

Energy: EV Propositions in Norway

April 2018

white space
STRATEGY

www.whitespacestrategy.com

Energy providers in the UK can learn from those in Norway who have propositions and services to support the widescale adoption of EVs...

Norway is leading the way with EVs...

20% of new cars are EVs

5% of passenger cars are EVs

21.5 registered plug-in cars / 1,000 people

The ambition is to have only EVs sold from 2025

...tactical initiatives help uptake...

Tax Savings (car purchase & general sales tax)

Free charging at municipal sites

Exempt from tolls, able to use bus lanes

...energy providers have propositions to support adoption

ToU & EV tariffs, in-home charging, out-of-home charging and solar PV are commonplace in Norway. Providers offer some form of these to support the adoption of EVs

EVs are currently still niche in the UK (120k fully electric cars on the roads, 1.8% of total new cars sold are full EVs).

However, as adoption grows, UK energy providers will need to follow Norwegian providers and launch propositions and services that support this

The following slides give some examples of what future offerings could look like

Fortum: Norway's leading energy retailer is offering customers up to 22kW charging capability, alongside an ability to charge at their stations out-of-home on a single invoice...

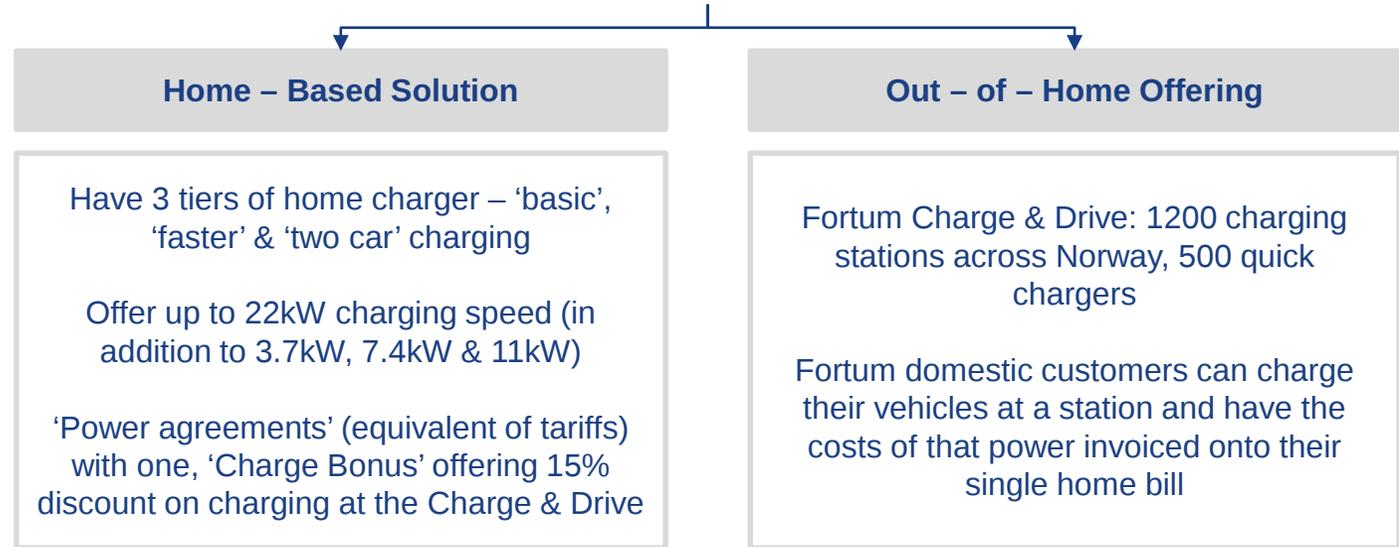


How is Fortum supporting the growth of EVs in the consumer space?

Size: 800,000 customers - largest electricity supplier in Norway

Turnover: €3.6bn globally (2016)

Focus in Norway: Retailing Energy, EVs, District Heating & Waste and Energy Recovery



3 Charger Packages:

Package 1: For those who want safe and efficient charging

Package 2: For those who want even faster loading

Package 3: For those who want to charge two cars at the same time

Eidsiva: Appear to be offering ToU tariffs and home solar panels. In the case of the latter, consumers are able to sell excess energy back to the retailer...



Size: 163,000 power customers

Focus in Norway: Retailing Energy, District Heating, Solar & Telco

Electric Vehicle Offering

Are you an electric car owner? Become a charger!

With the Eidsiva charger, you can safely and easily drive your electric car and get 100% renewable power right on the tank! The payment will make you interest free over 3 years through your power bill.

With InnlandsSpot you get guaranteed renewable energy from the hydropower in the country of **origin (origin guarantee)** included in the price. The price follows developments on the power exchange at an hourly level, and the price is based on the spot price in the area where the power is delivered.

With InnlandsSpot you also get more **customer benefits** on the purchase, like free tickets for cultural and sporting events in the country and discounts at several partners.



Offer the installation of EV chargers, with special EV tariffs. The tariffs are ToU as the price changes on an hourly basis, in line with the 'spot price in the area where the power is delivered'

Home Solar Panels

solar power

More and more people in Norway want solar panels on the roof. You can now install turnkey solar systems from us in Eidsiva. Simple, safe and environmentally friendly.

Customers are able to sell excess energy back to Eidsiva. Customers can monitor production in their online portals

Pilot commenced in Feb 2017. Package consists of 12 panels, production of up to 3.2 kW (~3,000kWh in annual production)

SolSpot - An agreement for our solar cell customer

Purchase of solar systems from Eidsiva Market gives you the SolSpot power agreement on the purchase.

With Solspot you not only get electricity at the purchase price - you also get the opportunity to sell your own power back to Eidsiva Market in the periods you produce more than you use. The price follows the development of the power exchange at an hourly level, and is based on the spot price in the area where the power is delivered.

Since the surplus of power you produce goes back to the mains where you live, your local network company must have its systems in place before you can get paid for the power. Many online companies have more information about this on their websites.

With the Solspot deal you also get more customer benefits on the purchase, like free tickets for cultural and sporting events in the country and discounts at several partners.