

Charging Service Canvas, Public Charging

Area served

Total Power

Power infrastructure

Charging Points & Dispensers

Charging Point Placement

Other

During charging

Arrival

Discovery of chargers

- Own app
- Chargers published to car nav systems & maps apps
- Roaming partner apps:

- Signage next to the road

Pricing

Pricing display

- Mobile app
- Charger Display
- Sticker
- Totem

Pricing structure

- /kWh energy pricing
- Charging time cost
- Idle fee

Charging

Payment & Authentication

- Integrated card payment
- Card payment kiosk
- RFID tags
- Apps from roaming partners
- Own App
- AutoCharge
- 15118 Plug&Charge

Receiving

- Digital receipts w. integrated payment terminals / kiosk
- Paper receipts from Kiosk
- Digital receipt from app
- Self service portal for getting receipts later
- Receipts via customer service

Operations

Driver support

- Self-service advice on...

L1 Support

- Service center via phone:
- Outsourced / Internal
- Service chat via app

L2 Support

- Own Operations Center
- On site staff

Field Engineering

- On site staff
- Partner staff from:

Dispatch process:

Charging Service Canvas, Public Charging

Area served

Where are the sites? What country and region are they placed in?

Total Power

Describe the total charging power on the site grouped in AC and DC or more granularly if relevant

Power infrastructure

Do the chargers get their power from the same transformer as the rest of the site? Is there local production or energy storages? Do other variable loads need to be accounted for?

Charging Points & Dispensers

List the charging points by type. Include also peak power, eg. 6x150kW DC CCS2 400-900V or 3x22kW AC Type2

Charging Point Placement

Describe the placement of charging points on the site. Eg. Under canopy, trailer friendly, fishbone parking, truck accessible...

During charging

What amenities and services are available for drivers? Is the provider the same as

Other

What else is important about the site that is relevant for planning or customer experience?

Arrival

Discovery of chargers

How do the drivers find the chargers when they need them? How are they guided within the site to a free charger or the charging field?

Pricing

Pricing display

How do the drivers find out what pricing is? Does the pricing or mechanism of finding out depend on the authentication mechanism (eg. roaming vs ad-hoc)

Pricing structure

What do customers pay for? Energy (kWh) Time at charger (min), prepaid packages?

Regulators in some countries have placed limits on what are acceptable tariff bases, especially in public charging.

Charging

Payment & Authentication

How do drivers authenticate and pay? Do we recognize the vehicle? Get a command to start via an app or receive payments via payment terminals?

Receiving

How do drivers get receipts for their charging?

Does the mechanism differ based on the authentication method?

What compliance requirements are applied to receipts (fiscalization proofs, metering or compliance verification)

Operations

Driver support

How do you communicate to drivers? How can drivers help themselves?

These are the measures you take to avoid drivers contacting the L1 support.

L1 Support

When a driver needs support, who do they contact and how?

L2 Support

When basic advice is not enough, who can L1 support contact for more help?

Field Engineering

Who goes into the field when repair and maintenance is needed?

Are there different roles for different situations and tasks?

Dispatch process:

Who can decide to send a field engineer? How does this happen?

Charging Service Canvas, Public Charging

Area served

Norway, Finland,
Sweden, Estonia

Total Power

600 kW - DC
50 kW - AC

Power infrastructure

Charging shares transformer
with retail property.
30-40kW solar production
Adaptive load management

Charging Points & Dispensers

6x CCS2@150kW peak
1x CHADEMO@100kW, alternate w,
CCS2
10x Type2@22kW

Charging Point Placement

DC charging under canopy
replacing fuel pumps.
AC charging in

Other

Fuel retailing also available.
Locations next to major inter-city
roads.

During charging

Retail location with restaurant,
toilets and a shop

Arrival

Discovery of chargers

- Own app
- Chargers published to car nav systems & maps apps
- Roaming partner apps:
virta, Plugsurfing
- Signage next to the road
- _____

Pricing

Pricing display

- Mobile app *Roaming only*
- Charger Display
- Sticker
- Totem
- _____

Pricing structure

- /kWh energy pricing
- Charging time cost
- Idle fee
- _____

Charging

Payment & Authentication

- Integrated card payment
- Card payment kiosk
- RFID tags
- Apps from roaming partners
- Own App
- AutoCharge *via contract only*
- 15118 Plug&Charge
- Logistics contracts, own backend*

Receipting

- Digital receipts w. integrated payment terminals / kiosk
- Paper receipts from Kiosk
- Digital receipt from app *Roaming*
- Self service portal for getting receipts later
- Receipts via customer service
- _____

Operations

Driver support

- Self-service advice on...
charger & payment kiosk display
- _____

L1 Support

- Service center via phone:
- Outsourced / Internal
- Service chat via app
- On-site staff*
- _____

L2 Support

- Own Operations Center
- On site staff
- _____

Field Engineering

- On site staff
- Partner staff from:
charger Maintenance LLC
- _____

Dispatch process: