



City of Oslo



The future is electric! Experiences from Oslo

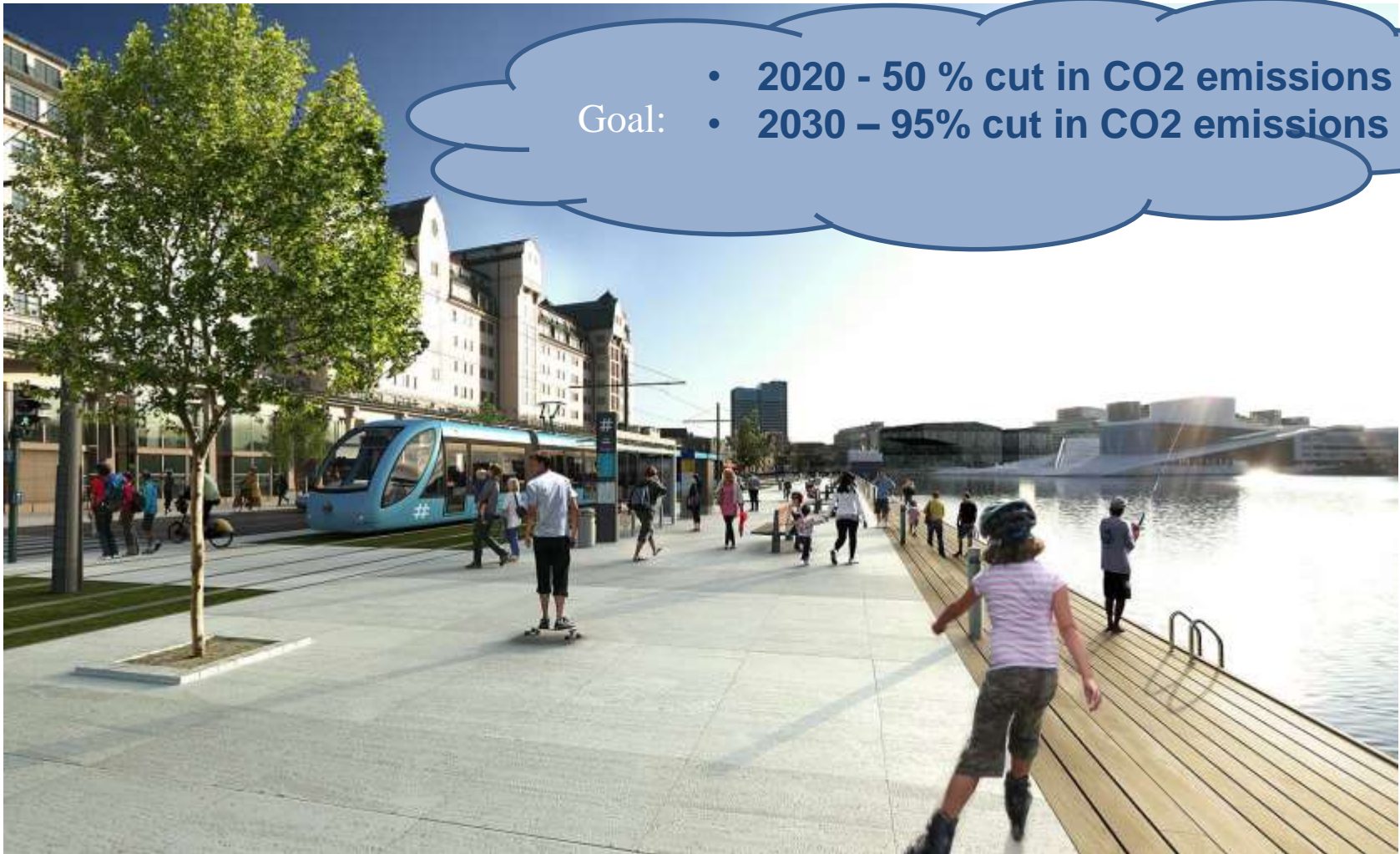
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Agency for Urban Environment
City of Oslo



Making EVs the right choice – It is all about the environment!

Goal:

- 2020 - 50 % cut in CO2 emissions
- 2030 – 95% cut in CO2 emissions



Making EVs the right choice – It is all about the environment!

With **64%** 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. In 2008, the City Parliament in Oslo adopted “*a ten-point plan*” to reduce CO2 emissions, to which the large scale introduction of EVs plays a big part.



Making EV the right choice

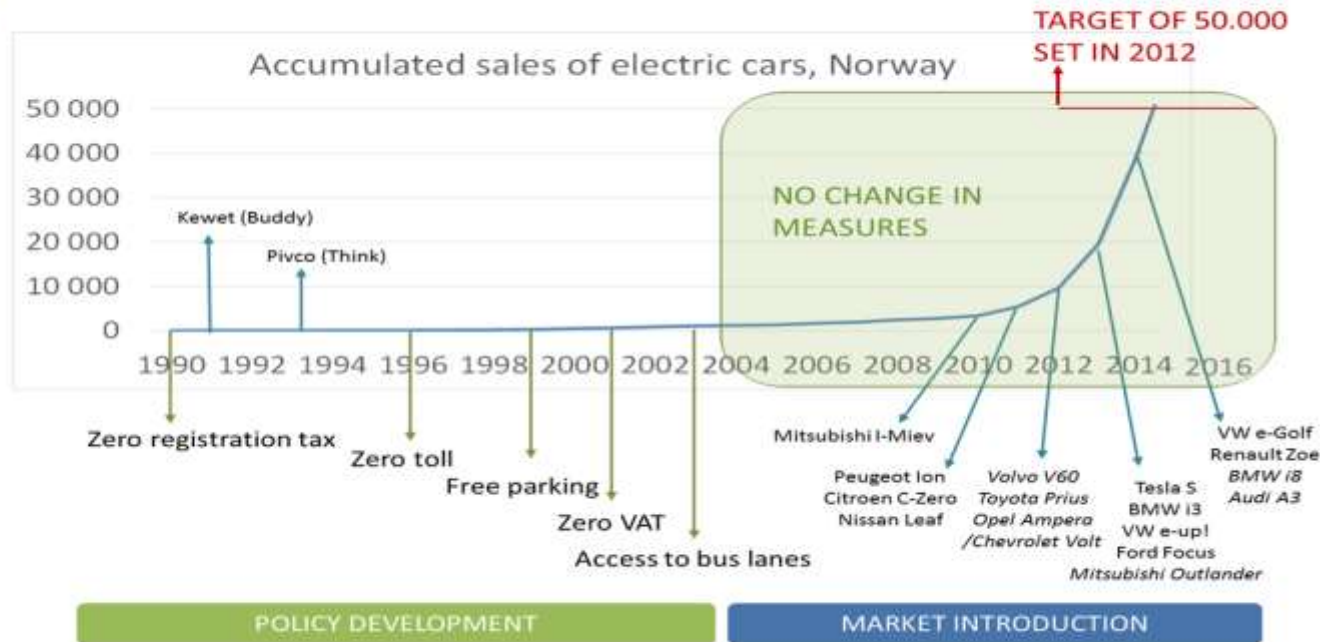
Making EVs the right choice: **three** critical success factors:

- EVs must be **cheap to buy** (no purchasing tax, no VAT)
- **Cheap to use** (free parking, free electricity, free passing in toll gates)
- **Convenient** to use (easy access to charging)

You also need **the right product** to succeed



Development of policy and sales



Making EVs the right choice - Charging infrastructure

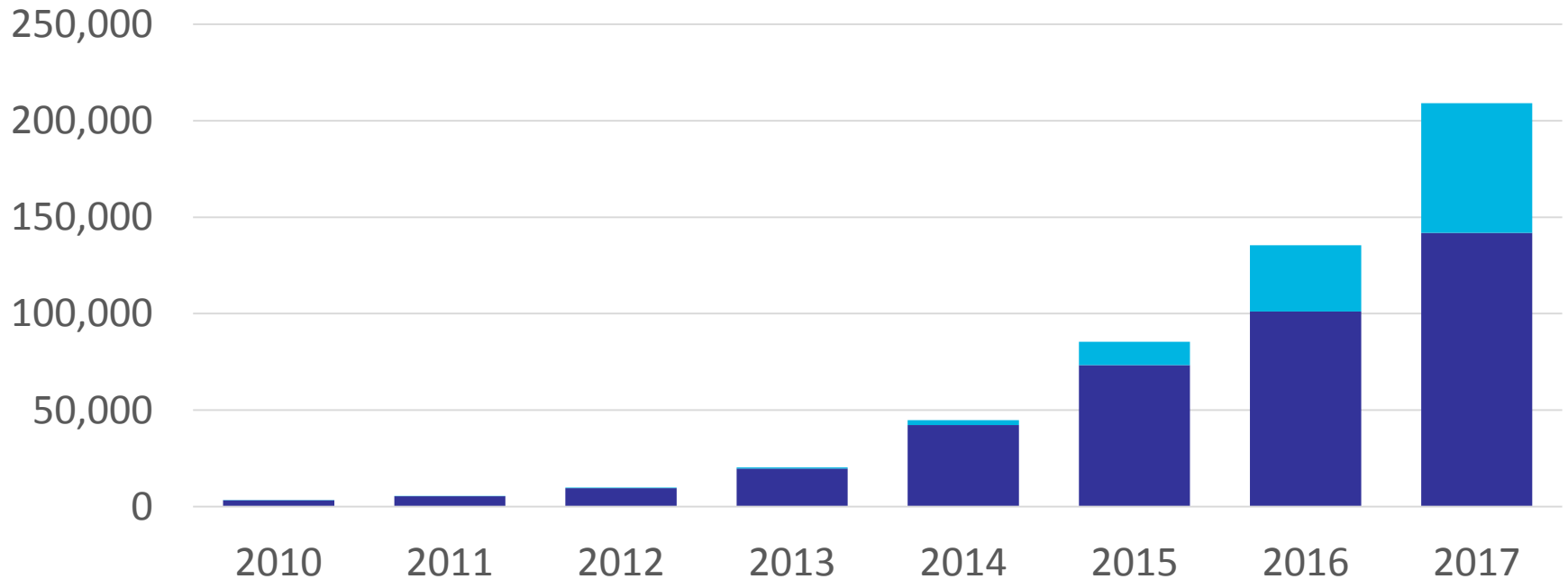
To **kick-start** the adoption of EVs electrical vehicle the City of Oslo has contributed to the proliferation of an adequate charging infrastructure. Today Oslo is Norway's, and probably the Worlds, largest owner of charging infrastructure.

Seeing- is believing. Easily available charging infrastructure made the driving an EV attractive and convenient, but also helped to raise public awareness and increase understanding about EVs.



Did it work?

Exponential growth – 200 000 EVs in Norway



■ BEV ■ PHEV

Source: The Norwegian EV Association

Green taxes are actually working!

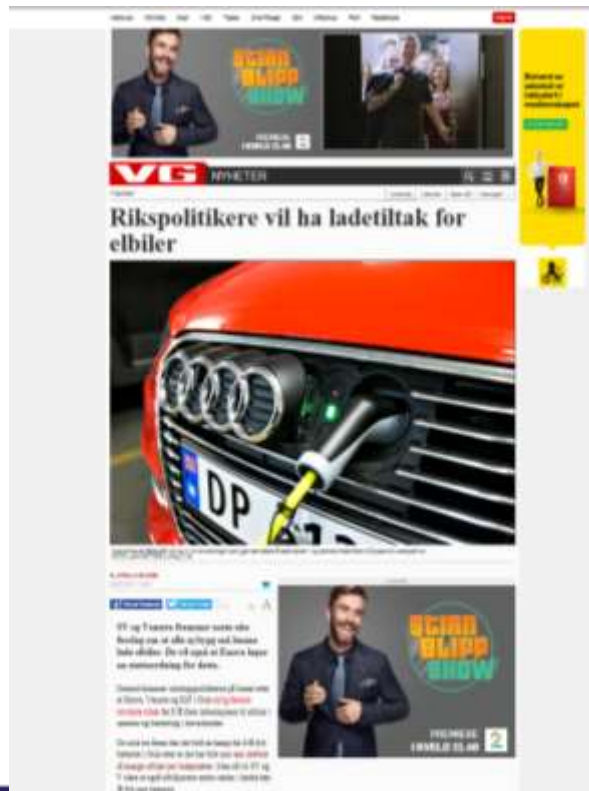
In 2017 more than **50 %** (or every second) cars sold in the Oslo region was electric! Either a pure electric vehicle (37,5 %) or a plug-in vehicle (14,1 %).



EV sales are boosting - Over 50% in Oslo!

The share of EVs and Plug-in hybrids sales has increased to **57% in 2018**.

Not rocket science. **Green taxes are actually working**, but you have to make it **affordable for people** to take green choices!



Sky is the limit, or trouble in Paradise?



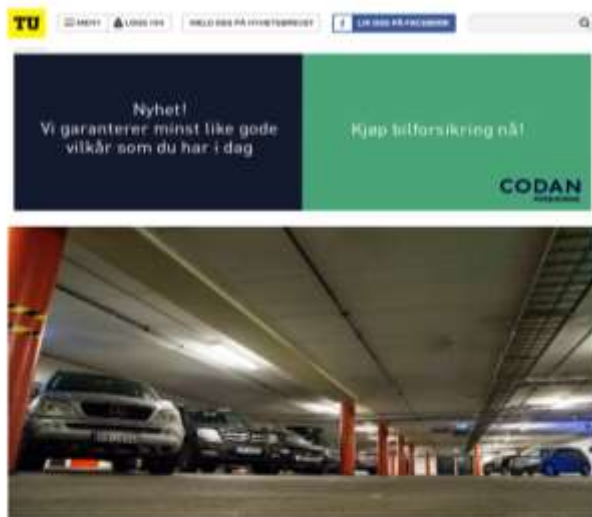
Three major Challenges:

- **EV sales are boosting.** Hard to deploy chargers quick enough. From 1 (charger) - 4 (car), to 1 (charger)-10 (cars) in two years
- **61 % are living in apartments** or town houses in Oslo
- **Electrification for professional users** (freight, taxis etc.) An increasing numbers of Freight vehicles and service cars



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



REKLAMMER Slik blir Norges mest avanserte ladeplass

Porten tar i bruk batteri, og gir 300 parkeringsplasser med mulighet for samtidig lading.

AV ANNE MARIE LARSEN | 10. JUNI 2017 | 10. JUNI 2017 | 10. JUNI 2017

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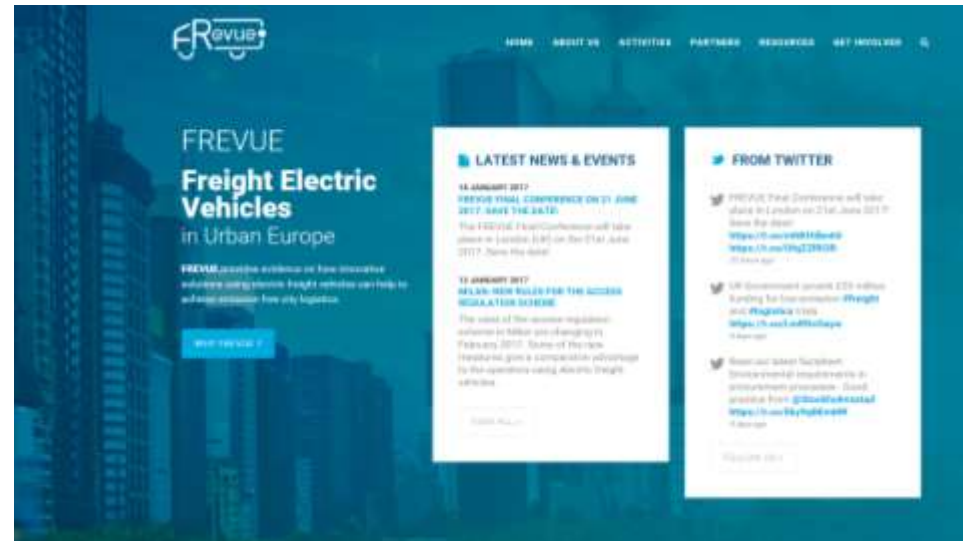
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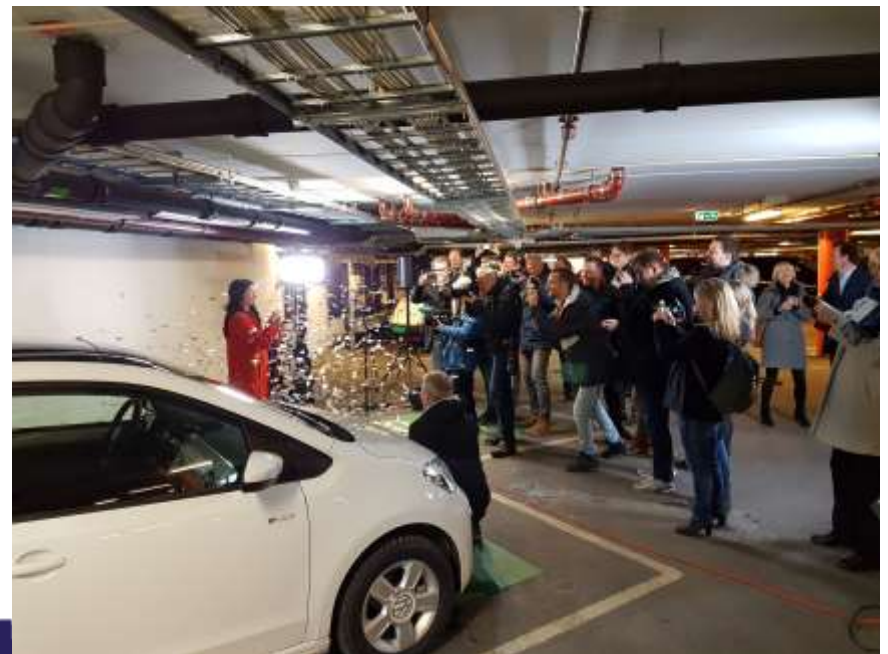
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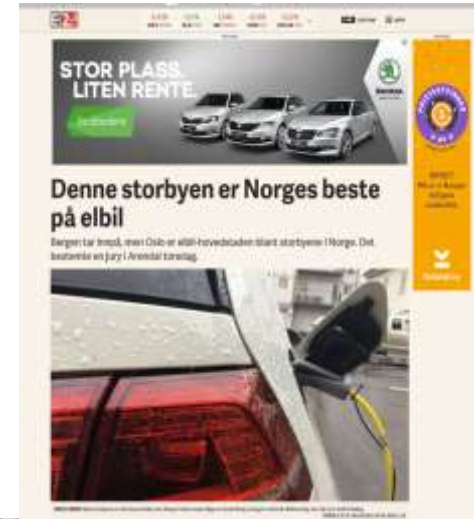
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New quick charging stations realized by FREVUE



New green mobility houses realized by FREVUE and SEEV4 City



A launching customer



A green shift in transport is needed

Everything is connected to everything, in addition to more EVs we need:

- **More public transportation**
- **Greener public transportation.** Fossil-free within 2020 (the official goal)
- Increased focus on facilitation for **pedestrians and cyclists**
- Focus on **Autonomous Vehicle/Mobility as a Service**
- Increased focus on **(green) car sharing**
- More **freight handling by trains**
- **Green freight distribution** in the City
- Electrification and **greener heavy duty vehicles**
- **EL-Taxis**
- **Park and ride solutions**, in combination with EVs
- Increased use of **ITS**
- **Low emission zones**
- **Residential park** (free parking for EVs)
- **Congestion tax** (non for EVs)



Keys to electrification of electric vehicles

- **Tailor-made charging infrastructure** and booking possibilities (**FREVUE**)
- **New Centre of Excellences for professional users of EVs** (**SEEV4 City/ Vulkan**)
- **Green procurements** with focus on Zero Emission deliveries (**BuyZET**)
- **Reserved parking and charging** for FEVs and EL-taxi
- **Free parking** for FEV
- **Last mile deliveries** with zero emission vehicles
- **Consolidation centers and energy stations**
- **Green freight distribution** in the City
- **New super quick chargers (175-350 kW)**
- **Inductive charging**
- **V2G and smart-grid solutions** (**SEEV4 City**)
- Electrification and **greener heavy duty vehicles**
- **EL-Taxis** (only zero emission from 2022)
- **Low emission zones**
- **Residential park** (free parking for EVs)
- **Congestion tax** (non for EVs)
- **Toll station** inn and out of the city (increasing with 53 new toll stations in 2019)
- **Temporarily Diesel ban** on the more pollution days



Not only private EVs



Not only private EVs



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

Interreg

North Sea Region

SEEV4-City

European Regional Development Fund



OSLO

winner 2019



An initiative of the
European Commission

