

# OSLO' STRATEGIES BEING CLIMATE FRIENDLY

HOW TO DEVELOP SUSTAINABLE URBAN FREIGHT  
IN THE NEW CONTEXT.

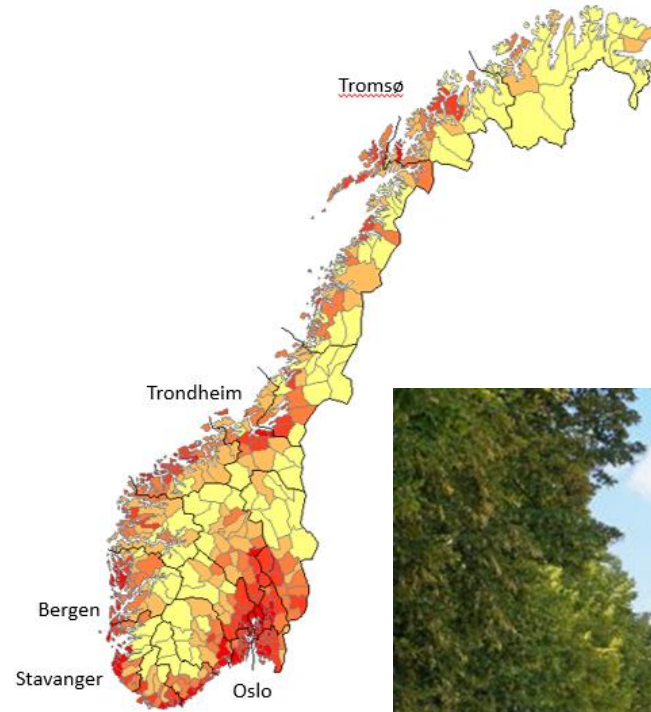
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# Outline

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- Introduction - the new context
- City logistics measures
  - Tolling & parking
  - Micro hub
  - Electric vehicles
- Evaluation
- Discussion





# City of Oslo

Population 2019: 680.000  
In 2040 815.000  
Region 1.200.000





# Policies

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## Climate friendly

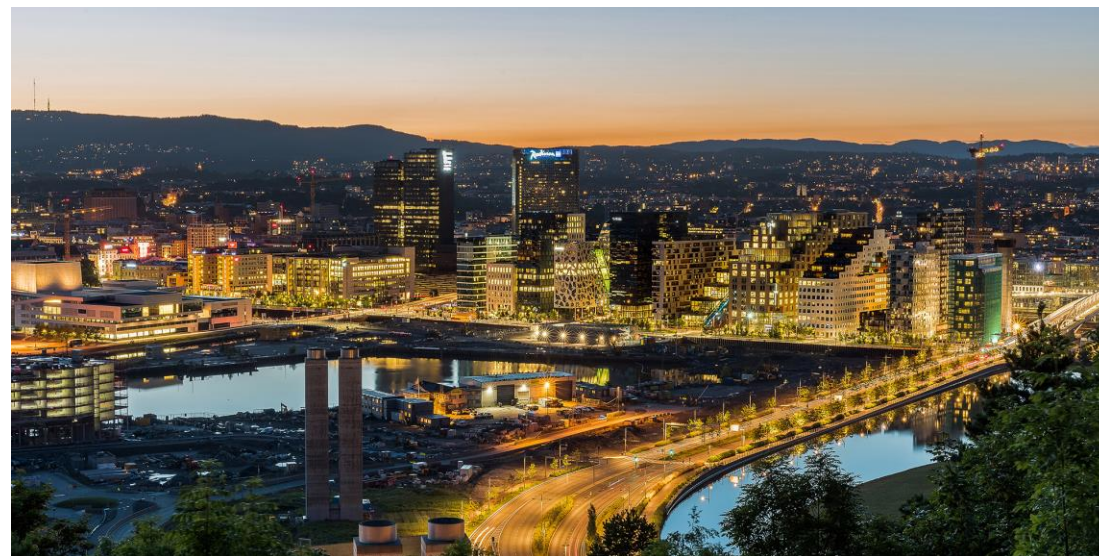
- Reduce Oslo's CO2 emissions

## Green and liveable

- Creating new forms of interaction and governance

## Strategic tools

- Agency for climate
- Climate budget



<https://www.klimaoslo.no/rapporter/english/>

<https://www.fastcompany.com/90235164/inside-oslos-plan-to-go-carbon-neutral-by-2030>

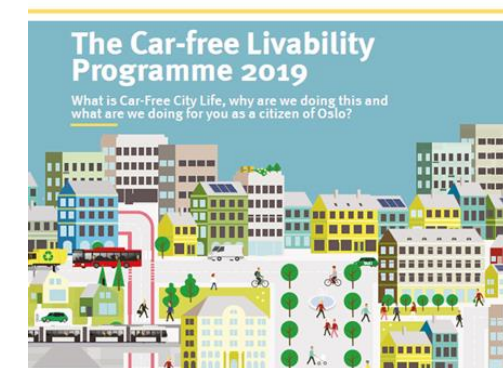
"The changes we must undergo to avoid dramatic climate change give us a golden opportunity to create the liveable city" The Mayor for Environment and Transport, Lan Marie Berg (2016).

# From car city to city life

- Greener public space
- Public transport and cycles routes
- Car-free spaces and parking policy
- Car sharing, reduced car ownership
- Renewable fuels, fast charging
- City logistics system



Oslo kommune  
The Car-free Livability Programme



# How to develop sustainable urban freight in the new context.

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- Document study
- Observation
- Semi structured interviews



# Car free city gives opportunities

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- Space for freight, services, craftsman, rescue, HC
- Climate friendly utility transport
- New delivery solutions
- Integrate e-commerce
- Mobility hubs



# City logistics measures

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- Tolling and parking
- Micro hub
- Electric vehicles





# Toll ring

1990: Investment in infrastructure

2017: Emission and time differences

2019: Reduce the traffic

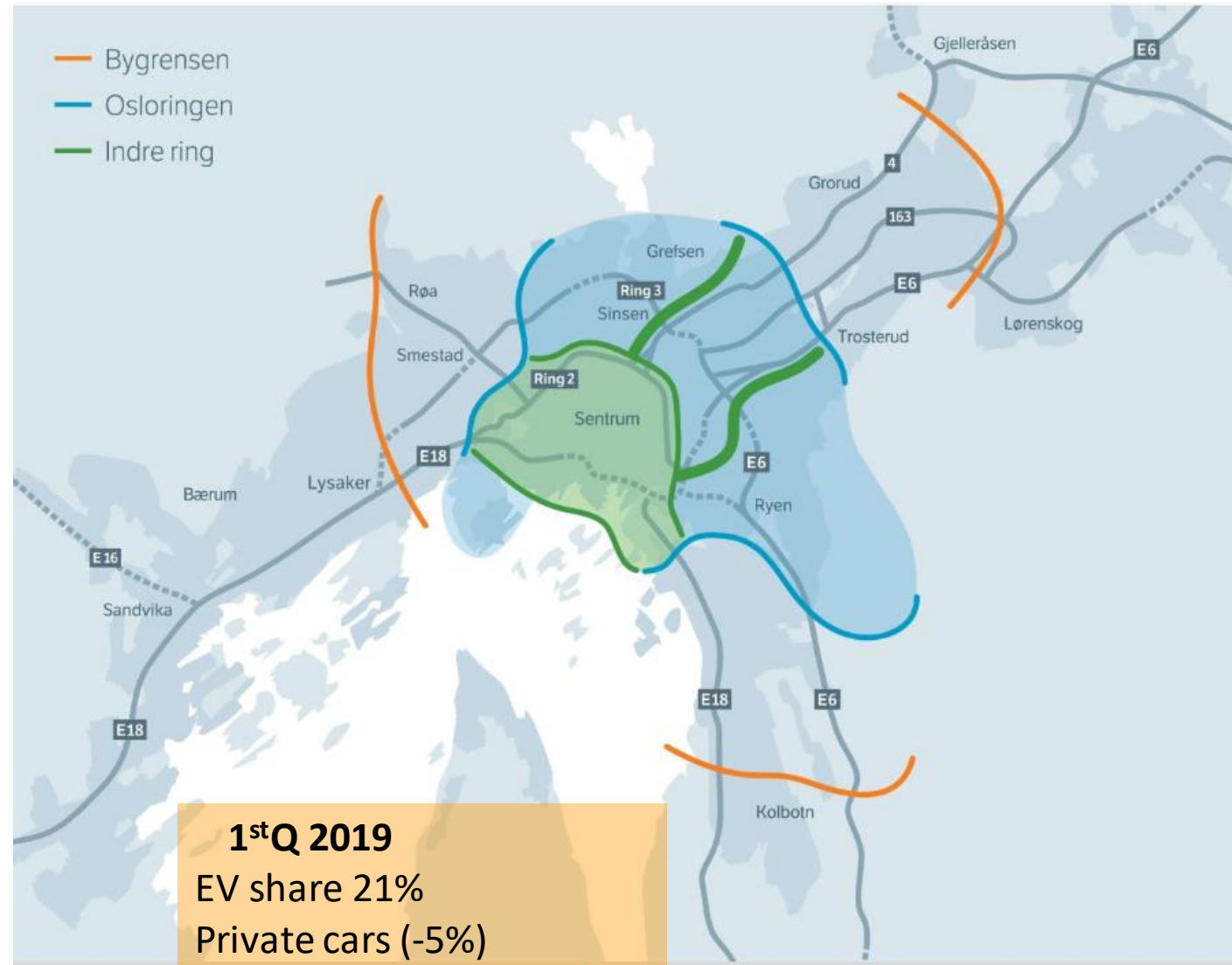
- From 31 til 80 toll stations



\$	Bensin	Diesel	EV
<u>Off hour</u>	2	2.5	0.5
rush	2.5	3.0	1.0



\$	Euro VI	Euro V and older	EV
<u>Off hour</u>	5	8	0
rush	7	10	0



**1<sup>st</sup>Q 2019**  
 EV share 21%  
 Private cars (-5%)  
 Public transport (+6.1%)

# Parking policy

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- Parking more expensive
- Removed 1500 parking spaces in the inner ring (2018)
- Space for city life and freight, services, rescue, taxi, delivery zones, HC parking





# Micro hubs: 3 pilots on-going in Oslo

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## DB Schenker

- Oslo City hub
- May 2019
- 1 year planning process

## DHL

- Pilot 2016-17
- Logistics
- New bikes 2019

## Posten/Bring

- June 2019
- Based on a pilot in Stockholm

- Centrally location close to highway with direct access to several terminals
- Reloading from larger vehicles to smaller electric modes
- Driven forward and established as a private initiative

# Oslo City Hub

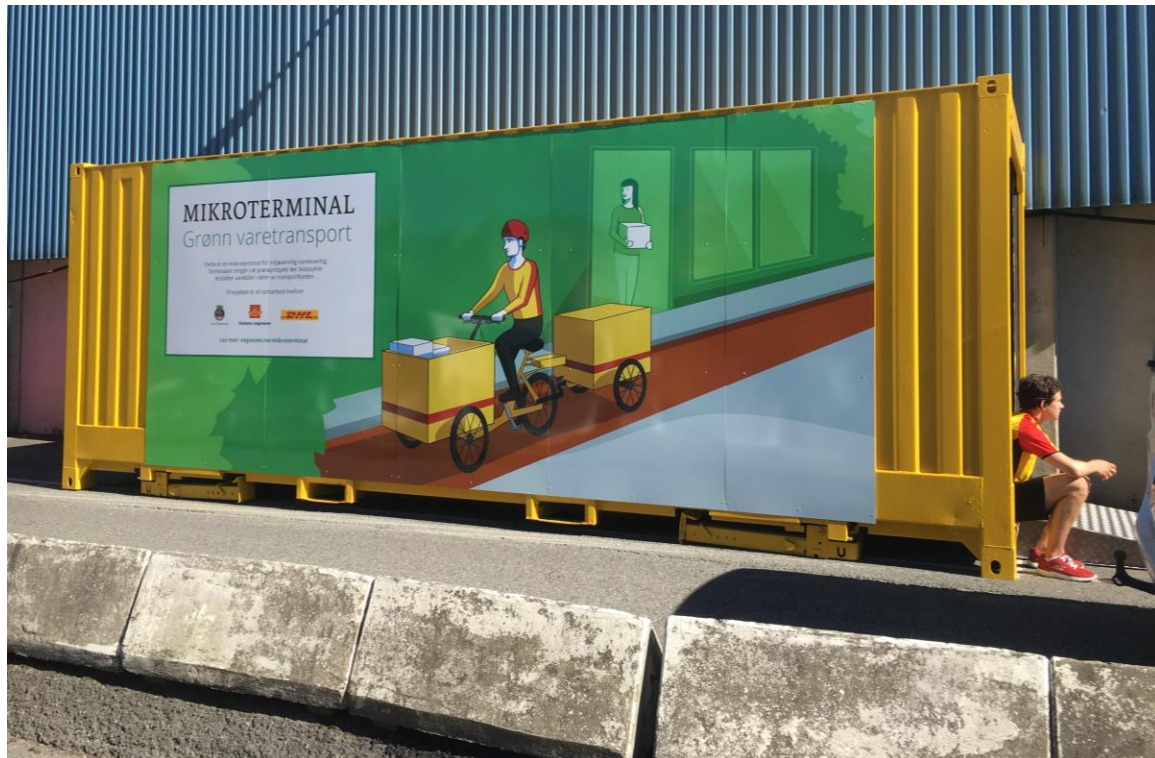
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- 3 E-cargo bikes and 8 E-vans
- Driving range E-van 173 km  
E-bikes 80 km.
- Charge 100 % on 5 hours 20 min.  
Fast charging 80% on 40 min.
- 30 % more effective compared  
to vans.
- EV-services, goods and personal  
mobility needs



# DHL micro hub



# 3<sup>rd</sup> initiatives combines cargo, waste, reale estate



[https://elskedeby.no/about\\_elskede\\_by](https://elskedeby.no/about_elskede_by)



# Evaluation

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- Planning and design, important factors
  - Temporary construction
  - Simple and flexible design
  - Location
- Start up and establishment
  - Private operating
  - Support from public sector
  - Public institutions use the hub



# Learning points

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- Create an arena for cooperation – trust between project partners
- Centrally location and accessibility to main road
- Define space in land use plan for logistics activities as infrastructure for cargo bike, winter maintenance, cycling towards one-way
- Full time cyclists, preferred modes
- Consider a multi use terminal / hub for several companies /mobility hubs
- Private operating and governmental support

[https://www.toi.no/getfile.php/1350748/Publikasjoner/TØI%20rapporter/2019/1717-2019/1717-2019\\_Summary.pdf](https://www.toi.no/getfile.php/1350748/Publikasjoner/TØI%20rapporter/2019/1717-2019/1717-2019_Summary.pdf)



# Package of measures for ZE city logistics in Oslo

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- Space for logistics activities and EV
  - Dedicated I/u space for ZV/EV
  - 100 new charging stations (fast)
- Municipal procurement as an instrument
- Public support and privately operating hubs
- Facilitating political instruments as toll ring, parking and EV access.



Supportive policy - how to regulate and mix measures in your city?

# A way to achieve the climate goal

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- Municipal agencies, responsibility and power – climate budget
- Collaboration academia, businesses and public authorities
- Stakeholder engagement / share of space

Oslo zero emission in 2030.  
Liveable and competitive city.







Technology for a better society