




City of Oslo

Low Emission Transport – Oslo

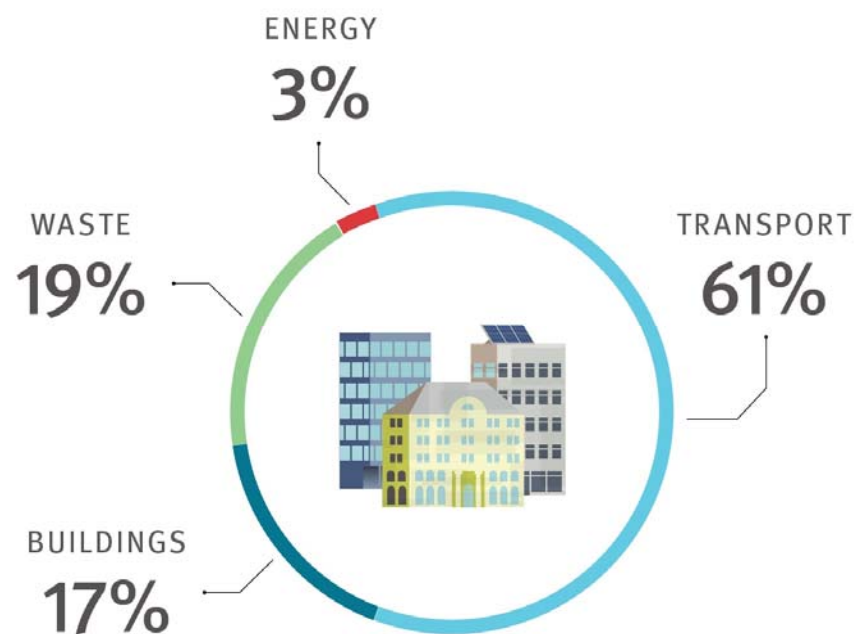
LowCVP Conference, June 27, 2017
Trude Rauken, Senior Adviser, City of Oslo

An aerial photograph of a city, likely Oslo, Norway, taken during sunset. The sun is low on the horizon, casting a warm orange glow over the city and the surrounding hills. The city is densely packed with buildings, and a large body of water is visible in the background. A green semi-transparent box with a grid pattern is overlaid on the left side of the image, containing text.

Population: 670,000
2% annual pop. growth
Young population
High education levels
Strong immigration
Low unemployment
Building pressure



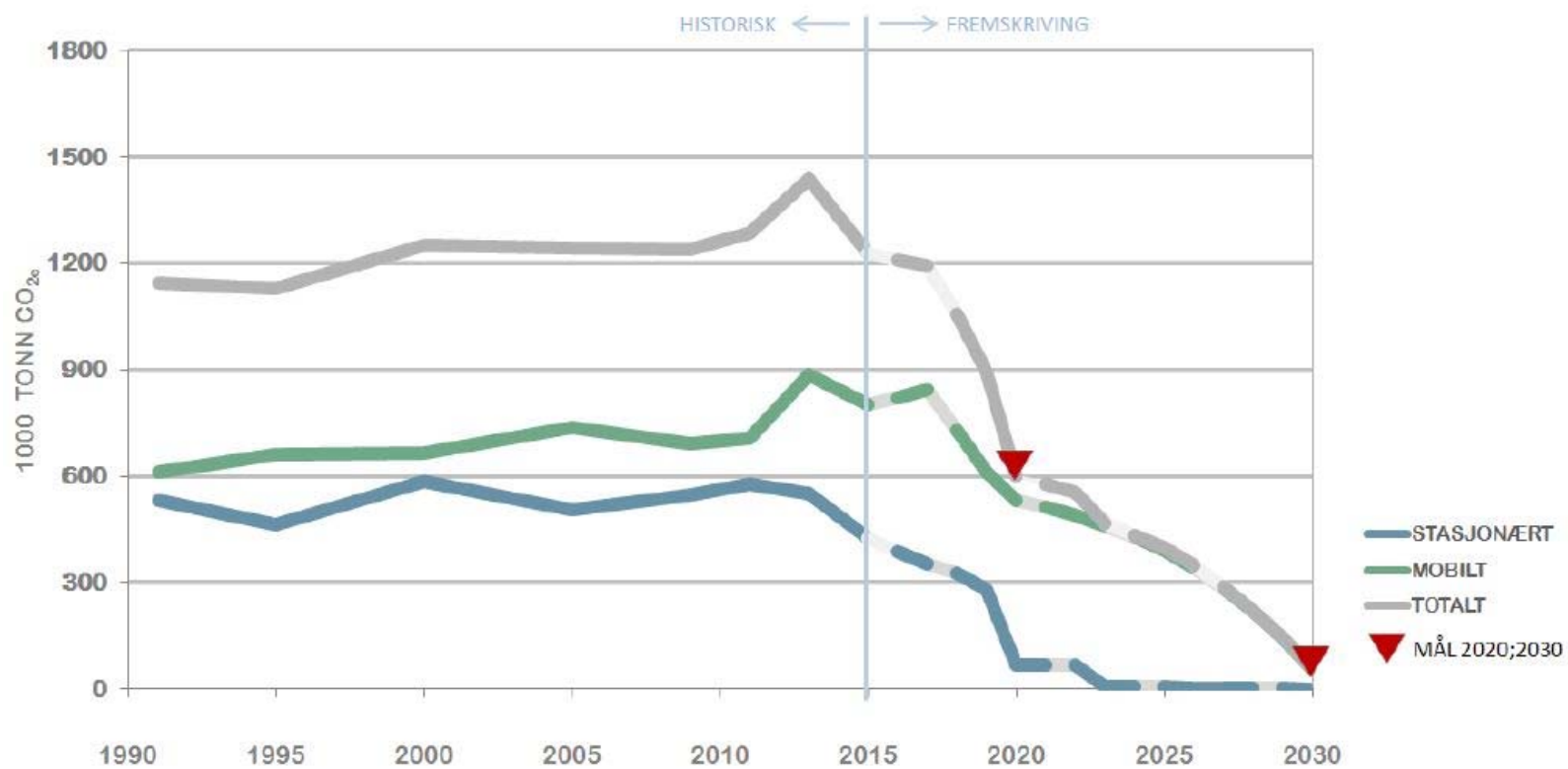
Emission mix – City of Oslo





Oslo Emissions

Reduction -16 % fra 2013 til 2015

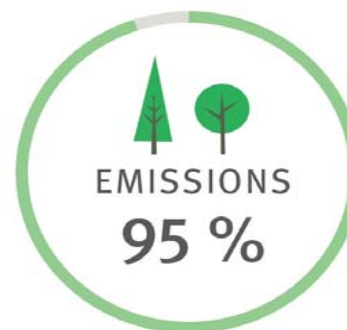




The targets of the Climate and Energy Strategy for Oslo:



- To reduce greenhouse gas emissions by 50 per cent by 2020



and by 95 per cent by 2030.



Transport – main challenge

PRIVATE CARS  39%

TAXI  3%

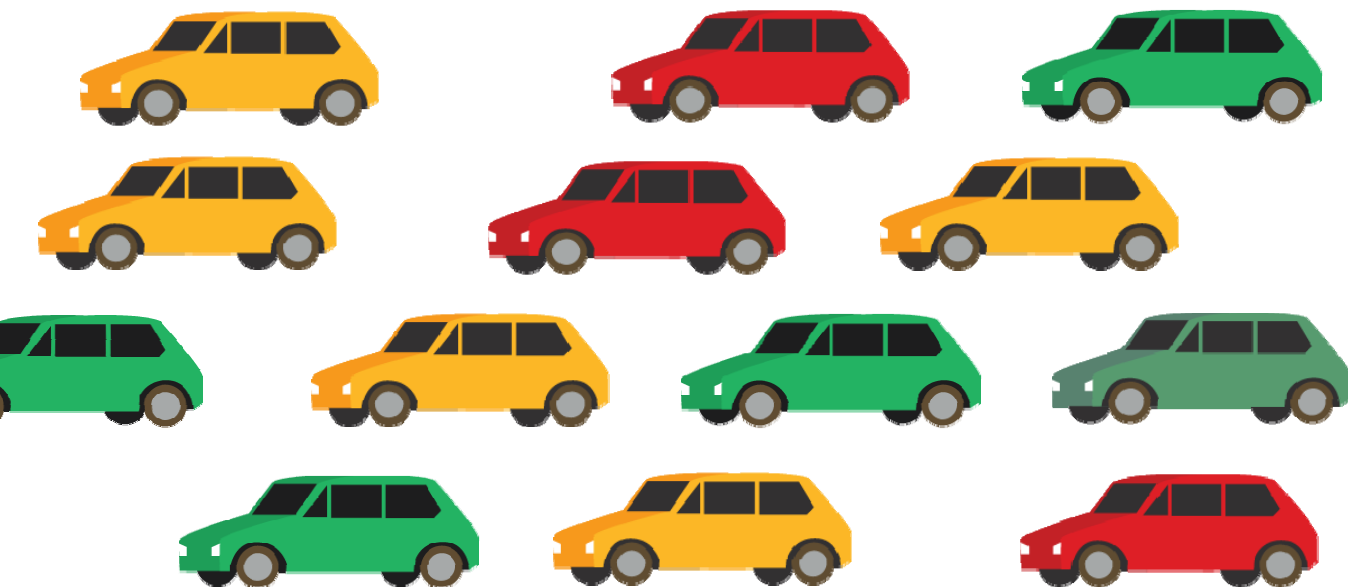
PUBLIC TRANSPORT  3%

LEIGHT FREIGHT VEHICLES  10%

HEAVY DUTY VEHICLES  15%

CONSTRUCTION MACHINERY  30%

D luftxødw



Oslo – the EV capital

Cheap to buy

- No VAT
- No registration fee

Cheap to use

- Free parking
- No charges at the toll ring
- Free electricity
- Free passage on ferries

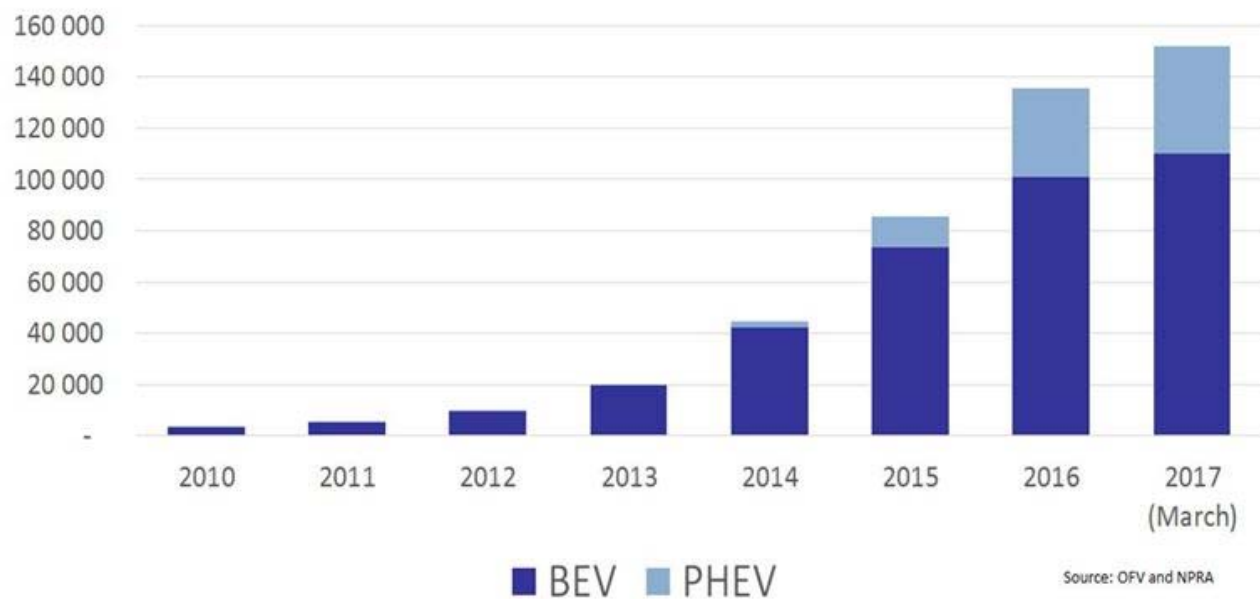
Easy to use

- Access to bus lane
- Public charging infrastructure



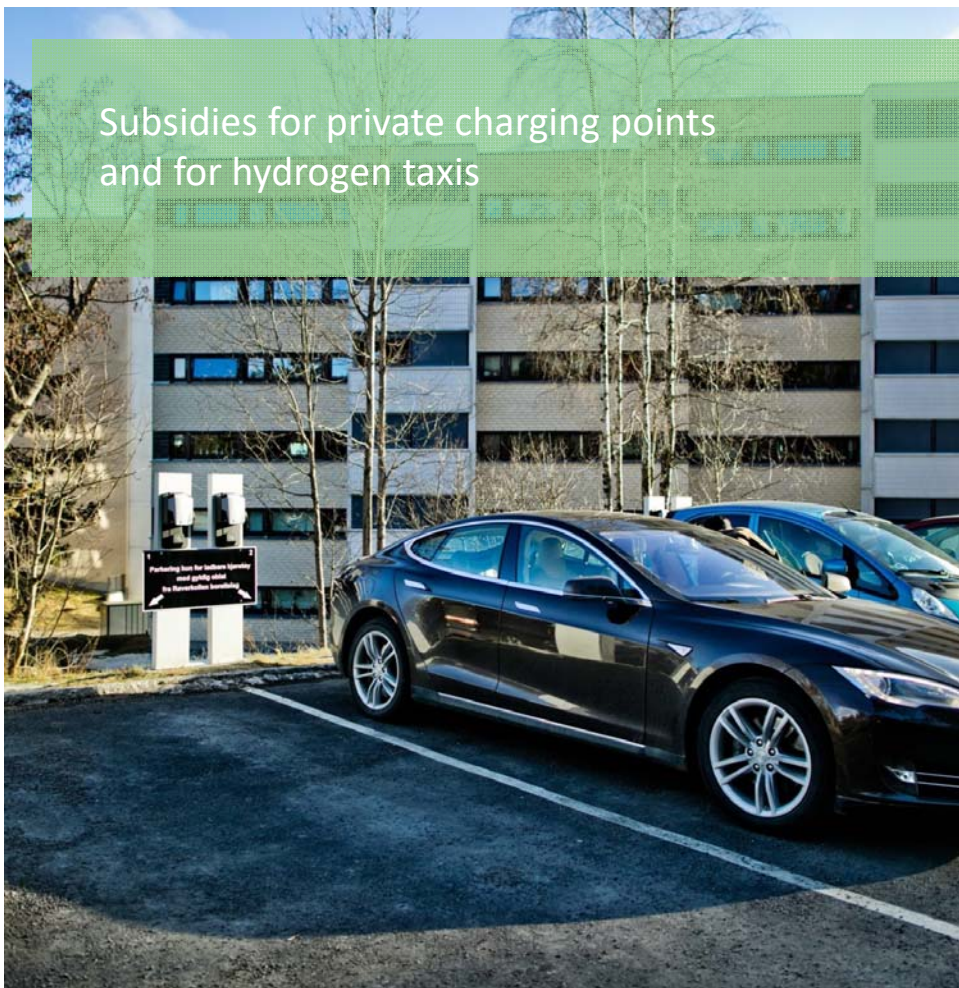


The Result: Exponential growth

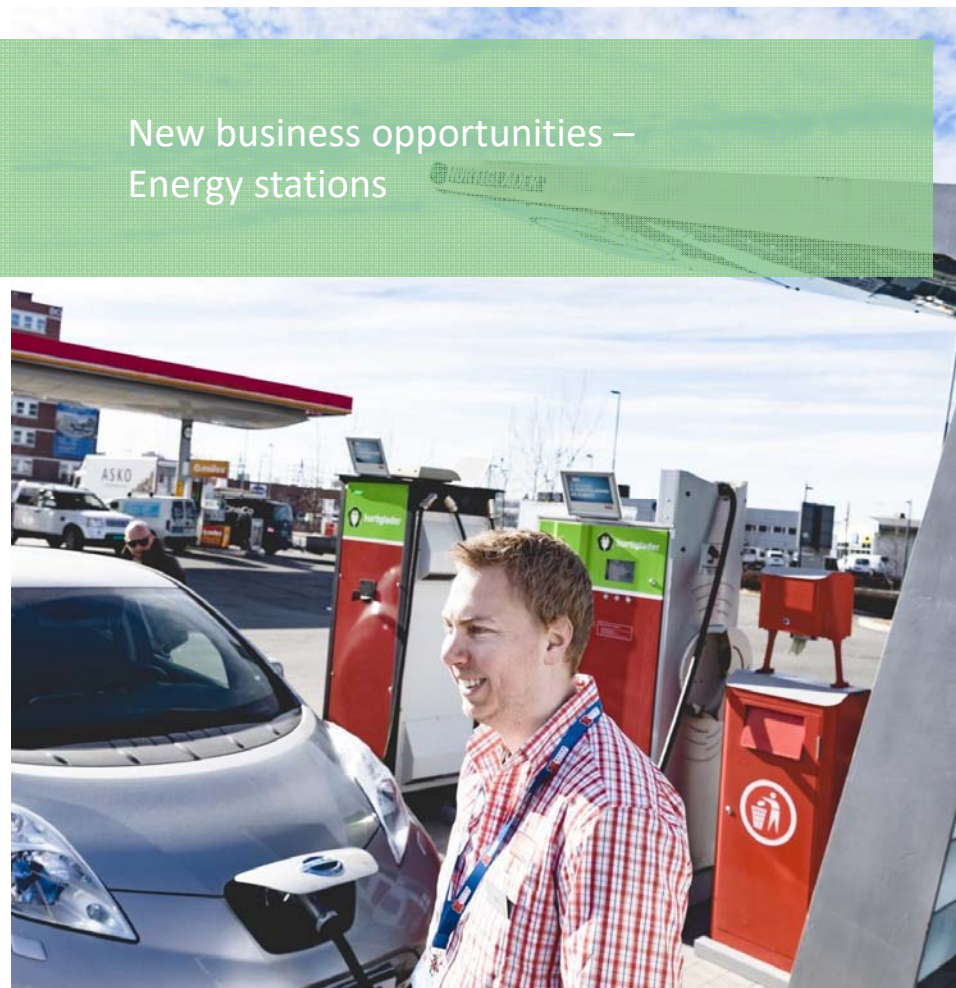




Subsidies for private charging points
and for hydrogen taxis



New business opportunities –
Energy stations



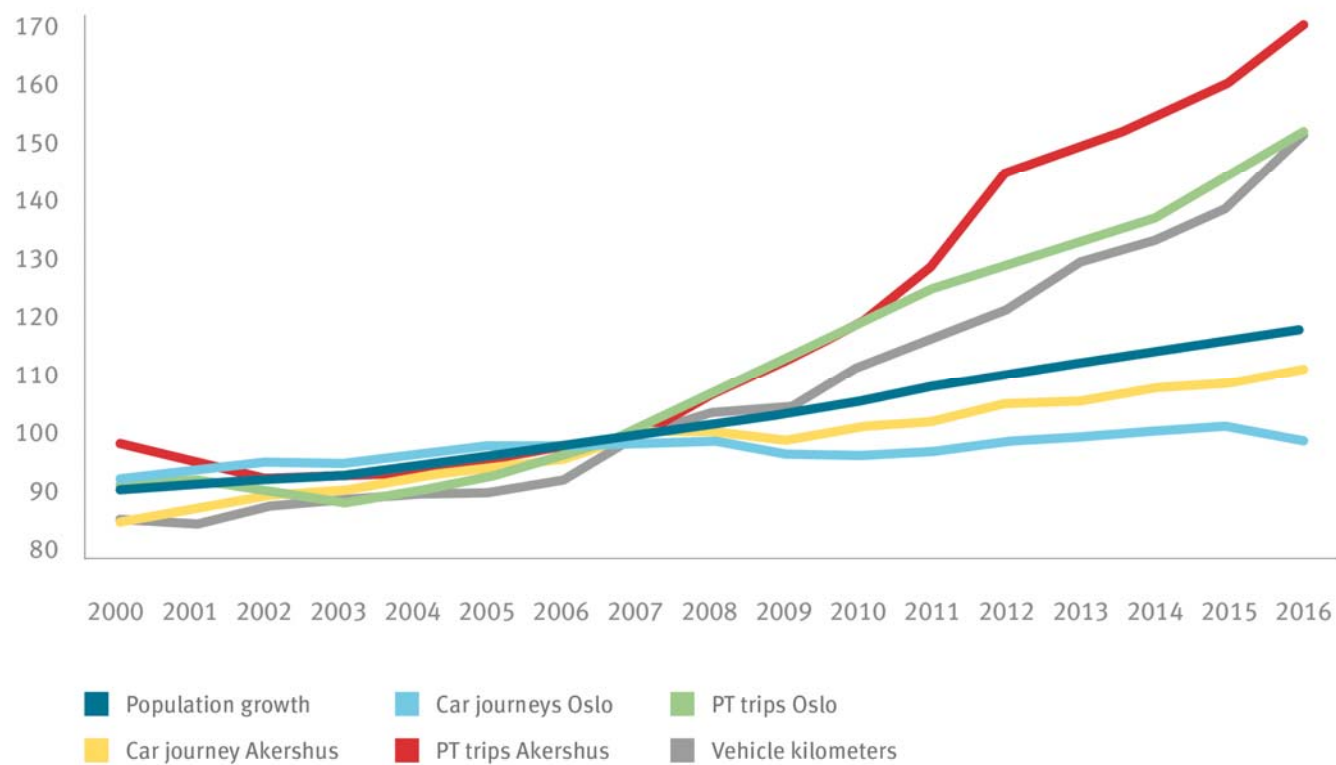


Irvinh p relw| b#p dw#l|1





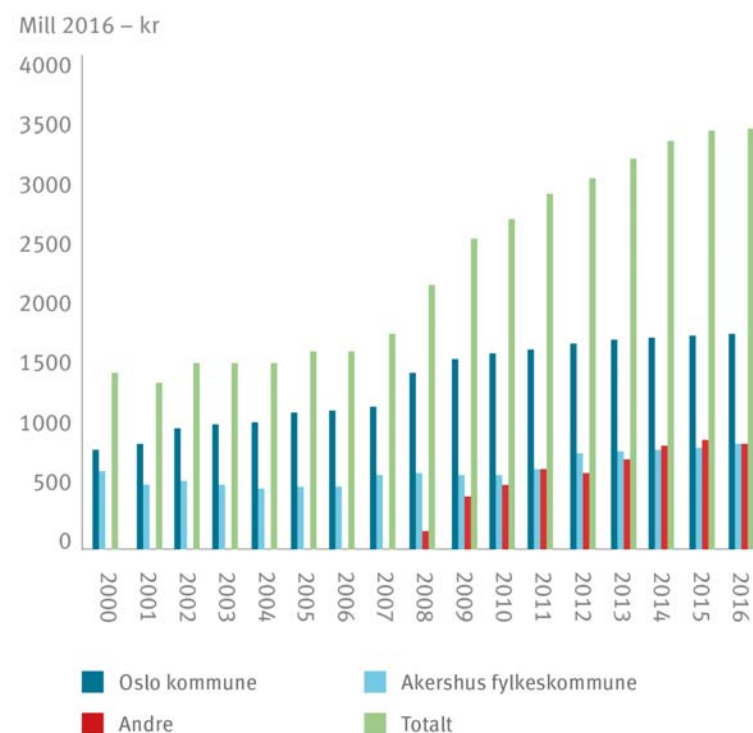
Orrn w#Q ruz d|=
Sxedf #wdqvs ruw#v#
vxusdvbj #kh fdu





J ulq w k dy h # d gh w k l v s r v v e d n

- Increased public financing, incl. Toll Ring revenues
- Common regional organization (Ruter)
- Customer-driven development
- Production moved in direction of heavier markets
- Increased frequency
- New rolling stock (metro)
- Real time information
- Reduced fares Oslo 2008 and Akershus 2011/2012
- Increased Toll Ring charges 2008 and 2013



Wr#hgdeth rxuf l}hqv wr#
dyh#kh.ludyhv





R q#rxuz d | w#d#p lvlrq ihh wdqvsruw# | vhp



35 %

renewable energy in the bus fleet in 2016 (biofuels, hydrogen and biogas). In 2025 60 % would be fully electric



10 %

renewable energy at the harbour in 2016. Planned electric solutions and biofuels from 2018



Trams & Metro already run on renewable energy



Autonomous vehicles will be fully electric



Q h { w w h s # / p d u # d g # q w j u d w h g p r e l w | v h u y l f h v

