

Flowbird
Park&Charge



Take charge of your e-mobility ecosystem

Our multi-channel solution supports your city throughout its e-mobility journey – from hardware sourcing and installation to daily management and operations.

Table of contents



Our simple mission	1
E-mobility trends	2
Cities' needs	3-4
Drivers' needs	5-6
The solution	7-13



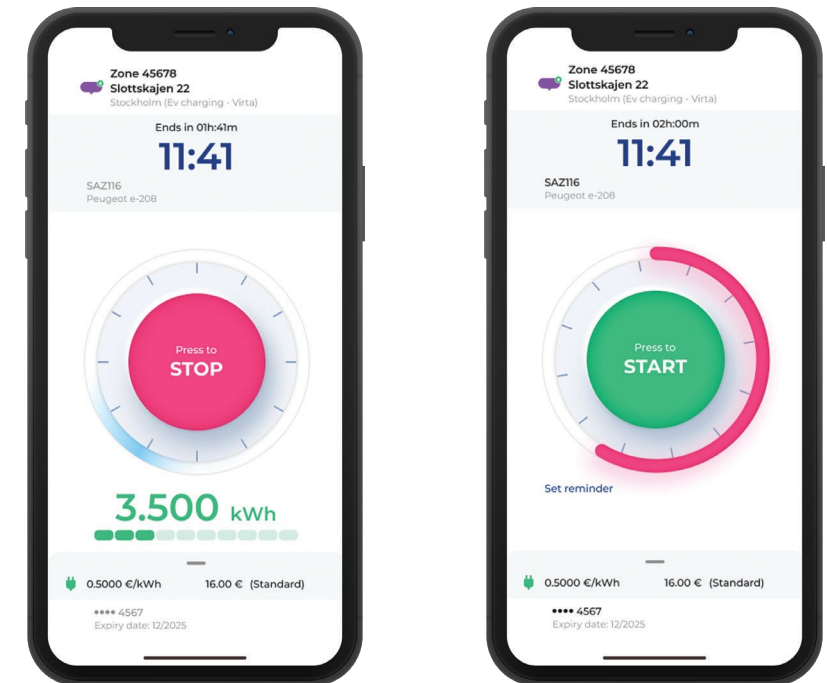


**Join us on our mission
to make charging as
simple as parking**

E-mobility market trends

Where is e-mobility headed?

- Increasingly regulated with mandatory requirements for service delivery and payments (e.g. ad-hoc payment methods at terminals)
- Evolving sales channels (e.g. mobile) and combined payments
- Emergence of dynamic pricing models for parking and charging
- Rising demand among mature cities for centralised management to remedy fragmented service delivery and data
- New tender structures as cities look for 'all inclusive' solutions



Dynamic pricing in flowbird app

Cities' needs

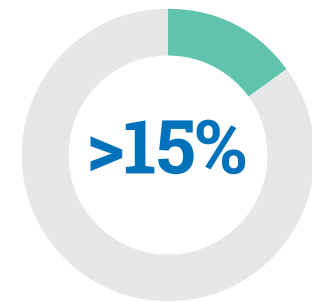
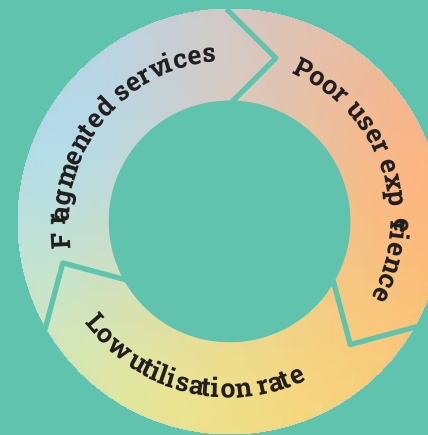
The e-mobility challenge for cities

Management and maintenance of EV charging networks faces many problems – most stem from a central issue:

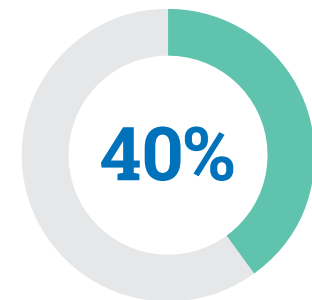
The inability of cities to take charge of their entire EV charging ecosystems.

When multiple Charge Point Operators (CPOs) deliver EV charging, there's no standardisation of service levels, pricing or payments.

There is no overview of operational data and no 'intelligence' driving tariffs, vehicle rotation, enforcement, or maintenance.



charge points are unavailable (broken, blocked)



paid charging sessions fail

Cities' needs

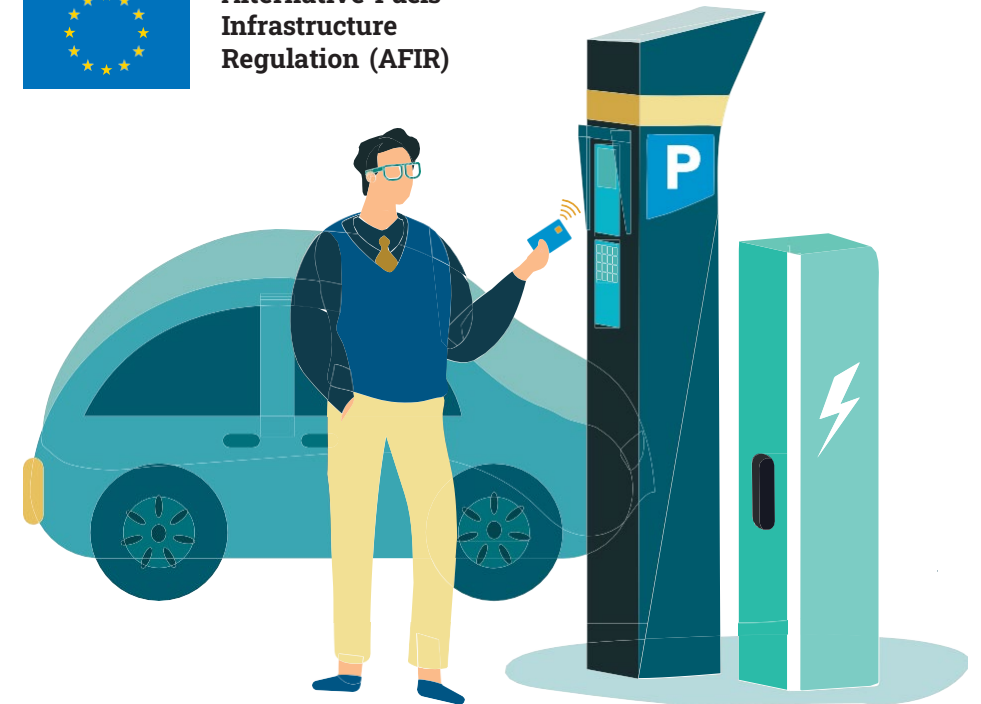
Directives applying pressure

AFIR (for the EU) and other legislation sets out mandatory requirements for public charging networks with many deadlines hitting between 2023-27. Cities must respond.

- Enable drivers to charge where they park
- Equip 15% parking spaces with public accessible chargers
- Public accessible chargers to be available at least 8 hours a day, 6 days a week, with a minimum of 98% uptime
- Simple card payment for all charging stations >10kW
- Charge points that meet technical standards



Alternative Fuels
Infrastructure
Regulation (AFIR)



Guest payment with ad-hoc payment method is required

Drivers' needs

Find out how public charging infrastructure is failing

- Cities may have multiple CPOs and driver apps but no complete, real-time data to steer drivers to a working charge point
- Lack of intelligent systems for vehicle rotation and charge station reservations is compounding the problem
- When a charger is unavailable drivers waste time and fuel cruising to find an alternative charge station
- Drivers find separate payment processes for charging and parking annoying, even more so when payment fails
- When drivers need assistance, there can be many contact points for CPOs, leaving them unclear about where to get help

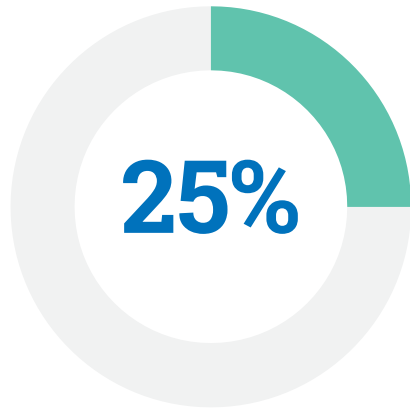
FLOWBIRD

How to solve the problem in our latest whitepaper

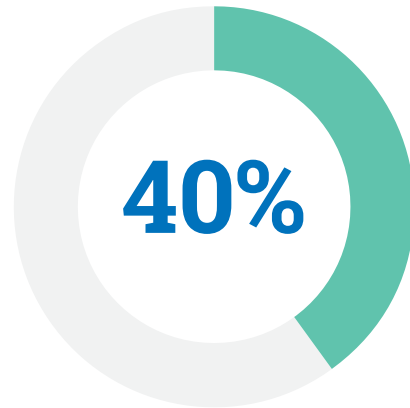


Drivers' needs

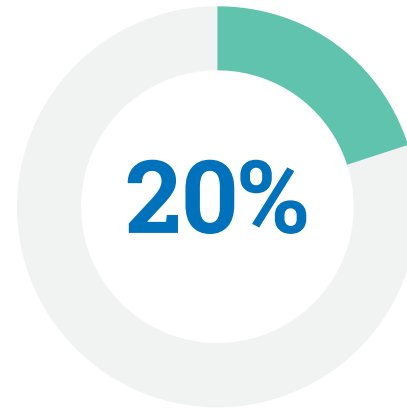
Frustrations affecting utilisation



Average downtime of EV chargers



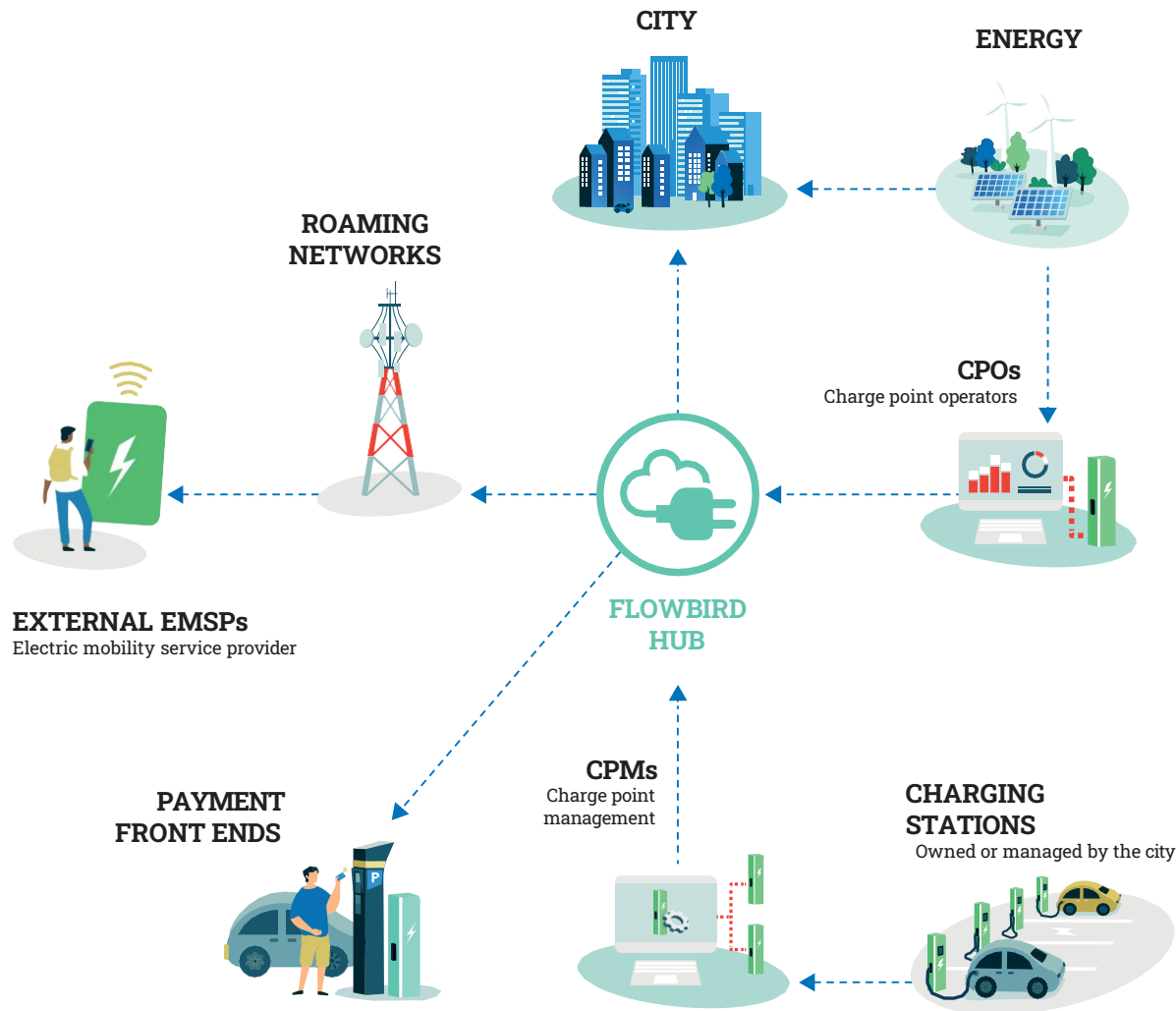
Drivers reporting charger operability issues



Drivers reporting charger payment issues



Source: Harris Williams, based on U.S. data



The solution

Unifying the e-mobility ecosystem

Our parking and e-mobility platform Flowbird HUB is the centrepiece of our fully-fledged solution. Through simple integrations, it unifies charging hardware, Charge Point Operators and parking/charging sales channels.

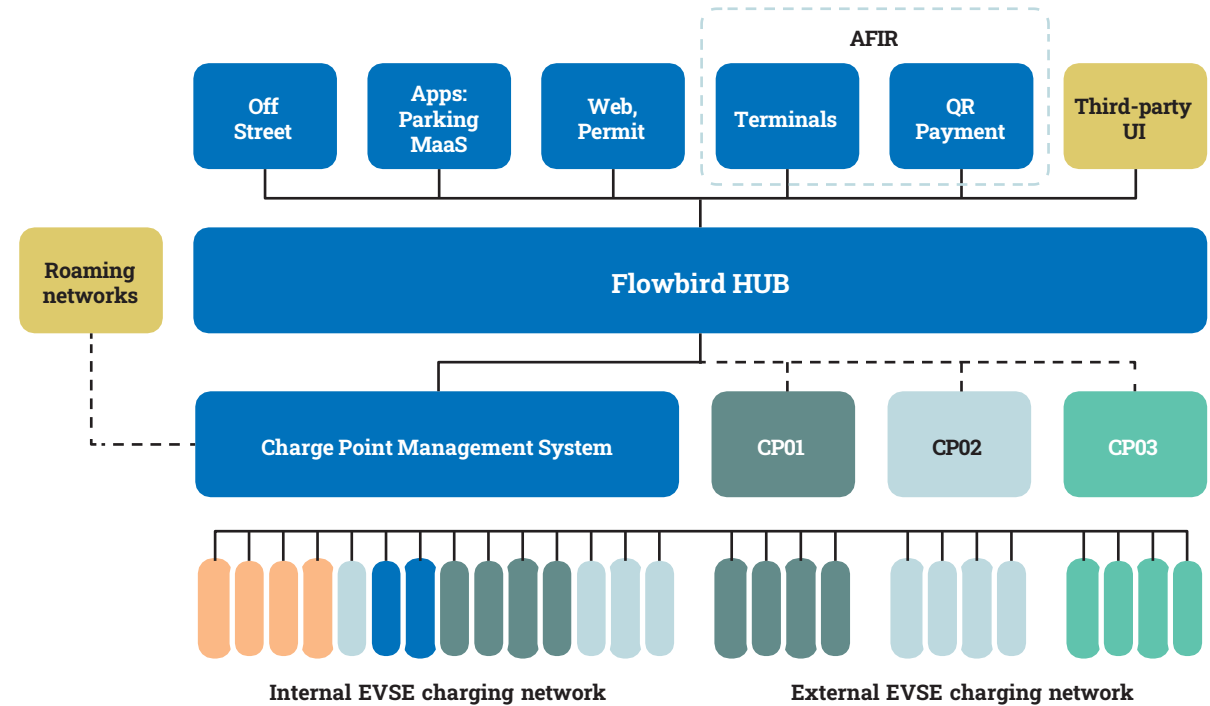
The solution

Plug-and-play for flexibility and scalability

Example architecture, showing the many integrations that can be enabled by our Platform-as-a-Service model.

The centralised system, which connects all parties, has compliance and flexibility built-in. This unification of tariffs, payments and data across all channels benefits cities, Charge Point Operators and EV drivers.

As cities' needs change, e-mobility infrastructure can flex as needed.



OCPI integration enables CPO and CPMS access to Flowbird front ends

The solution

100% hardware agnostic platform

Our platform supports more than 100 models out of the box and any other charger not supported can be certified through a simple process.

- Flowbird's Park&Charge solution includes a hardware agnostic parking and e-mobility platform (Flowbird HUB) at its core.
- Connect to any charging hardware or Charging Point Operator through standard protocols
- Benefit from Flowbird partners' charger installation services
- Choose from 100s of modern charger models for every EV use case (on-street, off-street, destination, journey)
- Any charger not currently supported can be certified through a simple process
- Integrate with Flowbird and third-party sales channels, including AFIR compliant S5 terminals, flowbird app



Existing fully integrated EVSE partners:



Information on our charger range, regional coverage and use cases available on request.

The solution

A choice of sales channels

Combine payment channels as you like, choosing from Flowbird's S5 terminals, flowbird app and any third-party user interface. We guarantee effortless integration using standard APIs.

Supported mobile features:

- Start-stop feature – only pay for time used
- Select charge points
- View connector availability
- Understand price & Kw Capacity
- Simple card payments



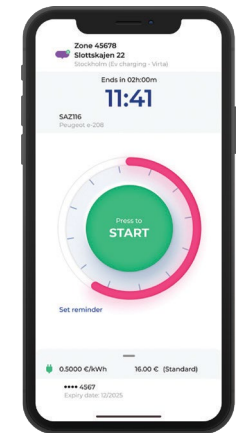
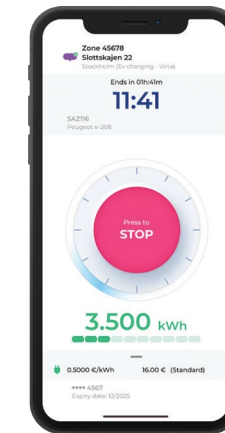
Compact S5



Experience our terminals



Access S5



Flowbird App



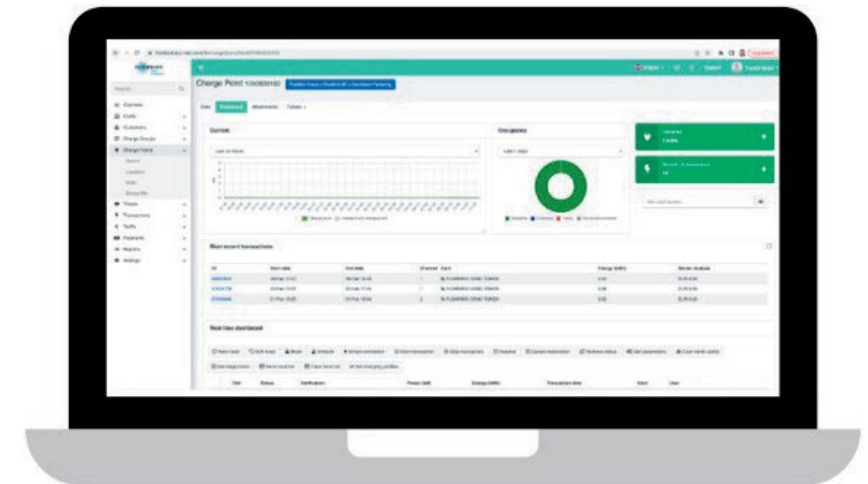
Experience our app

The solution

Simplified management

Our CPMS provides a comprehensive tool for EV charger management and support:

- Monitor live status of chargers
- Configure alarms
- Carry out remote reboot (soft/hard)
- Release charger cable
- Start and stop sessions



Flowbird's cloud-based Charge Point Management System (CPMS)

The solution

Data consolidation and reporting

Flowbird HUB can be used to set-up e-mobility networks and charging locations. In addition, it puts data at the heart of e-mobility management:

- Collect real-time sales channel data
- Carry out data analysis & reporting
- Use insight to optimise e-mobility



Open architecture platform



Standard protocols for integrations



Configurable rights and tariffs



Digital permits integration



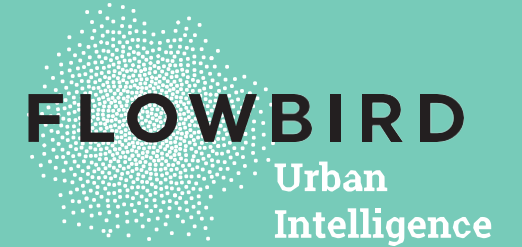
Parking enforcement simplified



Data analysis creates actionable insight

The solution

A fully supported service



End-user support

Skilled staff, speaking in your native language, offer remote 24/7 support, 365 days a year, handling tasks such as:

- Simple remote reboot of charge station
- Remote start of charging session
- Unlock charging cable

Charge point control and servicing

- Charger sourcing & installation
- Dispatch service for maintenance & repairs

Annual service:

- Charging tests & functional checks
- Reset of ground fault circuit breaker
- Test protocol and certificate
- Charger cleaning

Pricing and fee structures available on request



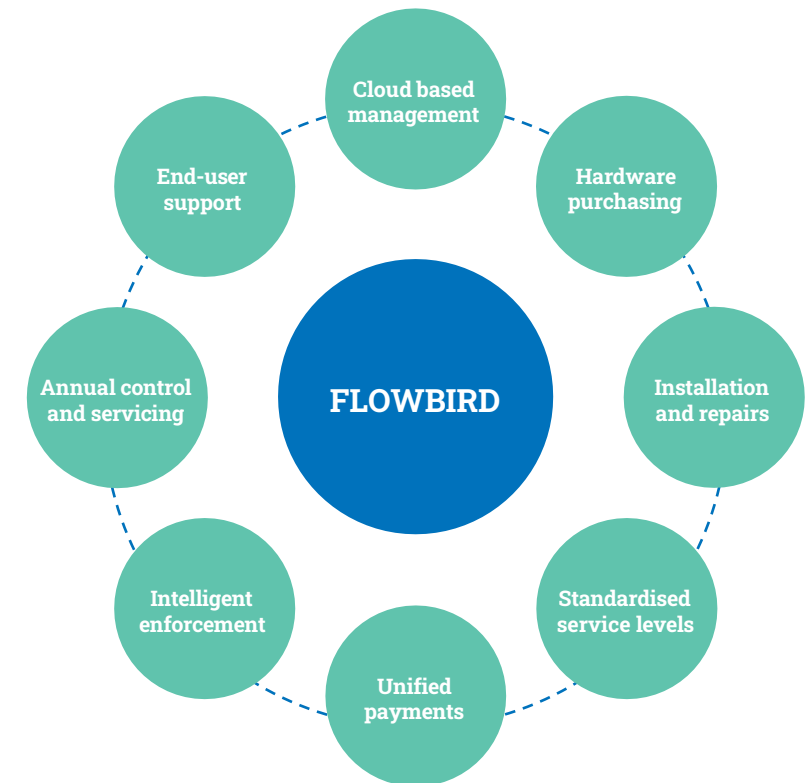
The solution

Lifecycle support for e-mobility ecosystems

The first step of your e-mobility journey: work with Flowbird and our partners to source and install park and charge hardware.

After this, you benefit from a helping hand from our expert team at every stage of your e-mobility ecosystem's lifecycle.

We'll be your partner to supercharge your public parking and charging operation – levelling-up service delivery and efficiency.



Join us on our mission to make charging as simple as charging

Get started today! Contact us to start your journey:
info@utsparking.com



FLOWBIRD

Urban
Intelligence

