


# CONNECTING YOUR FORECOURT TO THE FUTURE



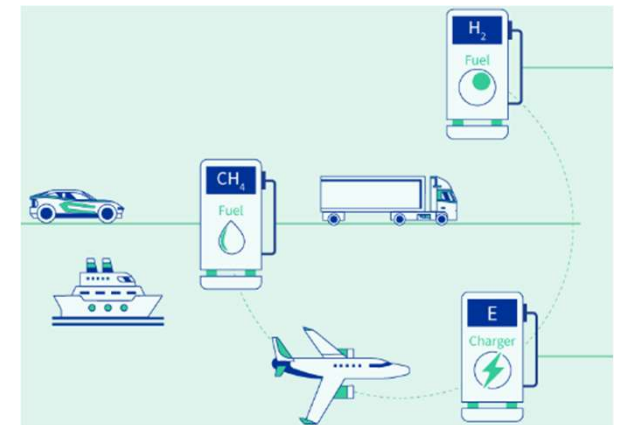
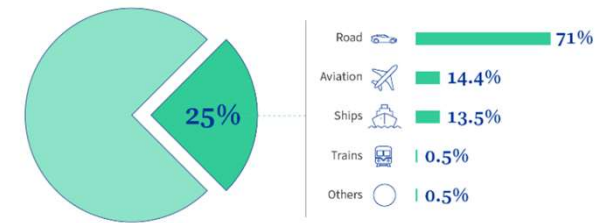
## EV Charging Payment Regulations and Forecourt Integration

David Mc Guinness, Director Product Management, EV Charging  
UNITI expo FORUM 2024

# Alternative Fuels Infrastructure Regulation (AFIR) EV Charging

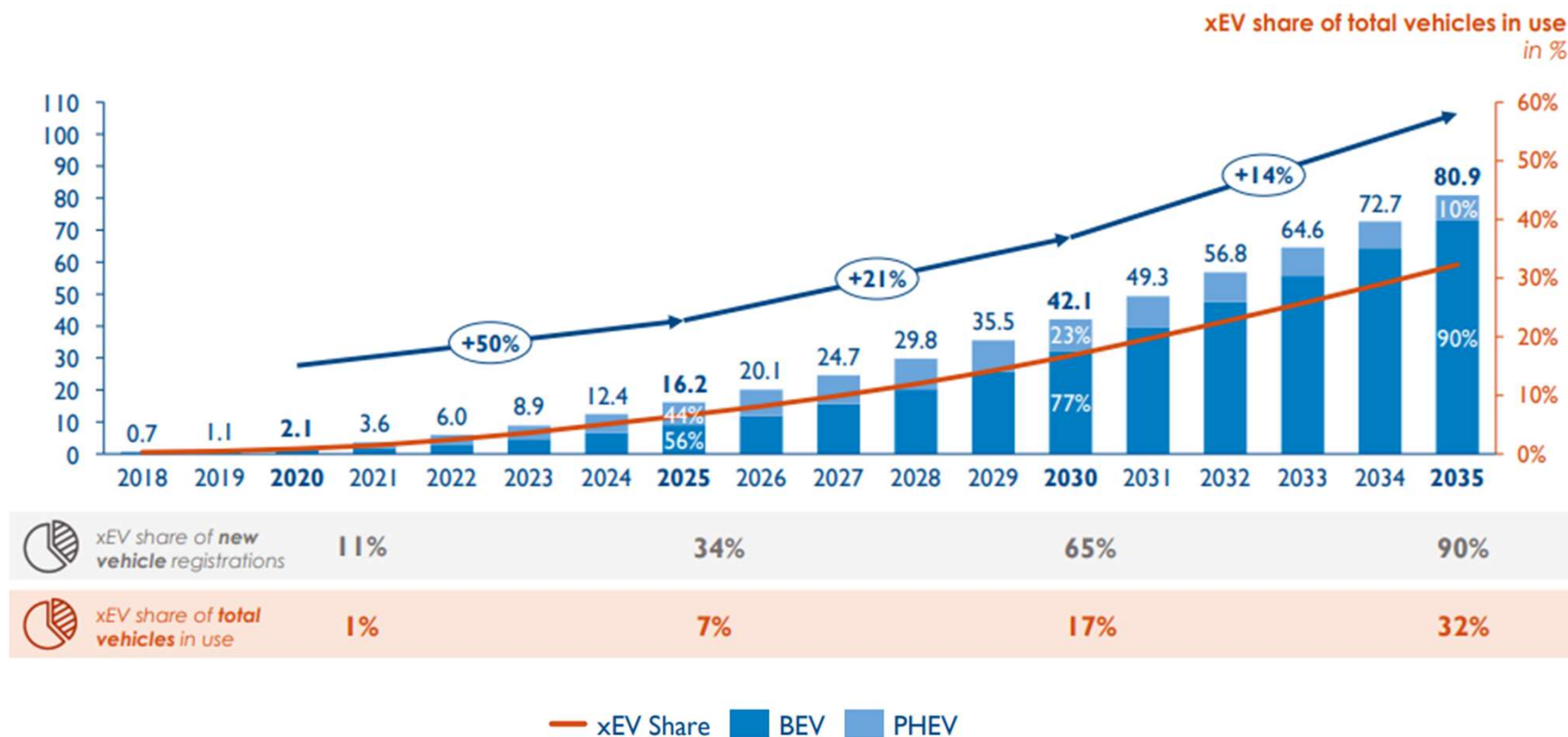
## What is the AFIR?

- The Alternative Fuels Infrastructure Regulation (AFIR) is part of the Fit for 55 package which aims at enabling the EU to reduce its net greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels and climate neutrality in 2050
- The objective of AFIR is threefold:
  - to ensure that there is a **sufficient infrastructure network for recharging or refueling** road vehicles or ships with alternative fuels
  - to provide alternative solutions so that vessels at berth and stationary aircraft do not need to keep their engines running
  - to achieve full interoperability throughout the EU and to make sure that the infrastructure is easy to use.



# EV Sales vs Total Fleet Forecast

BEV and PHEVs in use EU-27 up to 2035



# Alternative Fuels Infrastructure Regulation (AFIR)

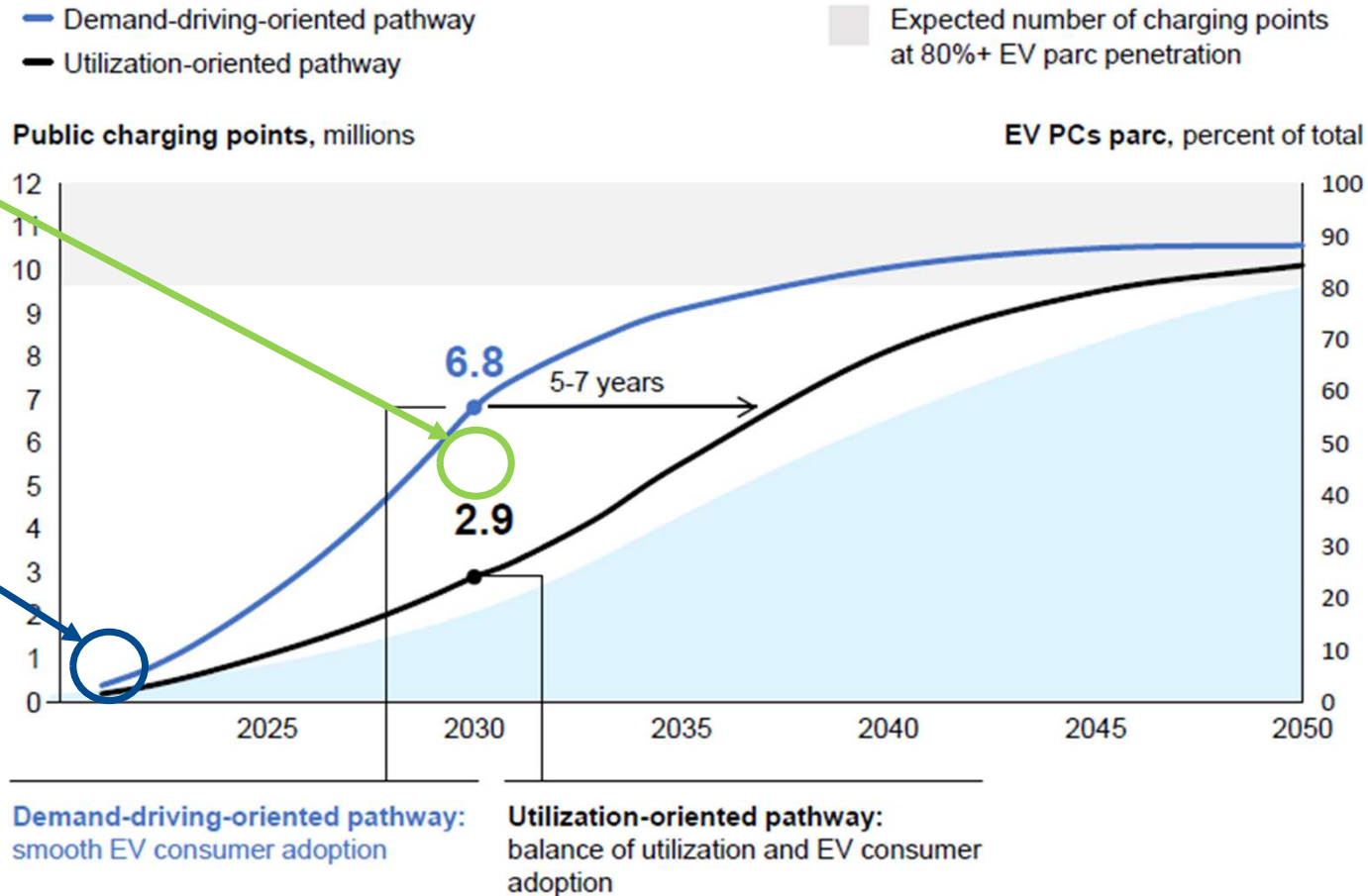
AFIR infrastructure requires 2.9MN to 6.8MN public charging points by 2030

**2030**

4MN Public Chargers  
(450K DC Chargers)

**May 2024**

700K Public Chargers  
(93K DC Chargers)



Source: European EV Charging Infrastructure Masterplan

# Alternative Fuels Infrastructure Regulation (AFIR) EV Charging

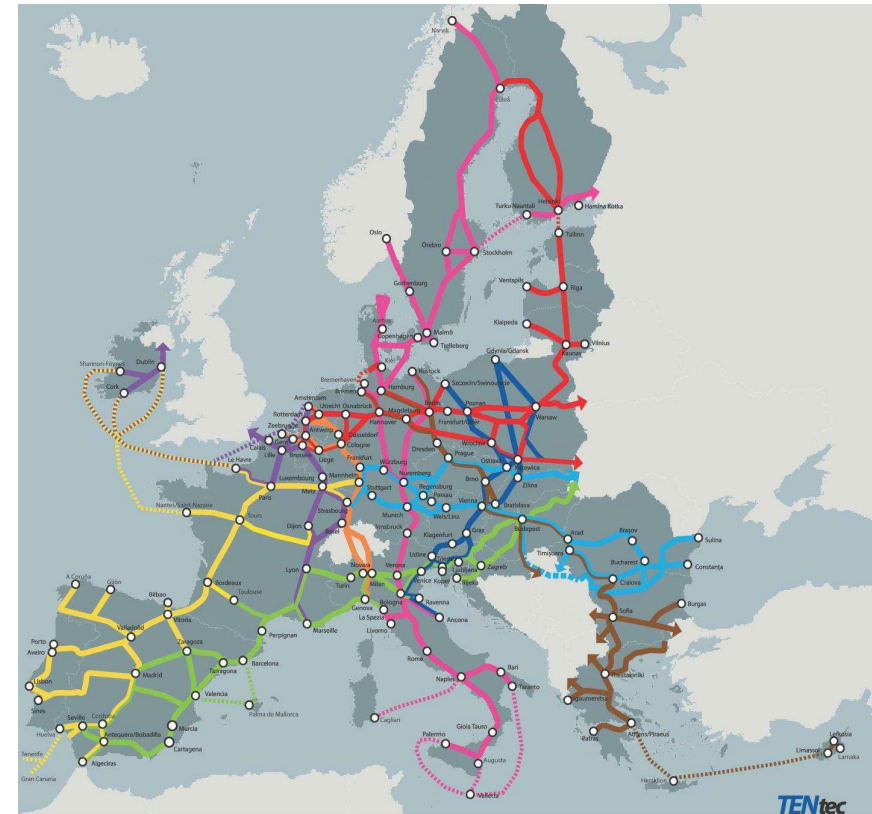
## The objective of AFIR

- To ensure **sufficient infrastructure network for charging EVs**

## Expanded Charging Network

- Fast recharging stations with a **minimum capacity of 150kW** for cars and vans must be installed **every 60 km** along the 'Trans-European Transport (TEN-T) Network'
- In 2025, the TEN-T Core network must have **400 kilowatts of charging capacity in both directions for every 60 kilometers of road**
- Charging stations for heavy-duty vehicles with a minimum output of **350kW every 60 km along the TEN-T core network**, and every 100 km on the larger TEN-T comprehensive network, starting in 2025, with full network coverage by 2030.

Passenger cars will need **184 fast chargers for every 100 km** of road to charge on core TEN-T corridors by 2030



# What are the key elements of AFIR?

AFIR's notable provisions: Ad hoc Payment

## Ad hoc Payment Methods

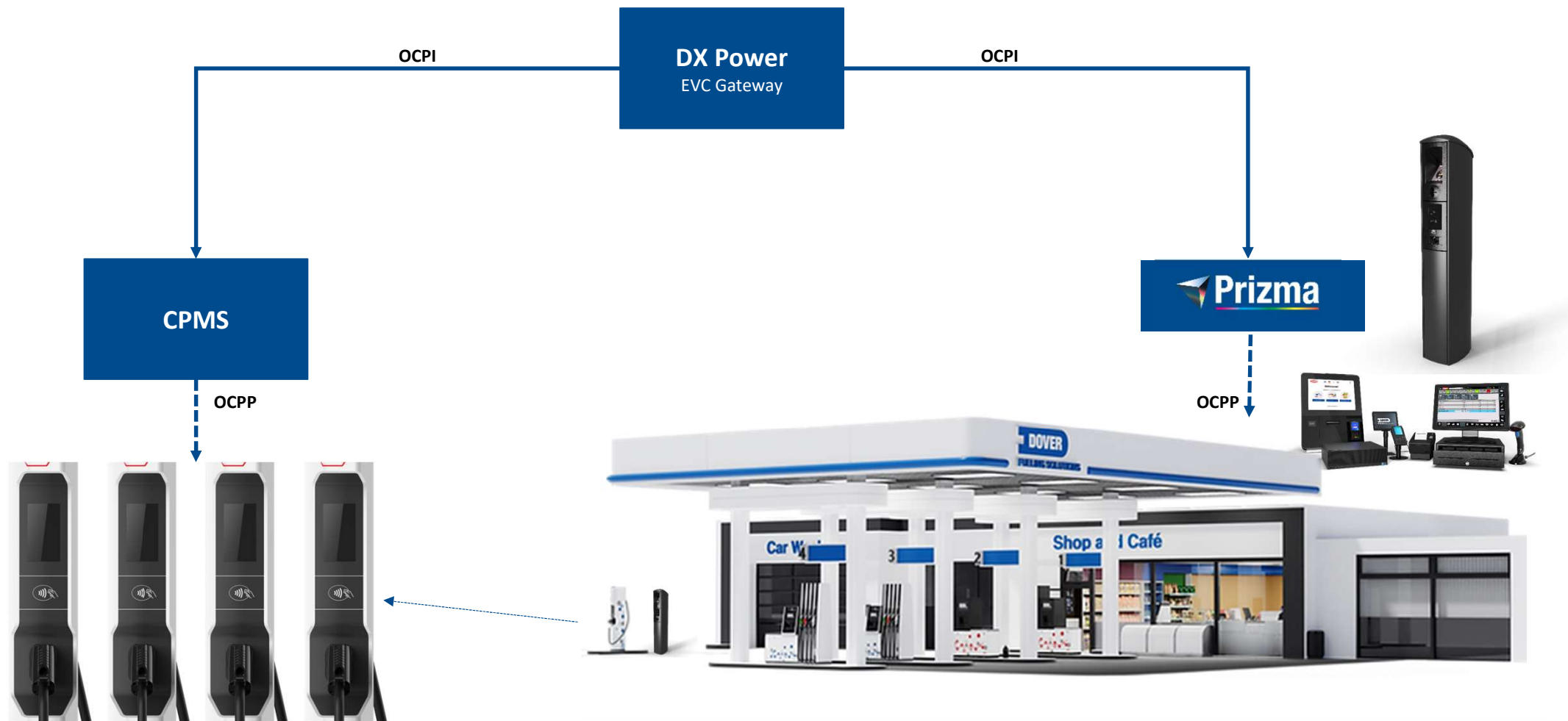
- From 13 April 2024, the AFIR requires that **users can charge ad hoc at publicly accessible charge points**, i.e. charging and paying without a prior contract
- The regulation applies to **new charging points over 50kW with immediate effect**, while existing charging points with a capacity of 50kW or more must be retrofitted by 2027
- If there are several charging points at one location, **a central payment terminal for all charging points is permitted** to reduce installation and operating costs
- Prices must be **transparent and available ahead of a charging session** through freely available, widely supported electronic means, clearly distinguishing all price components, including applicable e-roaming costs and other fees or charges applied by the eMSP
- Prices charged by mobility service providers to end users shall be **reasonable, transparent and non-discriminatory**





# Dover Fueling Solutions

Ensuring AFIR Compliance with the Connected Forecourt



# AFIR Compliance with the Connected Forecourt

Customer Example

## Customers arrives at EV Charger

- Payment options: Charge Card, Plug & Charge or **QR Code to enable Bank/Credit Card and Cash**

## Customer scans the QR code on the charger with their smartphone

- DX Power web-app opens where the customer can immediately start charging and is **instructed to pay inside** at the point-of-sale or at the self-checkout kiosk
- The operator at the **Prizma point-of-sale screen** receives a **calling signal** that someone wants to start charging. The operator checks the forecourt and authorizes the charging request.



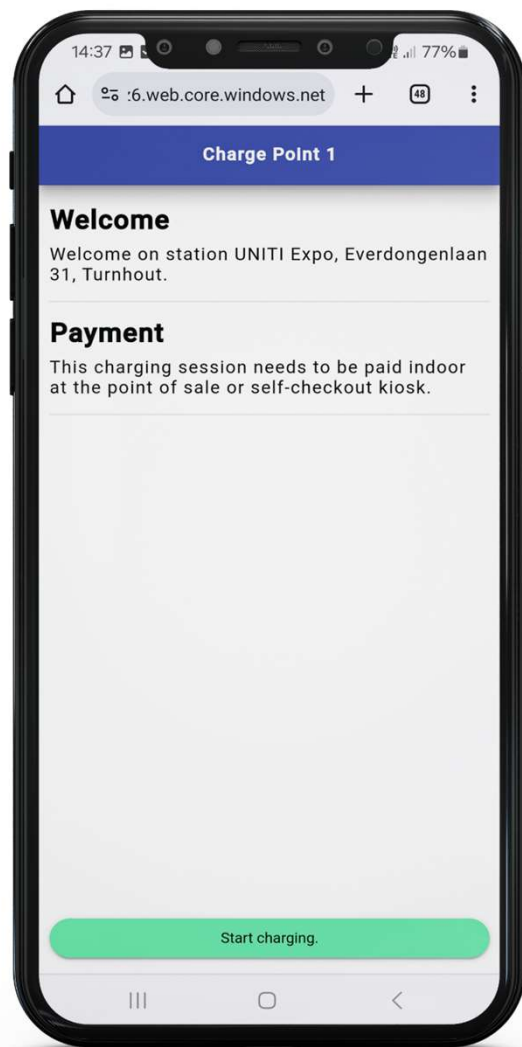




## UNITI – Showcase

Connected solution eco-system

1. Start at EV Charger
2. Take a smartphone
3. Scan QR code on charger
4. DX Power Web-app opens



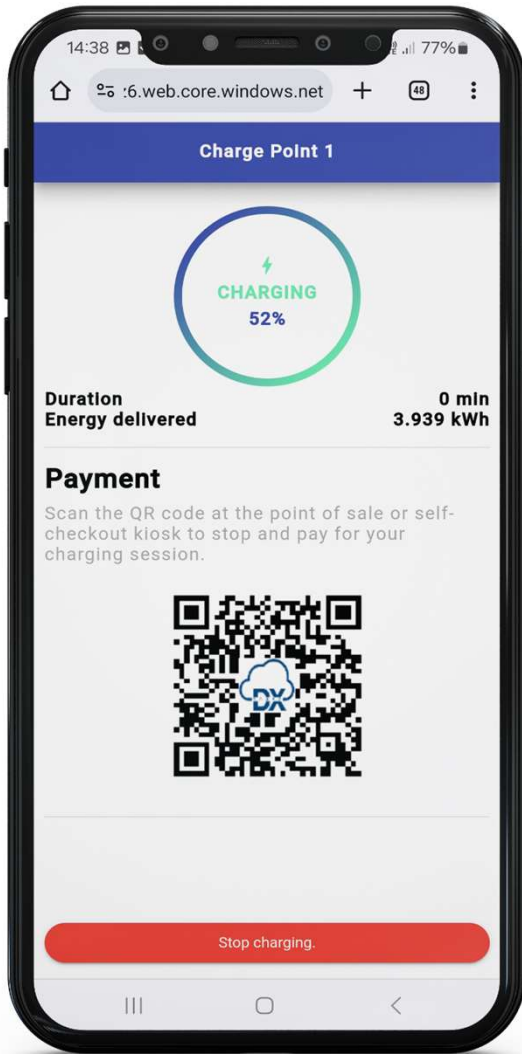
1. Press

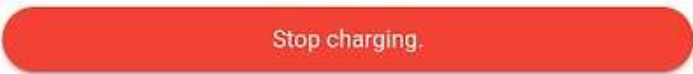
Start charging.

2. Confirm charging session at point-of-sale (operator role)

3. Charging starts





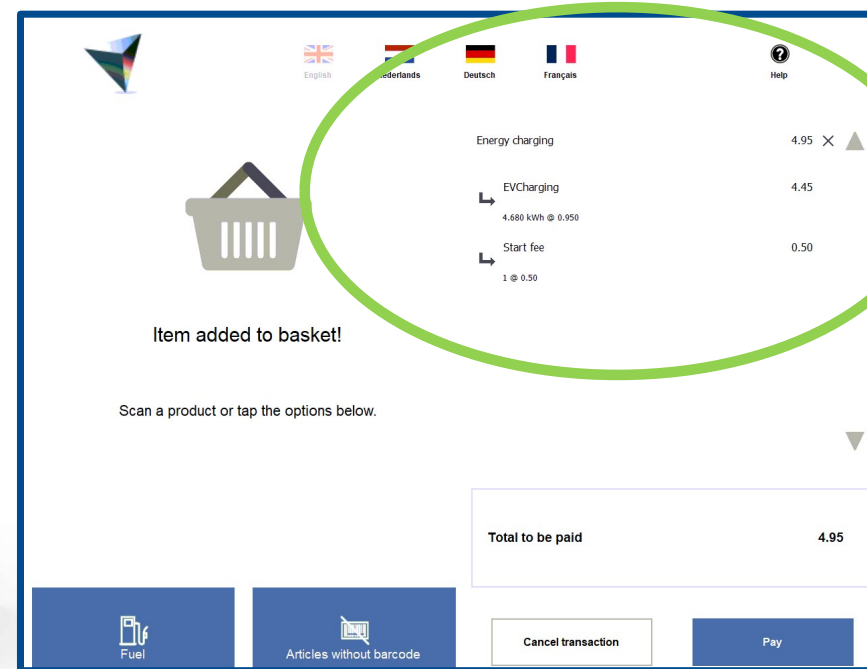
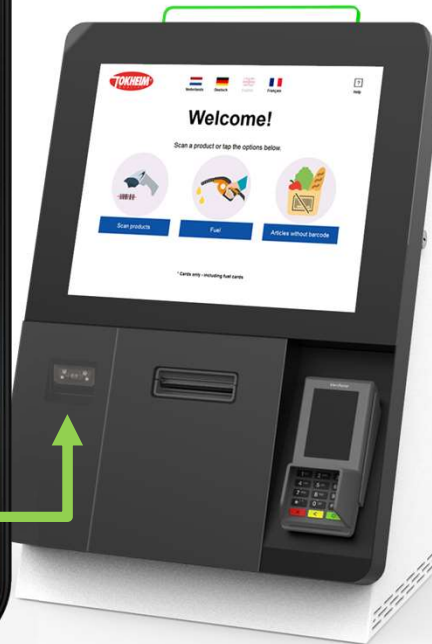
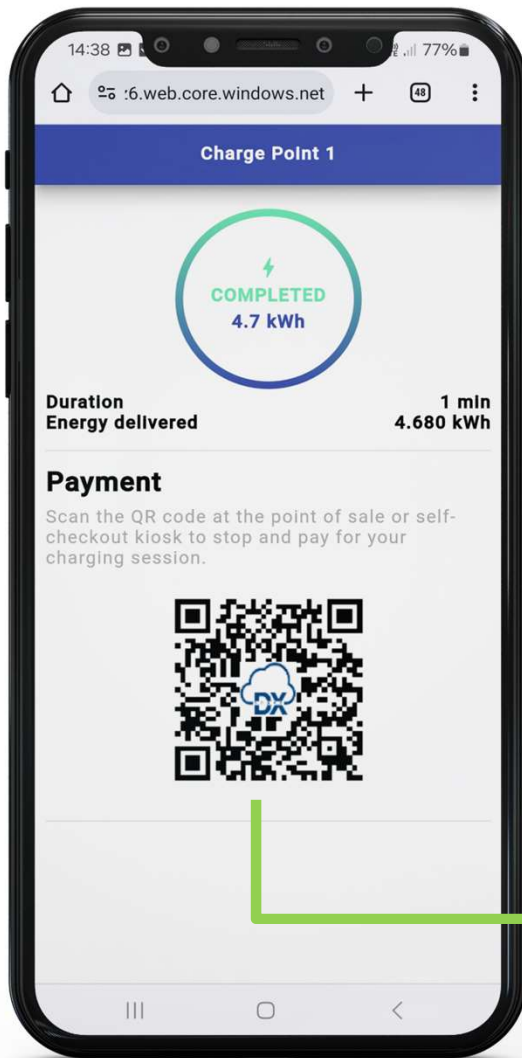
1. **Monitor** progress in DX Power Web-App
2. Charging will run and stop automatically (45-60 sec)
3. OR Press 
4. Transaction appears on Prizma
5. Walk to self-checkout kiosk



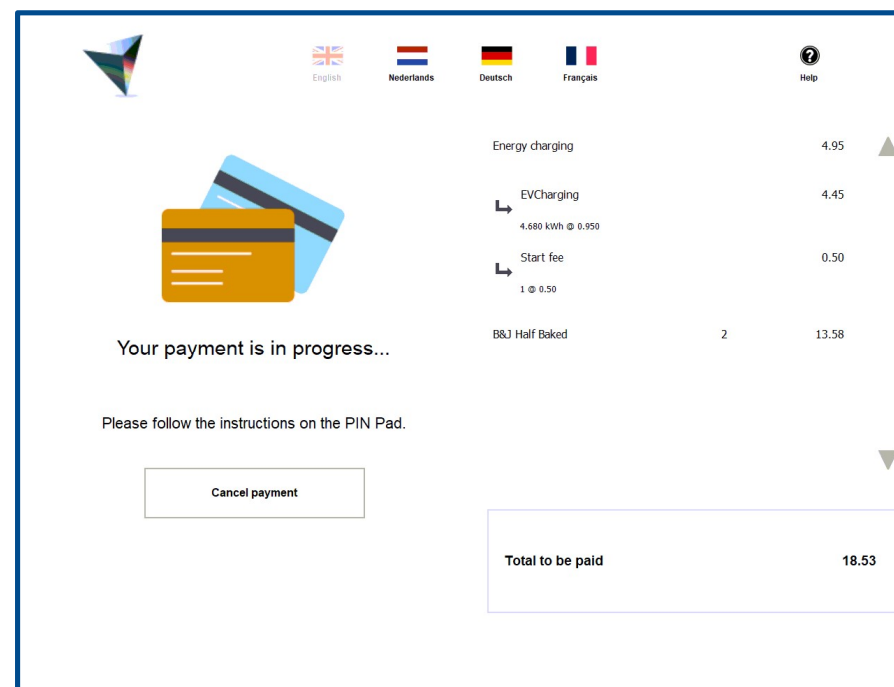
## UNITI – Showcase

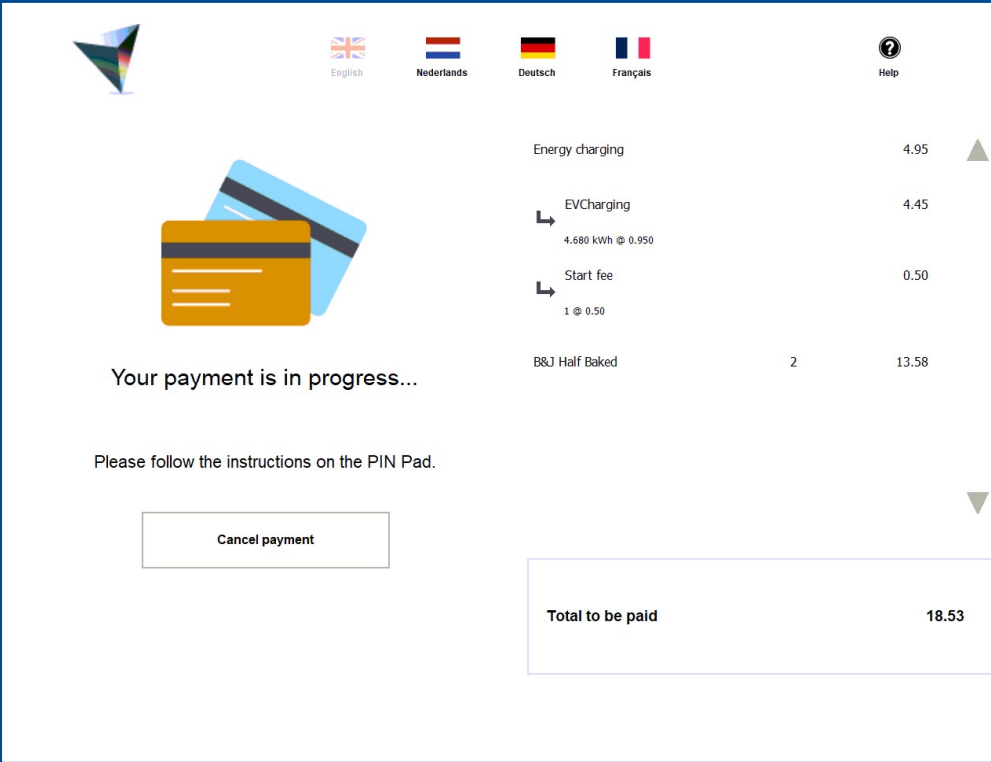
Connected solution eco-system

1. Scan DX Power App QR code at self-checkout kiosk
2. EV Transaction appears in basket
3. Add articles and/or press PAY



1. Select receipt option
2. Press **“Digital receipt via QR code”**





The screenshot shows a payment terminal interface with a blue border. At the top, there are language selection buttons for English, Nederlands, Deutsch, and Français, along with a Help icon. On the left, there is a graphic of two overlapping credit cards (one orange, one blue) and the text "Your payment is in progress...". Below this, it says "Please follow the instructions on the PIN Pad." and a "Cancel payment" button. On the right, there is a list of charges:

Energy charging		4.95
EVCharging		4.45
4.680 kWh @ 0.950		
Start fee		0.50
1 @ 0.50		
B&J Half Baked	2	13.58
<b>Total to be paid</b>		<b>18.53</b>

# 1. Complete transaction on the payment terminal

## 1. VISA Mobile CDET App

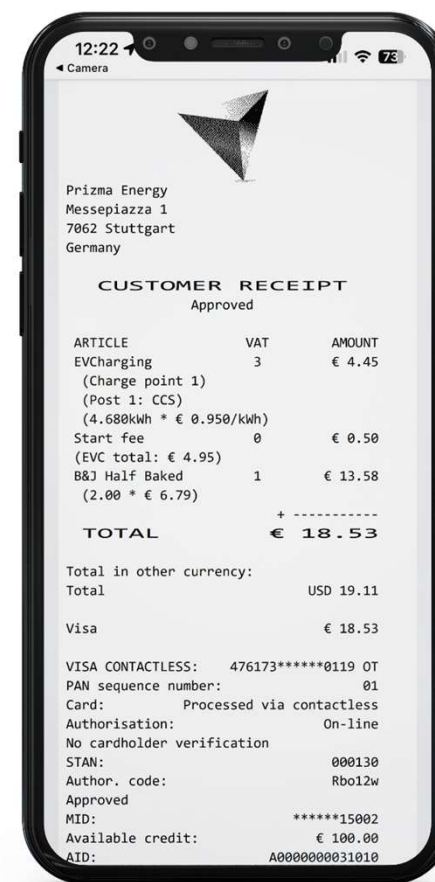
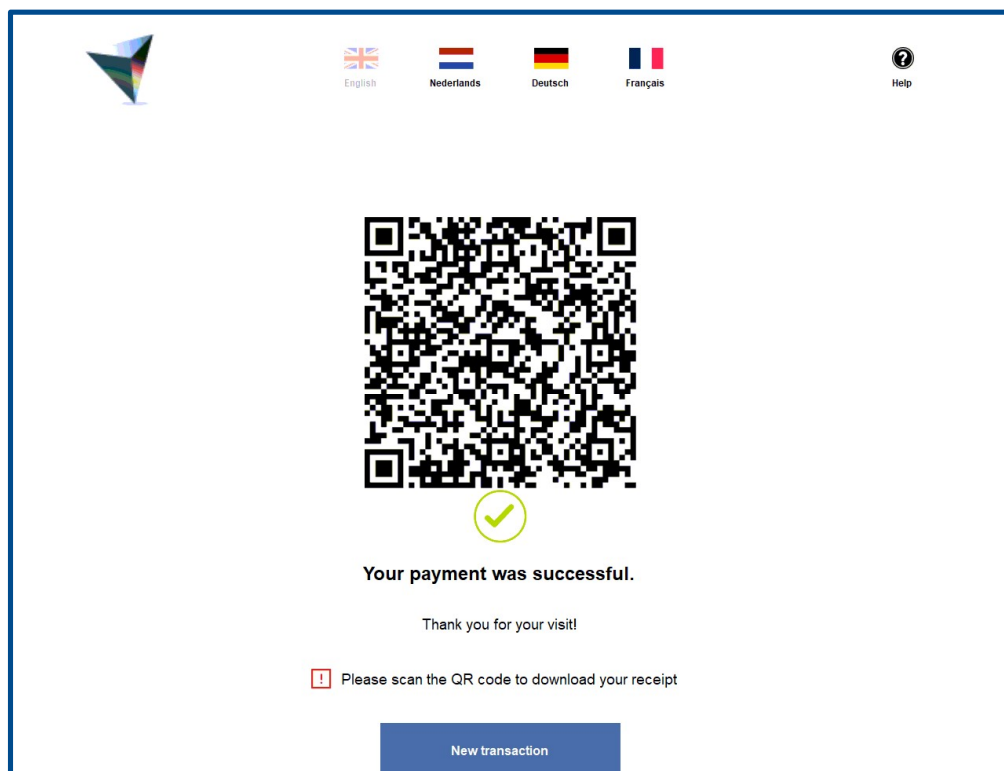


## 2. Showcase card



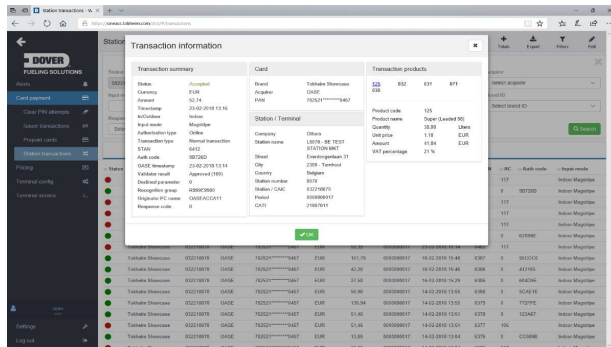


## 1. Scan QR code to get digital receipt

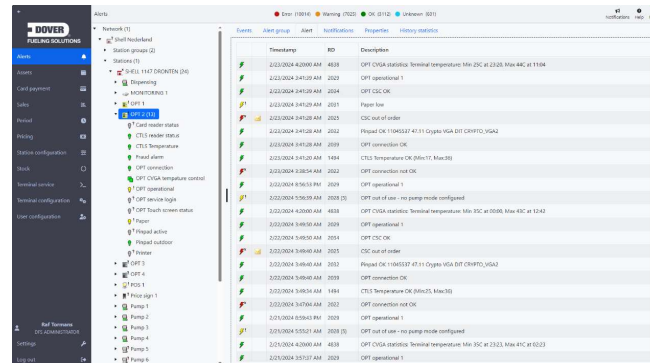


# ONE Portal: Your View on Performance

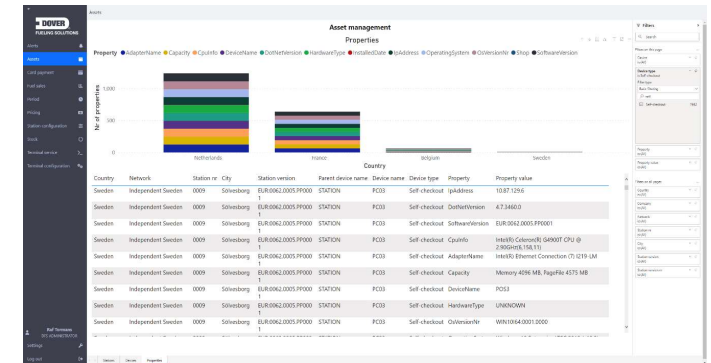
Real-Time view on card payment transactions



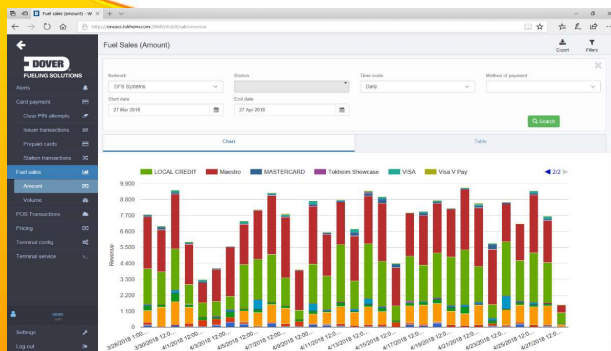
View and escalate alerts & events from Prizma connected devices



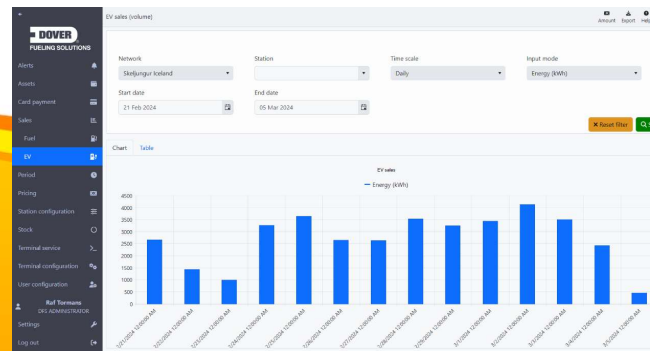
Instant view on connected assets



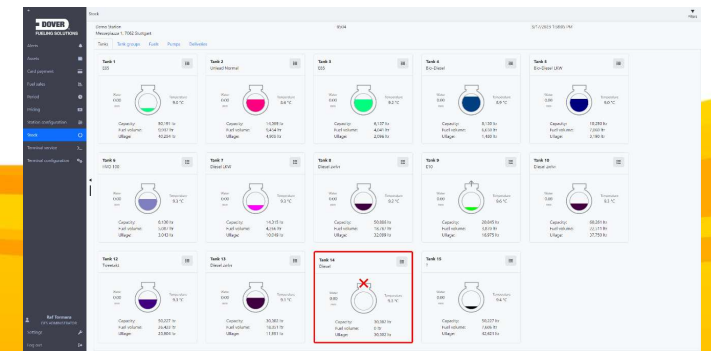
Get a detailed overview of all your fuel sales



Get a detailed overview of all your electric vehicle sales



View wetstock details from your Prizma sites



# UNITI – Showcase

Hall 5 | 5C10



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