vehicles

Car Type	Battery	Plug-in	Fuel
Battery Electric Vehicle (BEV) Powered solely by an electric battery which is charged by plugging into an electrical socket. Clean energy producing zero carbon emissions.	✓	✓	
Hybrid Electric Vehicle (HEV) Combination of conventional combustion engine assisted by electrical motor and batteries. All energy still comes from fuel, but generally more economical.	✓		✓
Plug-in Hybrid Electric Vehicle (PHEV) This type of Hybrid has larger batteries and electric motor, and can be plugged-in to charge as well as charging on the move.	✓	✓	✓

Types of charging connectors

AC CHARGING CONNECTORS

Type 1

A five-pin plug, which is common for American & earlier Asian vehicles, it's a single-phase plug and can charge at a speed of up to 7.4kW.

Type 2

A seven-pin plug, typically found on most European and Asian vehicles from 2018 onwards, it's a triple-phase plug, enabling you to charge your car at a speed of up to 22kW at home and up to 43kW at public charging stations.

DC CHARGING CONNECTORS

CCS2

This is an enhanced version of the Type 2 plug, with two additional power contacts for the purposes of rapid charging. It supports AC and DC charging. It allows up to 350kW charging speed.

CHAdeMO

This connector allows high charging capacities as well as bidirectional charging. Currently, Asian car manufacturers are offering EVs with a CHAdeMO plug, allowing charging up to 100kW.

Charging speed comparison

	AC CHARGING			DC CHARGING	
	SLOW Mode 2 / 3	**FAST** Mode 3	**SUPERFAST** Mode 3	**RAPID** Mode 4	**ULTRA FAST** Mode 4
Connector Type	UK 3-Pin Type 1 Type 2	Type 1 Type 2	Type 2	CHAdeMo CCS2	CCS2
Power	2.4 – 3.7kW	7.4kW	11 – 22kW	50 – 100kW	150 – 350kW
Average rate of charge from 10-80%	7 – 11mph	23mph	33mph†	150 – 215mph	320 – 420mph†
Time to charge from 10-80%	24 – 38h 30m	12h	8h 15m†	37 – 70m	25 – 30m†
Typical Application	Home	Home Workplace Shopping Centres Car Parks	Home Workplace Shopping Centres Car Parks Fleets	Workplace Shopping Centres Highways Motorways Fleets	Shopping Centres Highways Motorways Fleets

Charging times based on the Tesla Model Y Long Range Dual Motor 75kWh. Actual charging times may vary

† = Limited by on-board charger, vehicle cannot charge faster

Source: Electric Vehicle Database https://bit.ly/3JPNdMi

AC & DC charging What's the difference?

AC Charging

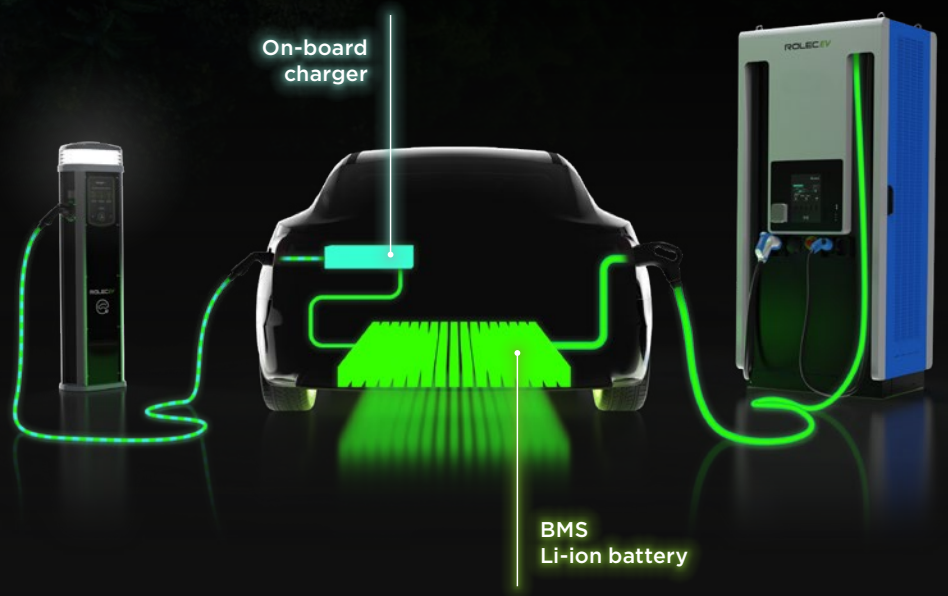
Alternating Current

Batteries on electric vehicles are powered by DC (Direct Current). An AC charger uses power from the grid which is supplied in AC (Alternating Current), which is then converted to DC by the vehicles on-board charger. Although charging speeds can be limited due to size constraints.

DC Charging

Direct Current

A DC charger supplies power directly to the battery management system (BMS) inside the vehicle, with no on-board charging infrastructure needed inside the vehicle. Higher power can be supplied meaning charging times can be considerably faster.



Office for Zero Emission Vehicles

GRANT FUNDED EV CHARGEPOINTS

Homes and businesses can benefit from huge savings when purchasing EV chargepoints

From April 2022, the Office for Zero Emissions (OZEV) grant funding schemes for both domestic and workplace charging requirements are changing in order to increase the number of electric vehicle charging points in the UK. So what savings can be made?

EV chargepoint grants for landlords, social housing providers & property factors

To assist landlords with providing EV charging to their tenants, the government has developed two OZEV grants. The **EV chargepoint grant for landlords** and the **EV infrastructure grant for residential car parks**. These grants have been designed to save landlords thousands of pounds on infrastructure and installing EV chargers.

EV chargepoint grant for landlords

Up to
£70,000* per year

- Up to 75% of the cost to buy and install an EV chargepoint, limited to £350 per grant.
- Each financial year, landlords can receive up to:
  - 200 grants for residential properties
  - 100 grants for commercial properties

These can be across several properties and installations or for one property.

Who can claim the grant:

- Building owners (including landlords and social housing providers and property factors).
  - single-unit residential properties, such as flats and houses
  - multi-unit residential properties, such as apartment blocks
  - commercially-let units

EV infrastructure grant for residential car parks

Up to
£900,000* per year

- A grant of up to £30,000 per building or estate.
- Limited to 30 grants per financial year.
- You must install infrastructure for a minimum of 5 private off-street parking spaces, with at least one working chargepoint.
- Up to £850 grant funding is available per bay (£500 per parking bay provisioned with charging infrastructure, plus an additional £350 per parking bay with a EV chargepoint).

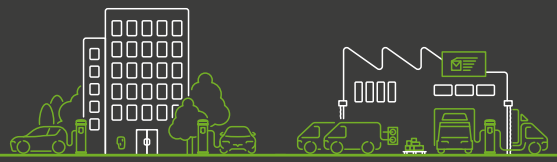
If more chargepoints are needed in addition to those provided by this grant, then the **EV chargepoint grant for landlords** may be used.

Who can claim the grant:

- Landlords or other entity who rents, leases or manages properties in the UK.
  - multi-unit residential properties, such as apartment blocks

For full details of OZEV grant funding, eligibility and how you can apply, please visit:
www.gov.uk/government/collections/government-grants-for-low-emission-vehicles

* Subject to OZEV Ts & Cs



EV chargepoint grants for businesses, charities and public sector organisations

The UK government has some of the most ambitious targets in the world for reducing carbon emissions and backed them up with substantial grants for electric car charging installations. There are two OZEV grants available to workplaces, the **Workplace Charging Scheme (WCS)** and the **EV infrastructure grant for staff and fleets**.

EV infrastructure grant for staff and fleets

Small to medium business enterprises (SMEs) can also access the **EV infrastructure grant for staff and fleets** alongside the **WCS grant**, helping them install the infrastructure they need for chargepoints, now and in the future. Both grants can be used at the same site, but not for the same charging points.

Up to
£75,000*

- A grant is capped at £15,000 per building, or 75% of installation costs.
- Up to £850 grant funding is available per bay (£500 per parking bay provisioned with charging infrastructure, plus an additional £350 per parking bay with a working EV chargepoint).
- Chargepoints installed must be exclusively for staff or fleet use.
- You must install infrastructure for a minimum of 5 private off-street parking spaces, with at least one chargepoint.
- Businesses can claim up to 5 grants (only one grant per site that the business owns, leases or rents).

Who can claim the grant:

- SMEs with up to 249 employees.

Workplace Charging Scheme (WCS)

Up to
£14,000*

- The grant covers up to 75% of the total cost to purchase and install EV chargepoints.
- Up to £350 is available per socket.
- Max. of 40 sockets across all sites per applicant.
- Chargepoints must be used by staff or fleet only. Except for charities and small accommodation businesses, your guests and visitors may use the chargepoints.

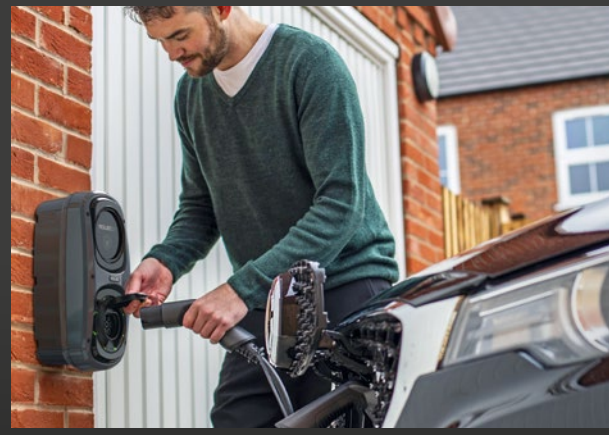
Who can claim the grant:

- Workplaces
- Small accommodation businesses (inc. Hotels, B&Bs, Holiday Lets & Campsites)
- Charities

Please note, if your home is your registered workplace with Companies House or HMRC, you may be eligible for the grant.

For full details of OZEV grant funding, eligibility and how you can apply, please visit:
www.gov.uk/government/collections/government-grants-for-low-emission-vehicles

* Subject to OZEV Ts & Cs



Electric vehicle charging for

Businesses

- WORKPLACE
- COMMERCIAL
- DEVELOPMENT
- RESIDENTIAL
- DESTINATION
- FLEET

Rolec EV's range of OCPP compliant AC fast and DC rapid charging solutions are ideal for businesses who are seeking to offer electric vehicle charging to customers, employees, and visitors with a future-proofed solution.

Operated via mobile phone and/or RFID, they are an ideal, flexible EV charging solution for businesses of all shapes, sizes and disciplines. Remote over-the-air firmware updates and the ability to connect to any back-office provides chargepoint hosts with a future-proof, scalable charging infrastructure solution.

- Integrates with any OCPP back-office
- Generate recurring revenue stream
- Mobile app and/or RFID operated
- Branding & colour options
- 3.6kW through to 200kW charging speeds
- Wall-mounted & pedestal options
- OZEV WCS grant fundable chargers
- Nationwide installation & project management services

ZURA

Sleek, innovative, powerful, Rolec EV's brand new charger, designed and manufactured to suit both commercial and domestic charging requirements. Zura is complete with never-seen-before customisable aesthetics and is packed with the most-wanted features. Choose from single or dual outlet models.

- Plug & charge, mobile app or RFID controlled charging
- 1x or 2x universal charging socket(s) or Type 2 tethered lead(s)
- Up to 7.4kW or 22kW charging output(s)
- TruePEN PME fault detection (no earth rod required)
- Dynamic load balancing (CT clamp & cable included)
- Solar PV, battery storage or domestic wind turbine integration*
- OCPP 1.6 compliant (can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in overcurrent & 6mA DC leakage protection
- Cable lock security feature (can be permanently locked by user)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Independent back plate for easy wall or post mounting
- OZEV grant fundable
- Designed & manufactured in the UK
- 3 Year Warranty

*App dependent features

Personalise the Zura chargepoint

For those interested in customisation or aesthetics, this is the perfect solution for you. Whether it's your company branding, colour or an image, the choice is entirely yours. Contact Rolec for more details.

Our most intelligent EV charger yet

Dynamic Load Balancing protects the property's fuse, allowing drivers to recharge their vehicles without disrupting the property's electrical supply.

Equipped with built-in TruePEN PME fault detection, with no requirement for an earth rod, reducing installation costs.

Meets the required safety and security standards, with over-the-air updates for the latest features, ensuring a secure and future-proof product.

Independent back plate for a quick and easy installation.

Single outlet units can be upgraded to dual in the future.
(single phase models only)

Cable lock feature* – Secure your untethered charging cable into the charger's socket, for peace of mind against cable theft.

*app dependent features

WALLPOD

Fitted with the latest smart technology, this charging unit allows the everyday EV driver to embark on their electrified, sustainable adventures all within the tap of a finger. If you're looking for a charger for your home or business that's affordable and easy to use, this may be the perfect solution for you.

- Plug & charge, mobile app or RFID controlled charging
- Universal charging socket or Type 2 tethered lead
- Up to 7.4kW charging output
- TruePEN PME fault detection (no earth rod required)
- Dynamic load balancing (CT clamp & cable included)
- Solar PV, battery storage or domestic wind turbine integration*
- OCPP 1.6 compliant (can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in overcurrent & 6mA DC leakage protection
- Cable lock security feature (can be permanently locked by user)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Wall or post mounted
- OZEV grant fundable
- Designed & manufactured in the UK
- 3 Year Warranty

SECURICHARGE

The ideal chargepoint for any workplace environment with its heavy-duty and vandal-resistant features.

This wall-mounted unit is a robust charging solution; it is also a space-saving alternative to a charging pedestal. A popular choice for exposed or enclosed locations, the SECURICHARGE is designed to provide a long-lasting charging solution for the future of electrified transport.

- Plug & charge, mobile app or RFID controlled charging
- Choose from 1x or 2x universal charging socket(s)
- Up to 7.4kW or 22kW charging output(s)
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in AC overload & fault current protection (RCBO)
- Built-in 6mA DC leakage protection
- Cable lock security feature (can be permanently locked)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Wall mounted
- OZEV grant fundable
- Designed & manufactured in the UK
- 3 Year Warranty

*App dependent features

QUANTUM

A modern solution for all workplace charging requirements. Sleek, durable, and easy-to-use, this charging pedestal is the perfect option for workplaces seeking to offer charging facilities for both employees and public use.

Popular for its LED features, the louvered amenity lighting and status indicator socket halos provide enhanced visibility of the charging bays and surrounding areas.

- Plug & charge, mobile app or RFID controlled charging
- Choose from 1x, 2x or 4x universal charging socket(s)
- Up to 7.4kW or 22kW charging output(s)
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in AC overload & fault current protection (RCBO)
- Built-in 6mA DC leakage protection
- Cable lock security feature (can be permanently locked by user)
- LED amenity lighting head (Photocell controlled)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Surface or root mountable
- OZEV grant fundable
- Designed & manufactured in the UK
- 3 Year Warranty

BASICCHARGE

This simplistic and affordable EV charging pedestal has integrated LED amenity lighting which provides greater visibility of the charging bays and surrounding areas.

This charger offers an effortless charging experience for EV drivers whilst providing a cost-effective solution for businesses. Ideal for car parks, workplaces, development sites and public locations.

- Plug & charge, mobile app or RFID controlled charging
- Choose from 1x or 2x universal charging socket(s)
- Up to 7.4kW or 22kW charging output(s)
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in AC overload & fault current protection (RCBO)
- Built-in 6mA DC leakage protection
- Cable lock security feature (can be permanently locked by user)
- LED amenity lighting head (Photocell controlled)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Surface or root mountable
- OZEV grant fundable
- Designed & manufactured in the UK
- 3 Year Warranty

AUTOCHARGE

A robust and hard-wearing pedestal that has been specifically designed and manufactured for both commercial and public facing environments. Ideal for development sites, workplaces, and car parks!

This versatile, future-proof pedestal is compatible with all EVs and PHEVs on the current market and is capable of charging up to 22kW.

- Plug & charge, mobile app or RFID controlled charging
- Choose from 1x or 2x universal charging socket(s)
- Up to 7.4kW or 22kW charging output(s)
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in AC overload & fault current protection (RCBO)
- Built-in 6mA DC leakage protection
- Switchgear & components behind lockable door
- Cable lock security feature (can be permanently locked by user)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Surface or root mountable
- OZEV grant fundable
- Designed & manufactured in the UK
- 3 Year Warranty

SLIM 100

Providing the convenience of a single charging station installation with the flexibility to charge up to three electric vehicles simultaneously.

From the entry level 50kW, this unit is upgradable in modules of 25kW, all the way up to 100kW without needing to modify the station itself. A perfect solution for space critical requirements where there are maximum height limitations.

- Plug & charge, mobile app or RFID controlled charging
- Offers up to 3x DC/AC charging outputs for simultaneous charging
- Up to 100kW charging speeds (CHAdeMO up to 62.5kW | CCS2 up to 100 kW | AC Type 2 up to 22kW)
- Choose DC & AC output options to suit requirements
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (can integrate with any back-office)
- Over-the-air updates
- EMC Certified & Harmonics Compliant
- 7” colour customer interface display screen & RFID reader
- Built-in RCD Type B protection
- 4G / Ethernet connectivity
- 97% power efficiency
- IK10 impact resistant design
- 5m charging cables with 4.6m operating radius
- Full accessibility (DIN 18040 compliant)
- Optional 22kW Type 2 socket, contactless payment terminal & emergency stop

UFC 200

One of the most advanced ultrafast DC charging stations in the world. From the entry level 50kW, this unit is upgradable in modules of 25kW, all the way up to 200kW without needing to modify the station itself. Offering up to 4x AC and DC charging outlet combinations, and can charge up to 4x vehicles simultaneously. The UFC 200 has a number of charge activation settings, with the option to add a contactless payment terminal.

- Plug & charge, mobile app or RFID controlled charging
- Offer up to 4x DC/AC charging outputs for simultaneous charging
- Up to 200kW charging speeds
  (CHAdeMO up to 62.5 kW | CCS2 up to 200 kW | AC Type 2 up to 22kW)
- Choose DC & AC output options to suit requirements
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (can integrate with any back-office)
- Over-the-air firmware / software updates
- EMC Certified & Harmonics Compliant
- 7" colour customer interface display screen & RFID reader
- Built-in RCD Type A & 6mA DC leakage current detection
- 4G / Ethernet connectivity
- 94% Power Efficiency
- IK10 impact resistant design
- 3.2m charging cables with 2.2m operating radius
  (Extended reach cables available)
- Full accessibility (DIN 18040 compliant)
- Optional contactless payment terminal & emergency stop

Chargepoint management

VendElectric
SMART SOLUTIONS

Enabling businesses to manage & operate their own charging network

Rolec EV's unique chargepoint management platform provides businesses and organisations with the ability to deploy and self-manage their very own EV charging network. This without incurring any of the significant costs associated with developing a back-office, phone app and secure payment/management platform.

- You're in complete control
- Future-proof & scalable solution
- Mapped network
- Customisable tariffs
- Generate revenue
- Smart reporting & analytical feedback
- Fleet management solutions
- Automatic fault notifications
- Over-the-air updates
- Optional electrical static load management
- Optional eRoaming facility

Other preferred back-office partners:

MONTA Fuuse ChargePlace Scotland electric vehicle charging

CLICK HERE to see the **VendElectric video**, or visit www.rolecserv.com/videos

Chargepoint operation

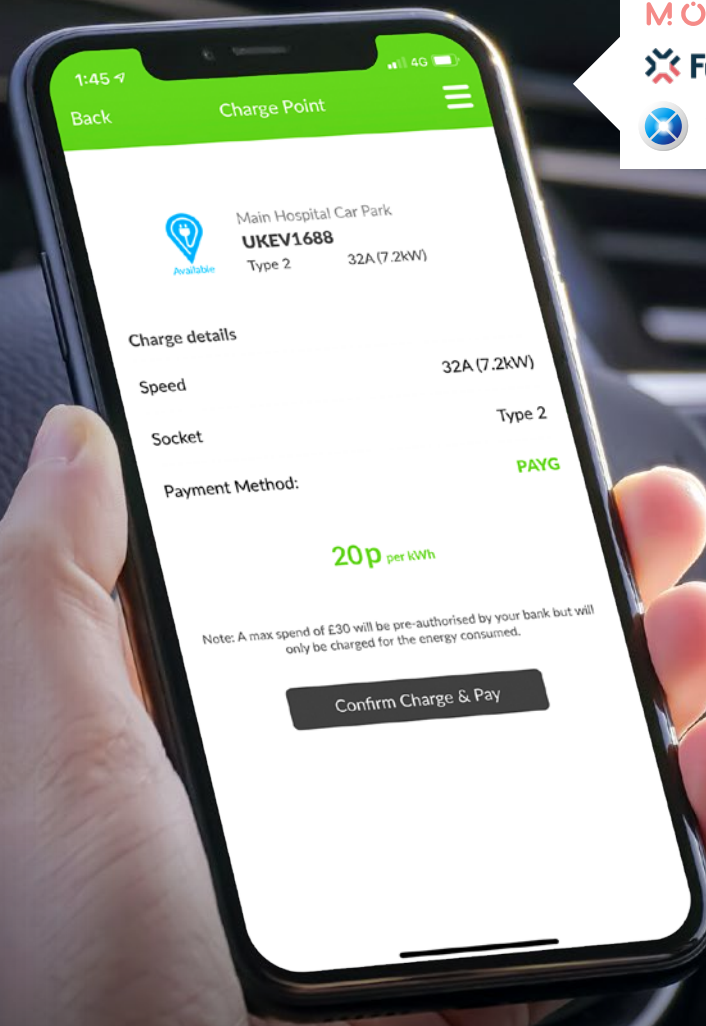
VendElectric app

Manage your charging activity whilst benefiting from an array of features via the VendElectric app!

- Locate and navigate using the chargepoint map
- Remember, sort and save favourite locations
- View current & past charge session information
- Review statistics and analytical data
- Exportable data (ideal for submitting benefit-in-kind claims)
- Receive live charge session notifications and alerts
- Virtual wallet for quicker chargepoint activation
- Add/remove multiple EVs to a single account

RFID

Ideal for workplace employees who frequently use the same charging points, whether for their own vehicle or a company car. RFID activation in either handy card or key fob format.



Other preferred mobile app partners:

MONTA

Fuuse

ChargePlace Scotland
electric vehicle charging

DOWNLOAD THE FREE VENDELECTRIC APP

GET IT ON Google Play

Download on the App Store

BRANDING OPTIONS

Rolec EV understands the importance of brand identity, so that's why we offer our clients the ability to brand their charging points to suit their brand guidelines, offering a completely unique aesthetic.

From a simple logo through to a fully bespoke branded solution, Rolec EV take great pride in providing a solution that distinguishes businesses' chargepoints from their competitors'.

OUR CUSTOMERS

Case studies:

Workplace charging

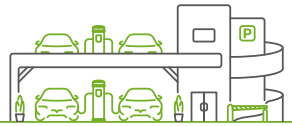
Saint-Gobain

Saint-Gobain UK & Ireland, one of the UK's largest manufacturers and distributors of building solutions has signed a new partnership with Rolec, one of the UK's leading charging manufacturers, to support the delivery of a 1,000 charging point network across Saint-Gobain's sites, offices and retail branches over the next 5 years. The agreement comes on top of Saint-Gobain's recent commitment to move all of its 3,200 company cars to fully electric by the end of 2023.

The 1,000 charging point network will be connected to Rolec's charger management system, VENDELECTRIC and will allow colleagues and visitors to recharge whilst on-site with brands such as Jewson, British Gypsum, Gibbs & Dandy, Minster, JP Corry, and all Saint-Gobain office locations. All Saint-Gobain UK & Ireland brands will benefit from chargers being installed; 500 of the 1,000 locations will be at Jewson branches.

Case studies:

Destination charging



Lake District National Park

Rolec worked closely with AMP EV to support the Lake District National Park's electrification journey. Our QUANTUM (AC fast) and UFC 200 (DC rapid) charging stations, complete with a back-office management system that enables Lake District National Park Authority to open up its charging network to the general public. Now benefiting from 28 EV charging points and allowing their own fleet drivers and EV driving visitors to recharge seamlessly.

Lake District National Park Authority has recently implemented various initiatives to support its aims of becoming net zero by 2025. Implementing an electric fleet and deploying EV charging infrastructure across multiple locations play a significant role in meeting their net zero targets. Whilst fleet drivers are provided with the advantages of greener working operations, the general EV driving public are now provided with the facilities to recharge their vehicles when travelling from the district.

Residential charging

Battersea Power Station

As part of a £9 billion project in central London, Battersea Power Station will be having a 500 strong EV chargepoint network that will enable residents to use their personal security/access RFID card to activate any chargepoint.

The installation of Rolec's SECURICHARGEs and the combination of a smart back-office management solution, including tailor-made load management software enabled residents to recharge whilst completely integrating with the site's management agency.

Due to limited power availability, Battersea Power Station significantly benefited from VENDELECTRIC's, Electricity Load Management feature, that ensures all charging facilities are available to use at all times.

Case studies:

Fleet charging

Development charging

First York

Rolec EV have collectively provided 1,620kW of power via 70+ charging points, including a combination of 22kW AC Type 2 charging sockets and an 8kW dual outlet DC Ultra-Fast Rapid Charger. Having this infrastructure in place allows up to 72 electric bus drivers to park and charge their vehicles overnight in unison before carrying out their journeys the following day. First York has also benefited from Rolec EV's bespoke back-office communications service, which supplies the bus operators with smart charging capabilities of managing charging activity, history, vehicle migration and more.

The government's Net Zero initiative, reaching zero carbon emissions by 2050 is now well underway with various industries opting to future-proof their fleets. The partnership between Rolec EV and First York has come at a time where the electric vehicle industry is experiencing exceptional growth, especially for establishments who are keen to enhance their environmental efforts.

Keepmoat Homes

All new residential buildings from June 2022 must be equipped with smart electric vehicle chargepoint as an aim to encourage EV uptake. Major properties with 10+ parking spaces that are undergoing development will also require at least one chargepoint for each dwelling with associated parking as well as cable routes for all spaces without chargepoints.

Rolec was recently appointed to supply electric vehicle chargepoints for a Keepmoat Development in Doncaster which features over 600 houses all fitted with a WALLPOD charging unit.

Many other key housing developers including Barrett Homes, Kier, Taylor Wimpey, Redrow Homes, Bloor Homes, Fairview Homes, Cala Homes, Elan Homes, Bellway Homes, Orbit Homes, and Persimmon Homes have also opted for Rolec's cost-effective charging solutions on their developments past and present.

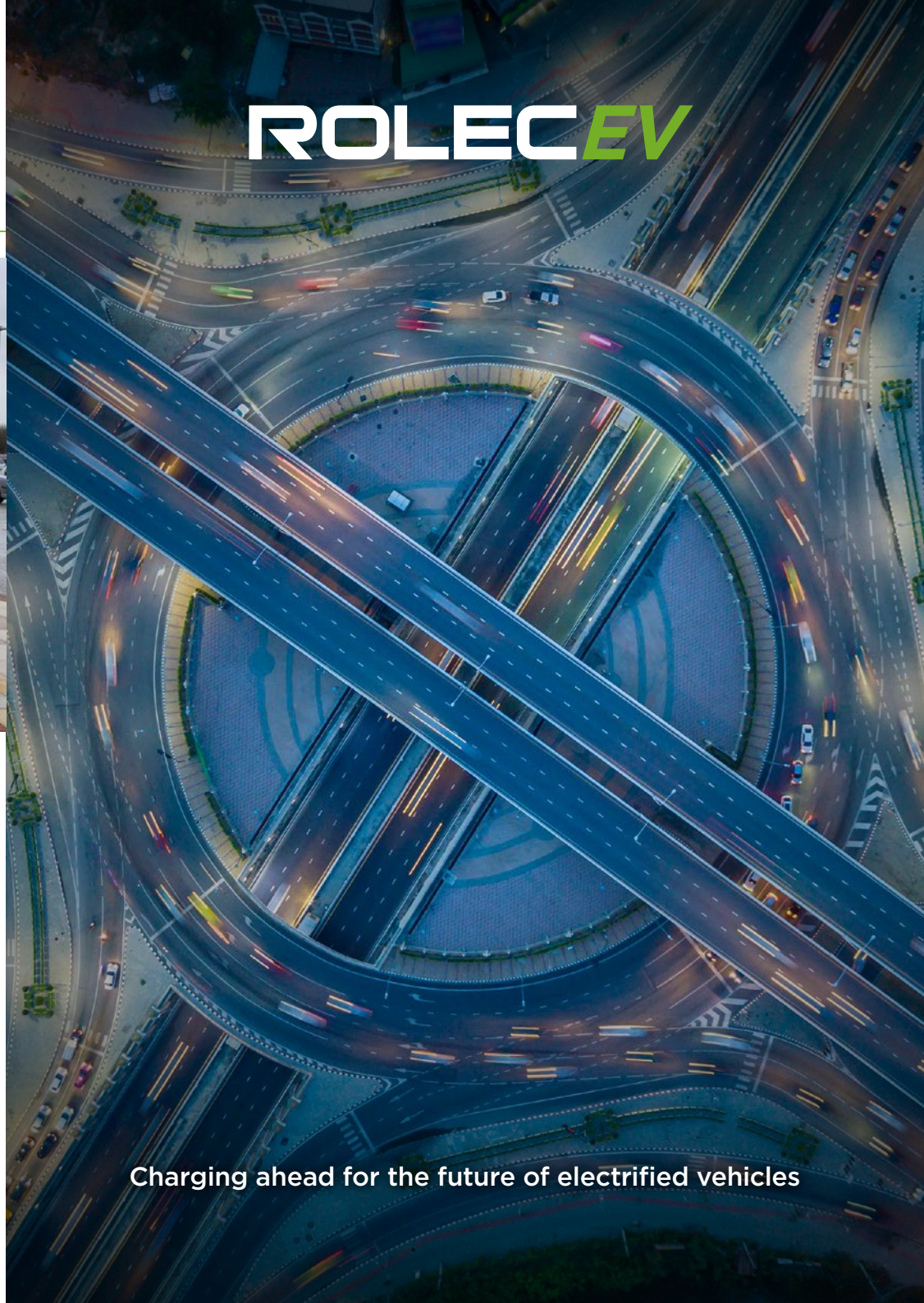
Case studies:

Commercial charging

Meadowhall

Leading shopping and leisure destination, Meadowhall collaborated with Rolec EV to implement over 50 charging points for their customers to use for free across two car parks. Our sleek and dynamic QUANTUMs can be spotted in various bays including disabled and parent & child parking bays.

By integrating the chargepoints to VENDELECTRIC, our smart back-office management system, Meadowhall can now benefit from operating their own bespoke charging network whilst also deploying all aspects of EV charging within a tailor-made management solution.



ROLECEV

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