



City of Oslo



The future is electric! The Oslo Solution

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It is all about the environment!

In 2008, the City Parliament in Oslo adopted a “*ten-point plan*” to reduce CO2 emissions. With **61%** of global emissions in Oslo coming from the transport sector, the only way to reduce emissions in our cities is to boost a green shift in transportation.

One of the action points was to establish 400 charging points within 2011.



In 2008, Oslo had around 1000 electric vehicles.



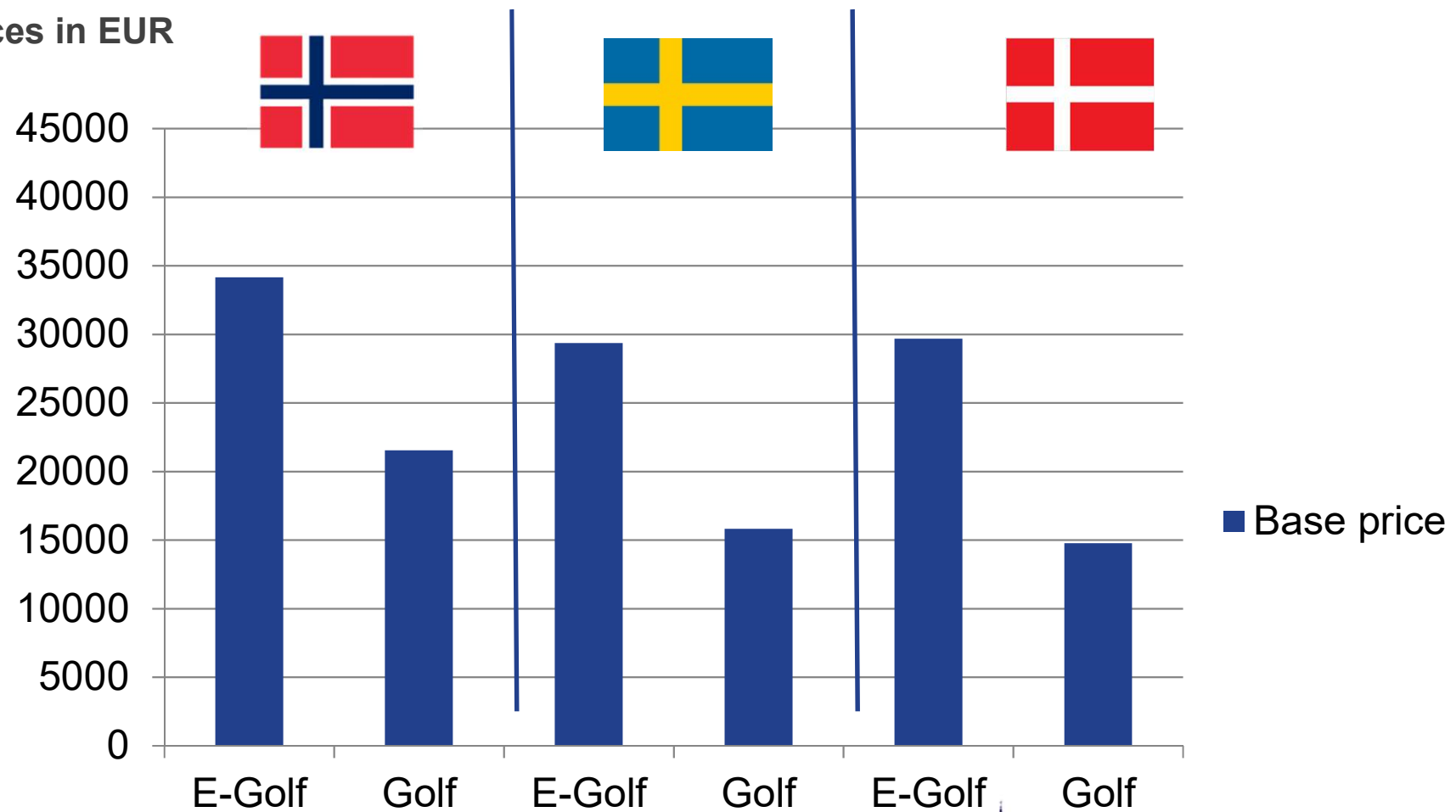
Making EVs a reasonable choice - incentives on purchase

- High taxes on fossil fuel cars
- 25% Value Added Tax (VAT)
- «Registration fee»
calculated on the basis of:
 - the weight of the vehicle
 - the emissions (CO₂ and NO_x)
 - the engine size (ccm) or effect (hp)* (removed from 2017->)
- **Electric vehicles are exempt from VAT and registration fee**
- Hybrid and plug-in hybrid cars have to pay VAT and registration fee, but get a small discount for weight (to compensate for extra battery weight)



Purchase price comparison – Scandinavia

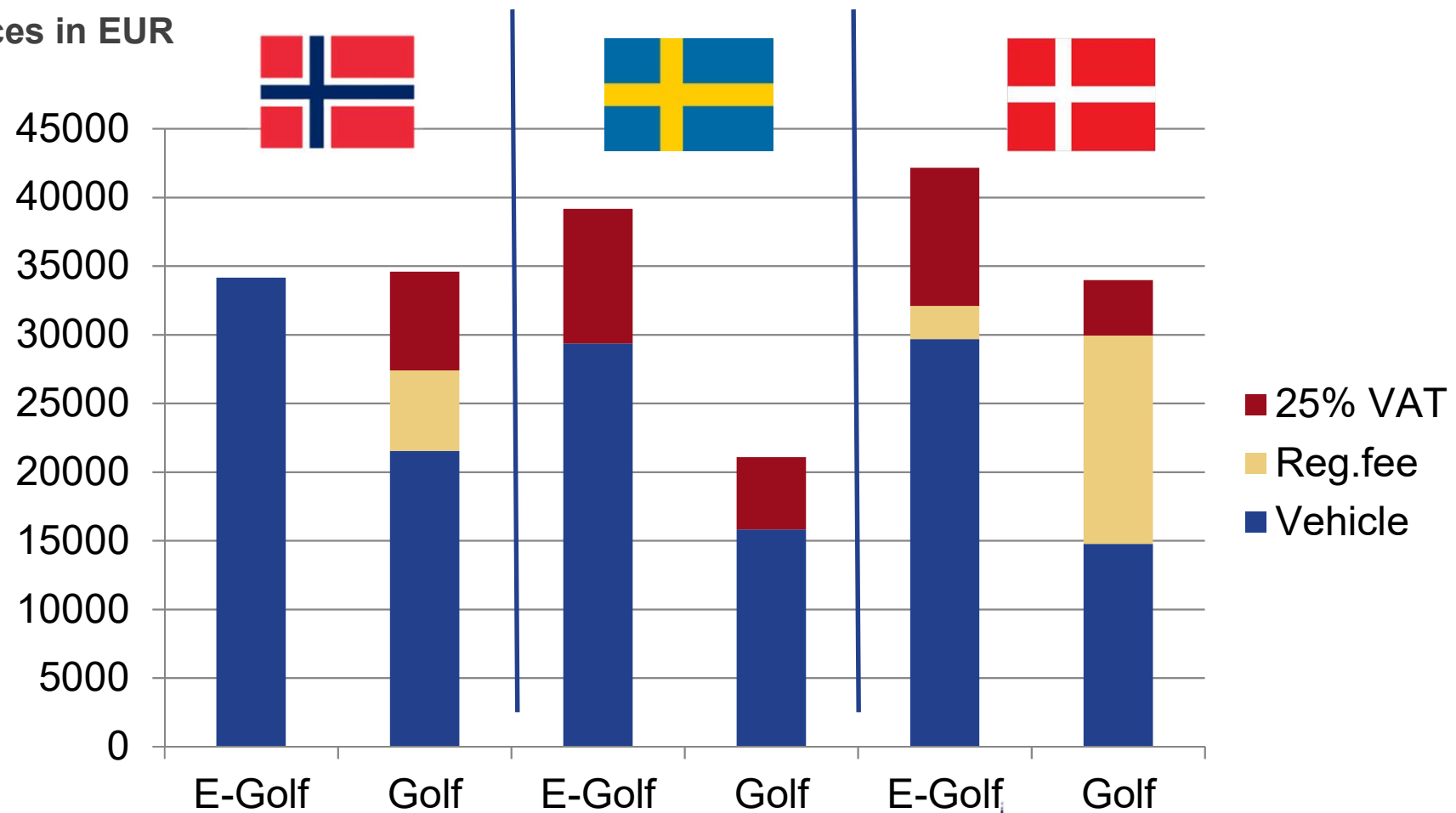
Prices in EUR



Purchase price comparison* – Scandinavia

*Prices the consumers see when looking online

Prices in EUR



What about larger family cars?

Tesla Model X



In Norway: 70 383 EUR
In Sweden: 94 628 EUR
In Denmark: 123 812 EUR

Volvo XC60



In Norway: 63 186 EUR
In Sweden: 34 804 EUR
In Denmark: 87 136 EUR



Making EV the RIGHT choice - Incentives on use

- **Free access on toll roads (1997)**

In Oslo € 5,
National roads, bridges and
tunnels up to €15.



- **Free parking (1999)***

€ 2 – 5 per hour

- **Access to use bus and taxi lanes (2003)***

Saves 30 min -1 hour per day

- **Free normal charging (2008)**

+ a nation-wide fast charging network built
with government incentives.



- **Free transport on ferries (2009)***

€ 12 – 24 each way

*Some of these incentives have changed
from free to 50% reduced fee



Three critical success factors are needed

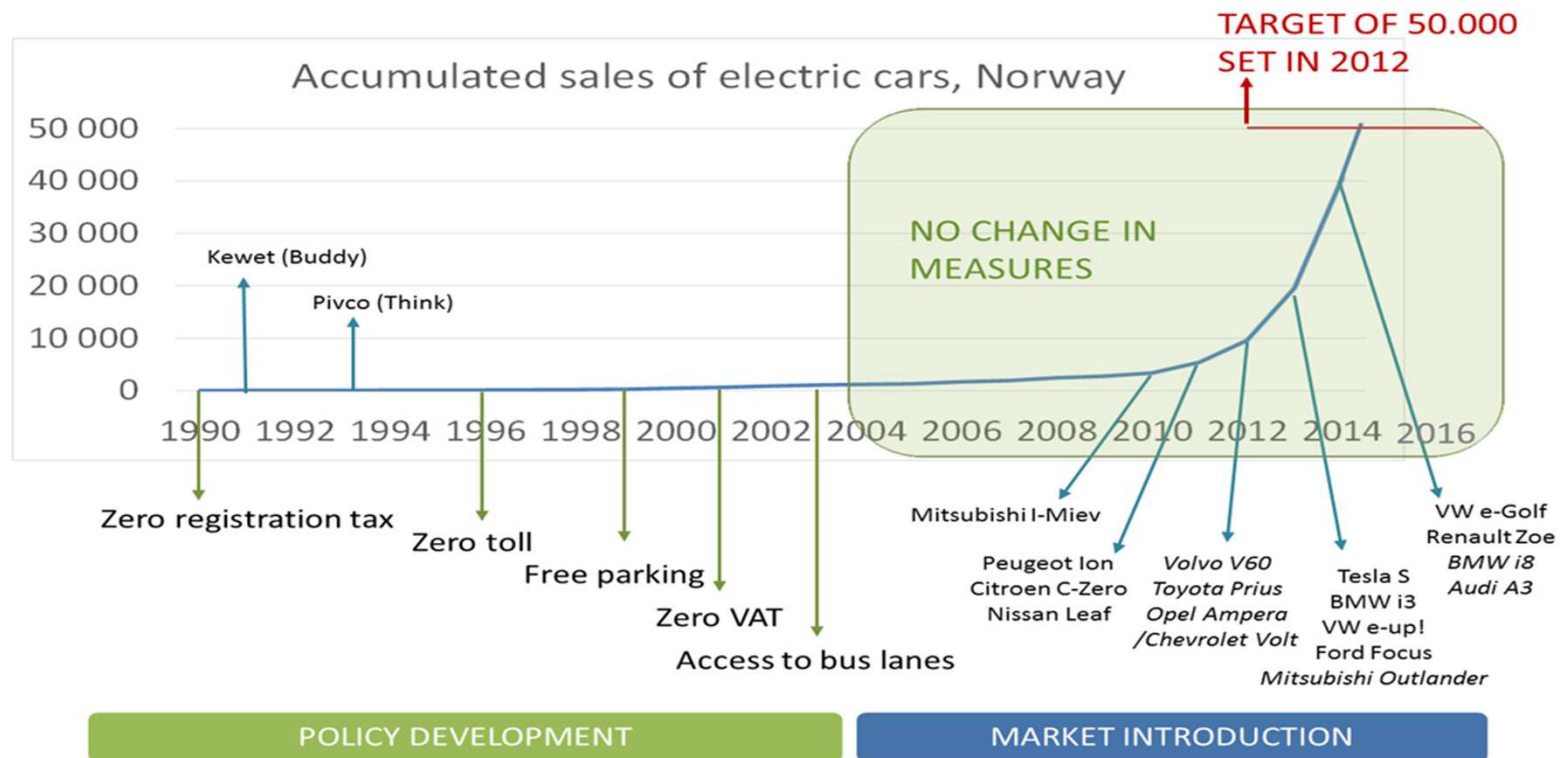
EV's must be:

- **Cheap to buy** – reasonable sticker price in the store.
- **Cheap to use** – daily or monthly savings and affordable fuel.
- **Convenient to use** - easy access to charging.

BUT - you also need **the right product** to succeed

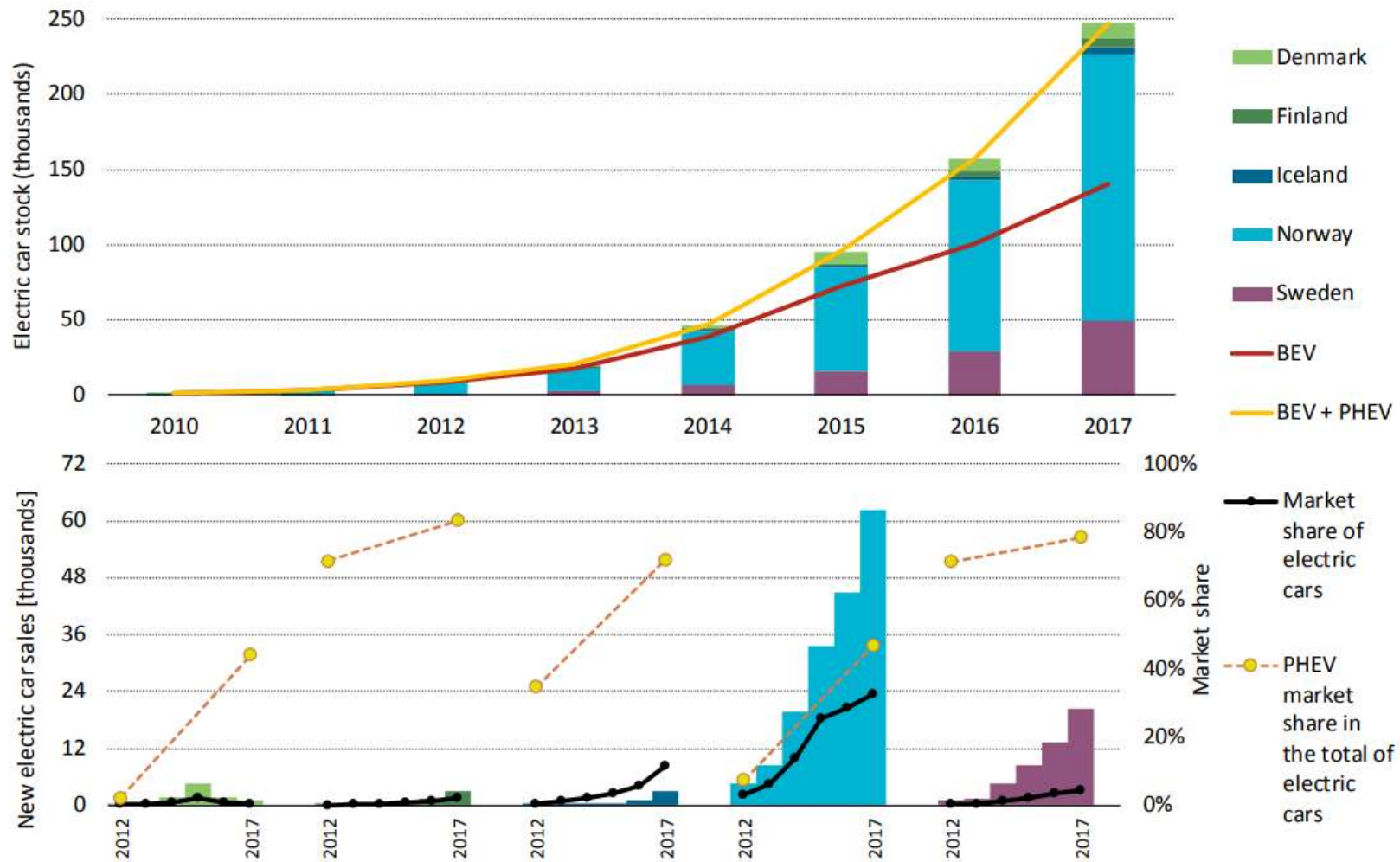


Development of policy and sales



What happens when everything is combined:

Figure E.1 • Number of electric cars, new sales and market share in Nordic countries, 2010-17



Extended focus - Charging infrastructure

To continue to enable the adoption of EVs electrical vehicle the City of Oslo has contributed to the rapid increase of charging infrastructure – in May 2018 more than 1300 public charging points + helped establish semi-private and private charging points.

Seeing is believing. Easily available charging infrastructure made driving an EV attractive and convenient, but also helped to raise public awareness and increase understanding about EVs. **This helped kick-start e-mobility in Oslo.**



Major Challenge – 61 % of Oslo’s’ citizens are living in apartments or town houses



LAGEB I TROND: Gull Elektrisk vil hjelpe med å finne og installere lading og elektriske bilparkeringer for alle i Trondheim. Foto: TORI NEST

Får ikke lade elbilen i borettslaget



- 61 % of Oslo’s population are living in apartments or town houses
- Many housing associations have old parking garages and infrastructure
- **Waiting list for parking**
- Many are **dependent on on-street parking**
- Demand for type 2 leads to **dismantling of type 1 chargers**
- Many **professional users of EVs**, like EL-taxi, Electric freight owners and craft and service staff are **living in apartments** with limited possibilities for charging



Flere elbil-eiere sliter med å få ladet hjemme

Det kan være utfordring å få borettslaget til å betale for å få satt opp ladestasjon i garasjen, men det finnes mange gode løsninger.



Major Challenge – Electrification for professional users of EVs

The use of commercial vehicles is growing far more rapidly than the use of private cars. While the private usage of cars is expected to drop by 20 %, the growth in freight deliveries is expected to grow by more than 50 % within 2030.



The only way to reduce the emissions from traffic is to increase the zero emission freight deliveries.



More chargers, faster chargers, smarter and more flexible charging, and **tailor-made solutions** for professional users of EVs are needed to succeed!



The solution

*Never change a winning card,
but always stay flexible*

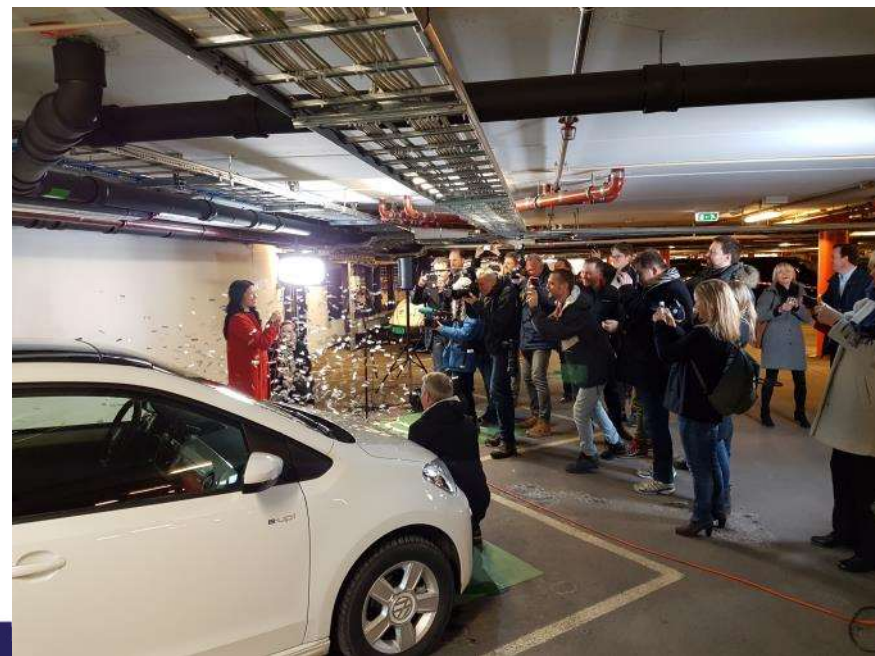


In order to catch up we need to:

- Establishing **fast chargers** in cooperation with private actors in the corridors in and out of the City
- **Indoor parking garages for EVs** (Akershus, Vulkan). The World's first dedicated P-houses for EVs only
- Build large **“Centre of excellence” for professional users** of EVs with flexible charging and pre-booking opportunities. Dualistic structure. The same garage offers free residential parking during night-time.
- **New green mobility houses** incl. tailor-made solutions for professional users of EVs and smart-grid
- **Fossil-free public transportation (2020)**
- Making sure that everybody can **charge at home** (61 % lives in apartments and town houses)

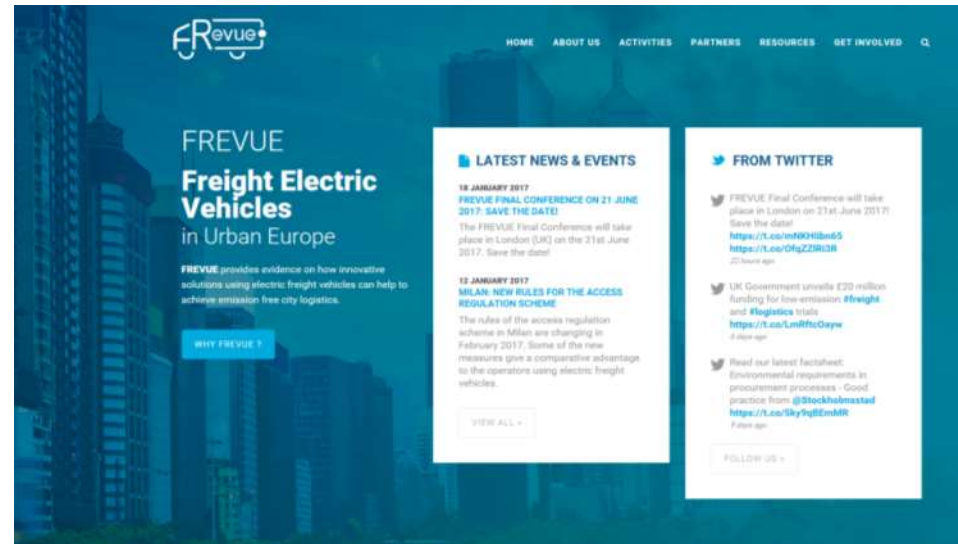
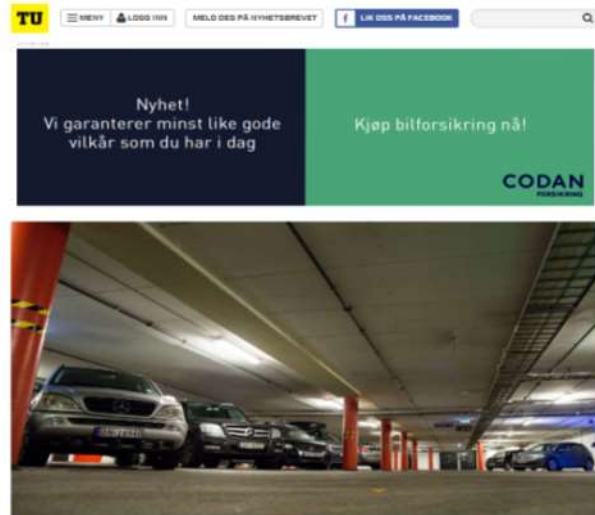


New quick charging stations



Important EU-project; SEEV4 City and FREVUE

Two important EU-project is leading the way as first movers for green freight distribution in Oslo; FREVUE and SEEV4 City



Not only private EVs



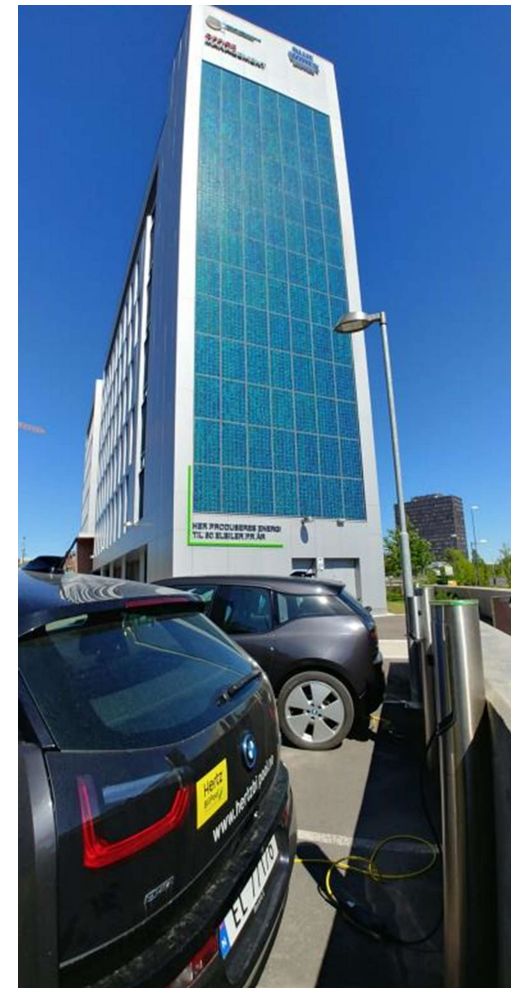
The City of Oslo – also a customer



Municipal EV fleet



Municipal E-bike fleet



Agency for Urban Environment office
incl. solar panels and car + bike sharing
(and no parking spaces for employees)



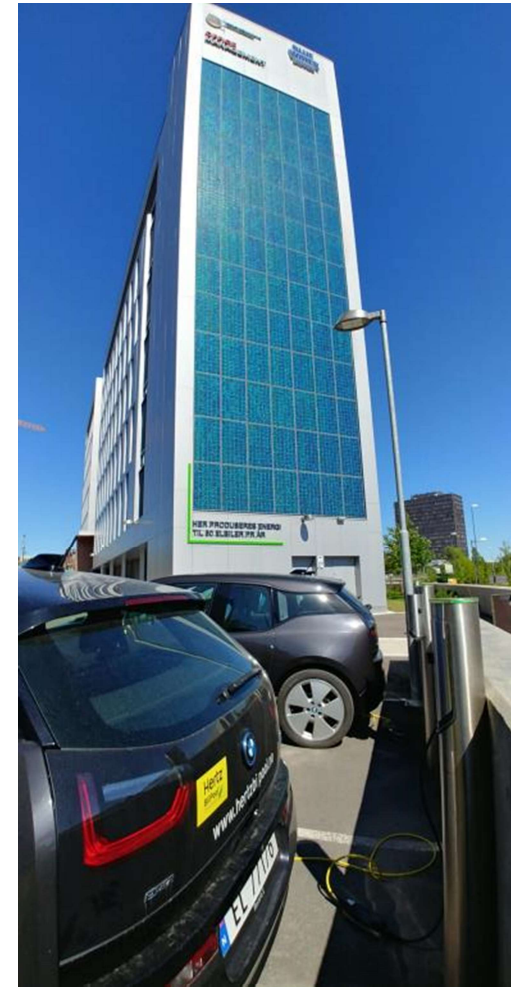
The City of Oslo – 3 advice for other cities



Transform the city's fleet – and start with your own!



E-bikes are a good supplement to your fleet too!



Look at the whole picture – everything must be connected (and make sense).



Grazie Thanks
Danke **Merci** Gracias
Ευχαριστώ multumesc
Takk dziękuję dakujem hvala
Obrigado dziękować
tänan kiitos köszönöm aciu
Tack děkuji paldies
nizžik ħajr dank u wel

Interreg
North Sea Region
SEEV4-City
European Regional Development Fund



OSLO

Winner 2019



An initiative of the
European Commission 

