COMMUNITHINGS
SMART-PARKING

Improving mobility at the city...

ELECTRIC VEHICLES
Maximizing availability of EV charging spots

The EV parking service is renowned for its contribution to higher rotation of cars on the EV charging spots.

With help of mobile application, users find charging points easily, park, charge their car, and leave.

On the other hand, parking controllers receive alerts on overtime or when car doesn't need to stay longer on the spot (battery charged or stopped charging).

The « waiting list » service alerts users when a charging spot becomes available. Once on the spot, bi-directional communication between ground sensor and mobile app allows platform to validate user profile and trigger session start.

1 Ground sensor

CommuniThings LPWAN wireless sensor placed at each EV parking space collects data on the occupancy status (free/busy) and duration per stay in each spot. The sensor is linked with spot number and geo-location.

2 End-user guidance

Designated EV charging zones are marked and indicated by the city. In addition, mobile application can guide users to available spots.

### 3 Wating list & authentication

When all spots are busy user can choose to receive notification when a charging spot becomes free. User is guided to the spot then authenticated by the platform

4 Enforcement Dashboard

Real-time alerts in each spot (overtime, battery fully charged or stopped charging), are relayed to the Controllers's management dashboard on their handheld device. As a result, controllers can reach the vehicle in breach, and ticket it promptly.

5 Charging status

Right in the mobile app users have information such as remaining charging time, remaining charging capacity, session timer, remaining time allowed on spot,…

● FREE   ● BUSY

EV SPOT MANAGEMENT
Optimizing usage of EV charging points
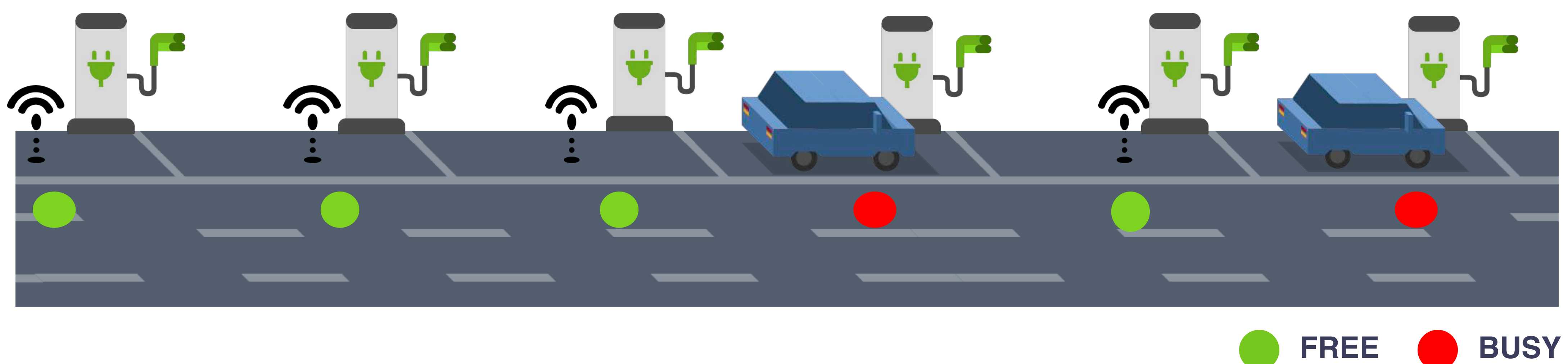
Public use-case

1 End-user guidance

Designated EV charging zones are marked and indicated by the city. Users can check parking availability (free/busy) in mobile application and be guided to the spot.

2 Alerts for controllers

Real-time alerts in each spot (overtime, car on spot NOT charging or stopped charging), are relayed to the Controllers's management dashboard on their handheld device. As a result, controllers can reach the vehicle in breach, and ticket it promptly.
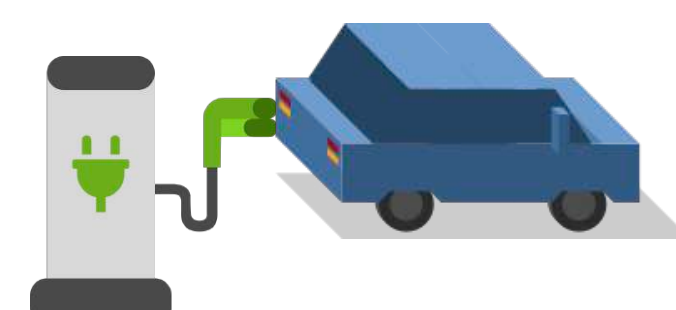
Subscribers Mobile App

(1) Occupancy status (free/busy).
(2) Guidance to available spot
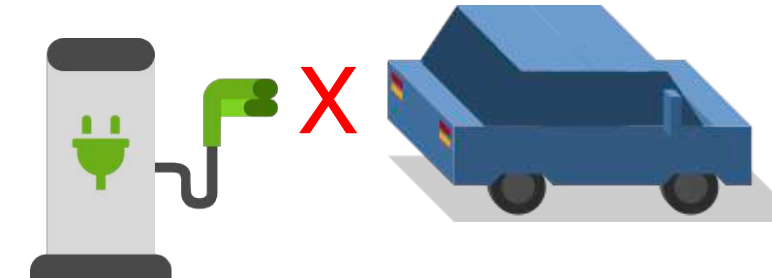   (via Waze, Google,…).
(3) Reservation
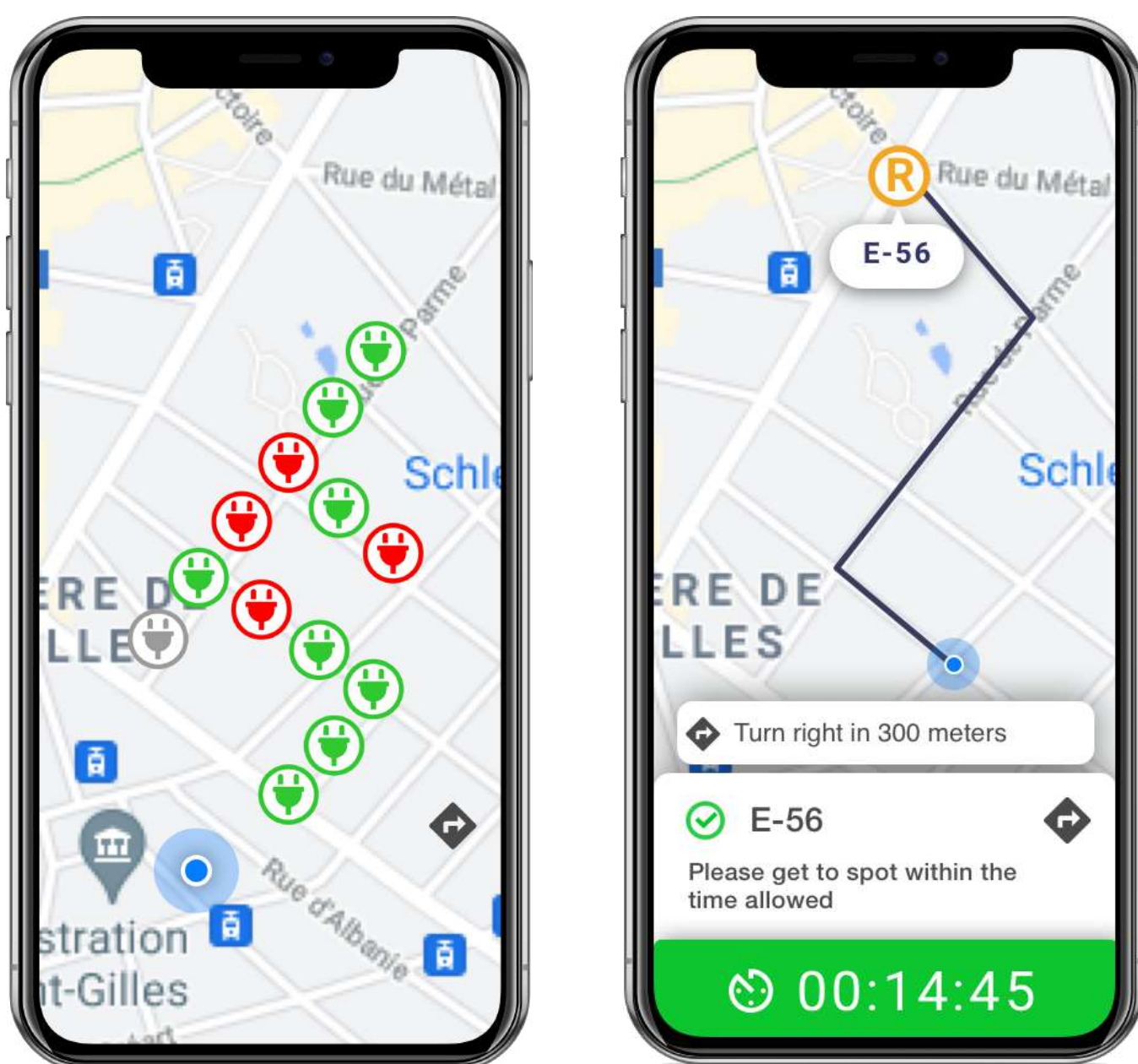
Controllers Management Dashboard

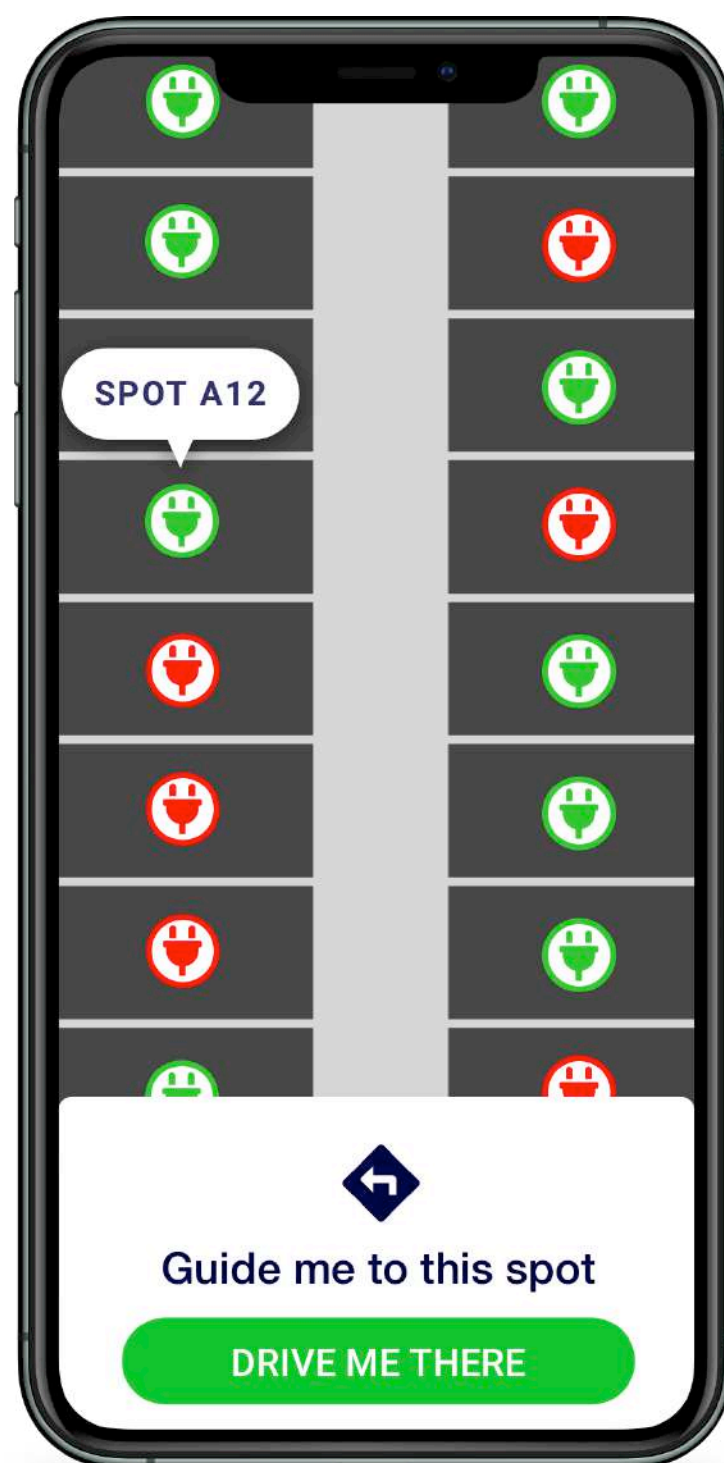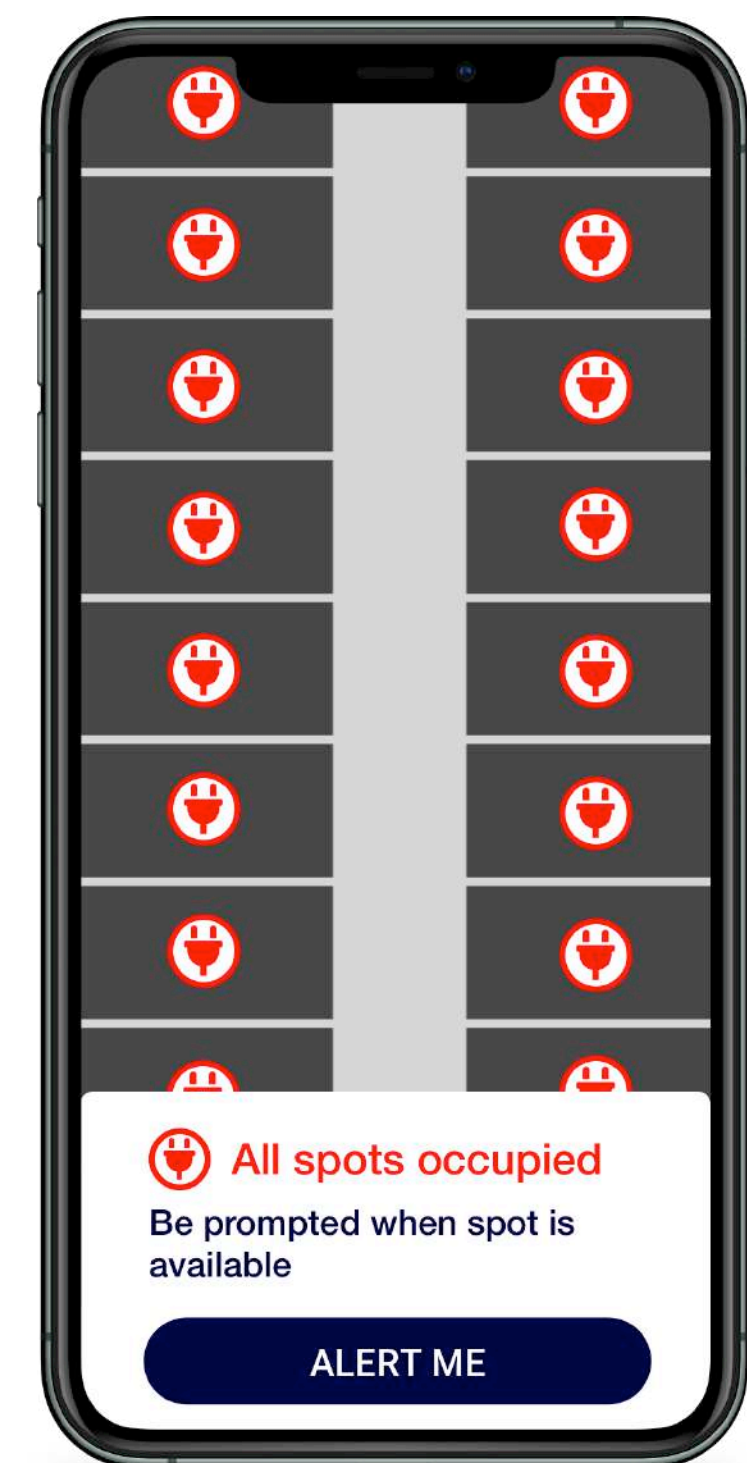Alerts on overtime-use or vehicle charging status at each spot.

Car on spot - charging
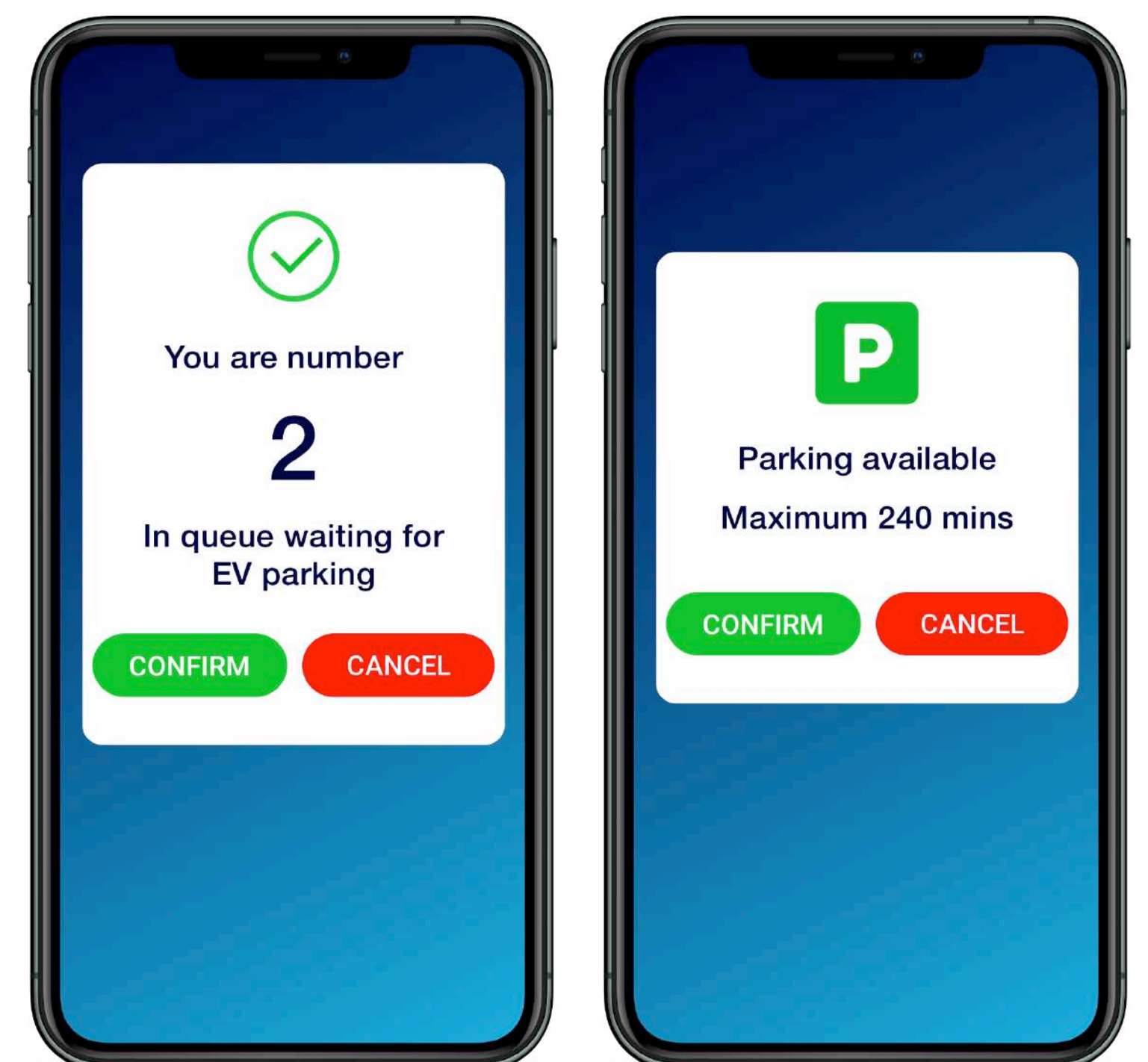
Car on spot - **NOT** (or stopped) charging

Ticket

Corporate use-case

CommuniTHINGS · **orange**

Available Spot

Parking Full

SPOT A12

Guide me to this spot

DRIVE ME THERE

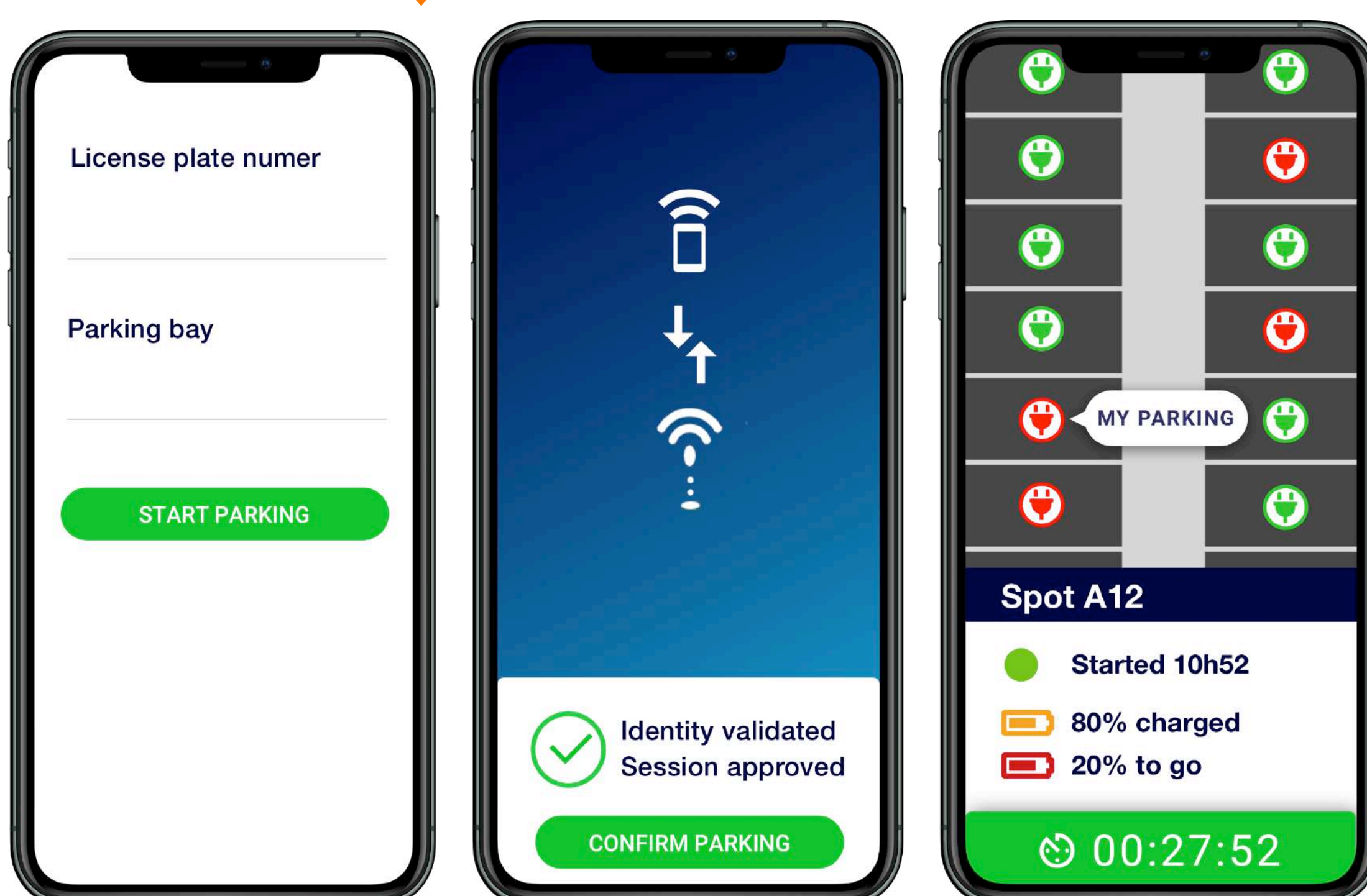**All spots occupied**
Be prompted when spot is available

ALERT ME

(1) User subscribes to waitinglist and is advised on position in the queue.

(2) User is alerted once a spot is available.

(1) User is guided to available spot and checks-in to service.

(2) User profile is validated by the paltform, triggering session start.

(3) App adivising on time remaining and charging capacity.

You are number

2

In queue waiting for EV parking

CONFIRM   CANCEL

P

Parking available
Maximum 240 mins

CONFIRM   CANCEL

License plate numer

Parking bay

START PARKING

Identity validated
Session approved

CONFIRM PARKING

MY PARKING

Spot A12

● Started 10h52

🔋 80% charged

🔋 20% to go

⏱ 00:27:52

User is directed to available spot, within the time allowed.

Corporate use-case - Enforcement

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▬ Employees / Subscribers

Occupancy Status

Spot A12
- 🔋 80% charged
- 🔋 20% to go
- ⏱ 00:27:52

MY PARKING

App advising on charging-time remaining OR charged capacity / remaining charging capacity.

Notifications

Spot A12
🔋 100% charged
Move your car to free the charging facility
OK

Spot A12
You have reached the maximum allowed charging time

Move your car to free the charging facility
OK
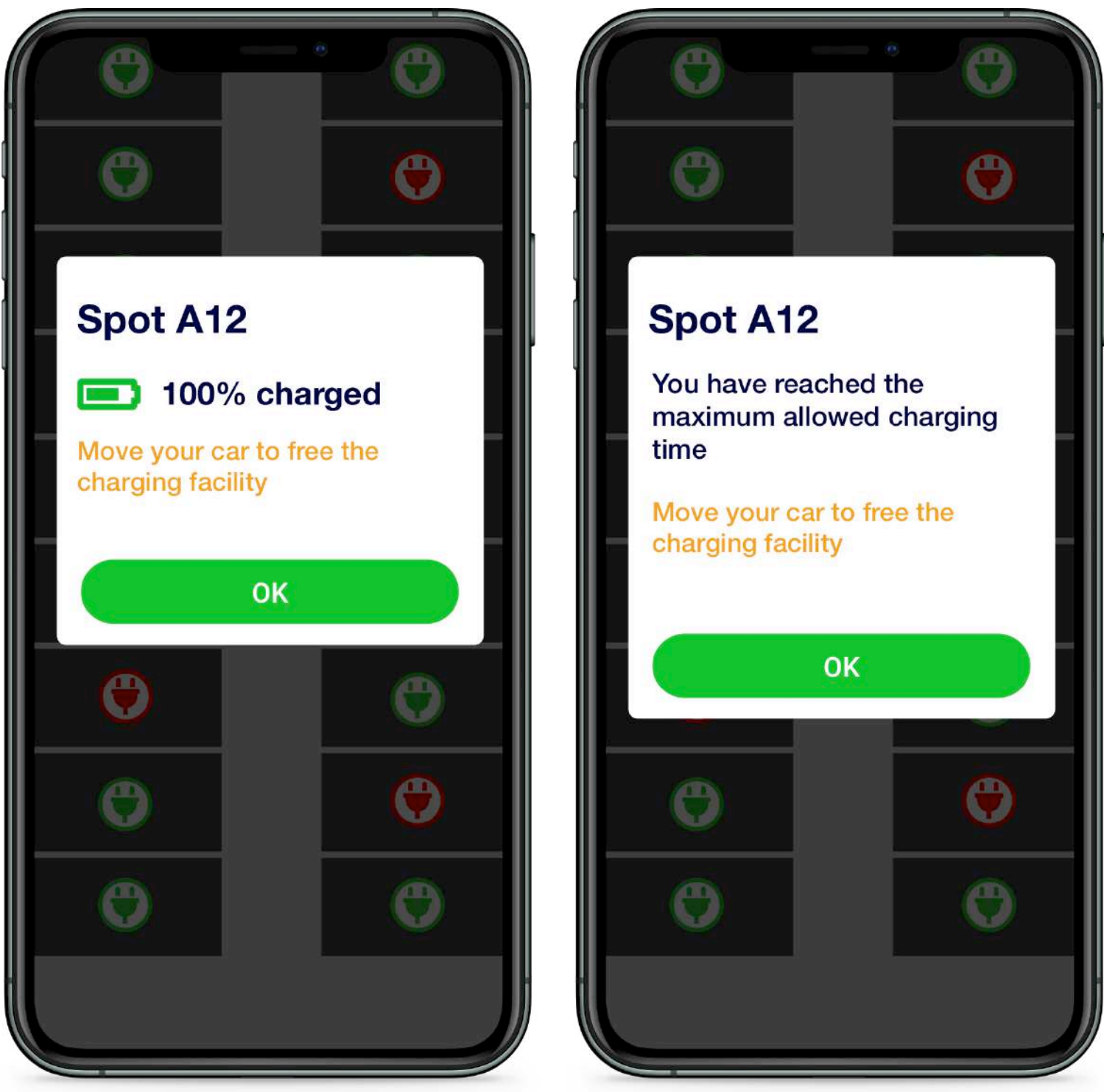
Notification to user once time elapses OR when battery is fully charged.

▬ Controllers

Enforcement Alerts

SPOT A12

Spot A12 🔋 100% charged   **TICKET VEHICLE**
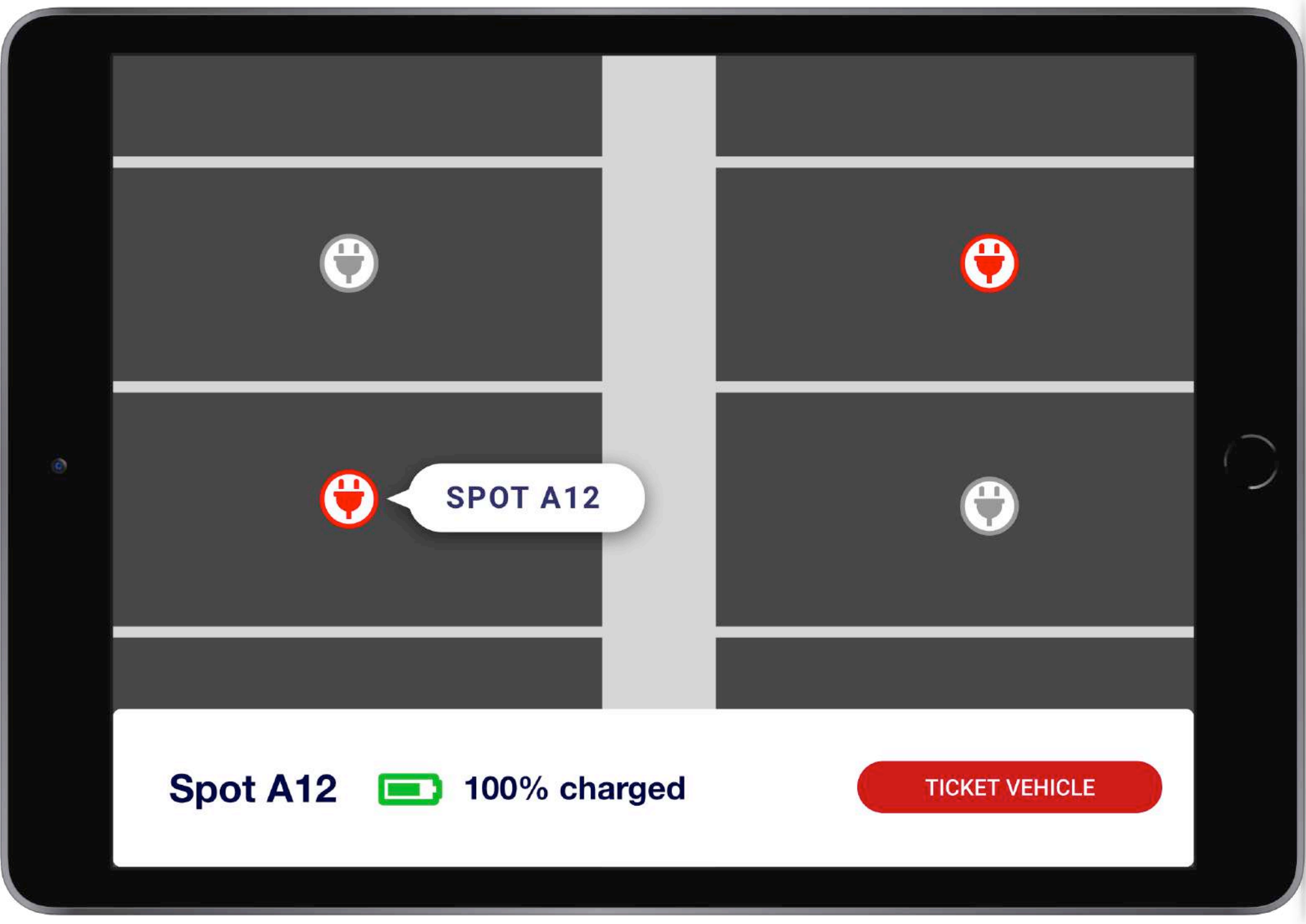
Enforcement alert is triggered when time is up (e.g 4 hours) OR when battery is fully charged.

They Trust Us

allego   Liège Une ville, un esprit.   UTRECHT   vrt   WAASLAND SHOPPING   BRUGGE