Salford City Council scales depot EV charging without costly grid upgrades

Case study →



At a glance

→ **Business type** Local Authority, Public Sector

→ **Location** Salford, Greater Manchester, UK

→ **Sites** Main operations depot plus multiple smaller council sites

→ **Vehicle type** Cars, Vans and Trucks

→ **Hardware** 39 Zaptec Pro AC chargers (up to 22 kW)

→ **Use cases** Operational fleet, pool cars and staff EVs

Key features

Dynamic load balancing and OCPP compliant, open protocol hardware.

→ More charge points without major grid upgrades

→ Shared infrastructure across different vehicle and user types

→ Consistent driver experience across all sites

→ Clear energy and cost reporting by site and user group

Salford City Council

About Salford City Council

A fast growing city with bold climate goals

Salford City Council is a growing urban authority in Greater Manchester with ambitious climate and air quality objectives. Its services span housing, highways, waste, parks and community services.

A mixed and evolving fleet

The council runs a varied fleet of vans, cars and specialist vehicles, as well as pool cars and staff EVs that charge at council sites.

Net zero as a trigger for change

To support Greater Manchester's net zero commitments, Salford set a clear direction to phase out diesel and petrol vehicles in favour of EVs, starting with reliable overnight charging at its main depot and flexible charging at smaller locations.



The challenge

Limited grid capacity at existing sites

The depots were not designed with EVs in mind. Existing electrical infrastructure could not support a high number of 22 kW chargers running at full power without disruptive and expensive grid reinforcement.

Legacy chargers that could not keep up

The existing EV hardware could not support current requirements such as OCPP compliance and MID certified metering for accurate, auditable billing of end users.

Multiple user groups, one network

Operational vehicles, pool cars and staff EVs all needed access to charging, with different priorities and dwell times. The council needed a way to share infrastructure while controlling access, usage and costs.

Public sector budget and procurement constraints

As a local authority, Salford had to maximise impact from limited capital and operating budgets, avoid vendor lock in and ensure any solution would be maintainable over a long asset life.

Operational simplicity for busy depots

Depot managers and drivers needed a system that was intuitive and reliable, while sustainability and fleet teams required clear reporting on energy use and utilisation across multiple locations.

The results: EV charging scaled without the costly upgrades

More chargers without major grid upgrades

Dynamic load balancing has allowed Salford to install significantly more charge points per site within existing electrical capacity, deferring or avoiding reinforcement costs and supporting phased fleet growth.

Standardised operations across sites

Using a single hardware platform across depots and small sites has reduced complexity and training requirements, with one user experience for drivers and a consistent approach to monitoring and firmware updates.

Progress towards climate and air quality goals

With dependable charging in place, Salford City Council can confidently accelerate the transition of its fleet to EVs, directly supporting local carbon reduction and air quality objectives.

Reliable overnight depot charging

Operational vehicles now return to predictable, well managed overnight charging at the main depot. Priority settings ensure critical vehicles are ready for service when needed, supporting day to day reliability.

Actionable data for smarter decisions

The chosen backend provides clear insight into energy consumption, costs and utilisation by site and user group, helping to build business cases for further electrification and support funding applications.



Zaptec Pro

- → Up to 22kW AC
- → Dynamic load balancing
- → OCPP compliant
- → RFID authentication
- → MID certified metering

"Zaptec's solution has given us the confidence to scale our EV fleet without waiting for costly grid upgrades. The combination of reliable hardware, intelligent load management and an open platform means we can grow our charging network in line with both our climate ambitions and day to day operational needs."

Alan Fitzsimons
Vehicle Service Manager, Salford City Council



The Zaptec Solution:

The details

High performance AC charging built for depots

Salford chose Zaptec Pro, which offers up to 22 kW AC charging in a compact, robust enclosure suitable for both wall and pedestal mounting, including integration with a solar canopy to make best use of limited space.

Open standards for long term flexibility

Full OCPP compliance gives Salford the freedom to choose and change back office systems, integrate with fleet and energy platforms, and avoid being tied to a single software provider.

Delivered by specialist partners

Certified installation partners with local authority experience managed electrical design, installation and commissioning across diverse sites, ensuring a safe and consistent rollout.

Dynamic load balancing to unlock capacity

Intelligent, cloud based dynamic load management allows chargers to safely share all available site capacity. This lets the council add many more charge points per site while significantly reducing or deferring grid upgrade costs.

Designed for multiple user groups

Zaptec's solution supports RFID authentication, user groups and differentiated tariffs. This enables shared infrastructure for operational fleet, pool vehicles and staff cars, with clear separation of usage and costs.

Phased roll-out

Phase 1: Smaller Sites

Zaptec Pro chargers were deployed at multiple council sites, sized to current EV demand but ready to expand. Infrastructure is shared by council vehicles and, where appropriate, staff EVs, with consistent hardware and user experience across locations.

Phase 2: Main depot, replacing legacy chargers

A bank of legacy charge points at the main operations depot was replaced with Zaptec Pros, enabling OCPP billing applications, integrated MID meters and patented phase rotation technology. Staff charging is offered on time or kWh based tariffs, with bays reserved for operational vehicles during core hours and reporting configured to separate operational from reimbursable staff use.

Phase 3: Main depot, expanding capacity

The Zaptec Pro network at the depot was expanded, including integration under an existing solar canopy. Dynamic load balancing is configured against an agreed site capacity, with priority rules in the Zaptec portal to ensure critical vehicles receive the charge they need overnight.

This phase created a repeatable template for further rollouts to other depots and smaller sites.