



BÆRUM
KOMMUNE

Fornebu - from airport to low carbon area

Arthur Wøhni, Director Community
Bærum kommune

Sammen skaper vi fremtiden

MANGFOLD - RAUSHET - BÆREKRAFT

Fornebu

- ▶ Main airport in Norway until 1998
- ▶ Planned and build with high environmental goals.
- ▶ Now rebuilding with high environmental goals in a long perspective purpose to achieve an environmentally sustainability.
- ▶ 340 hectars close to the capital of Norway (5 km from the centre of Oslo).
- ▶ Part of the municipality of Bærum



..1999

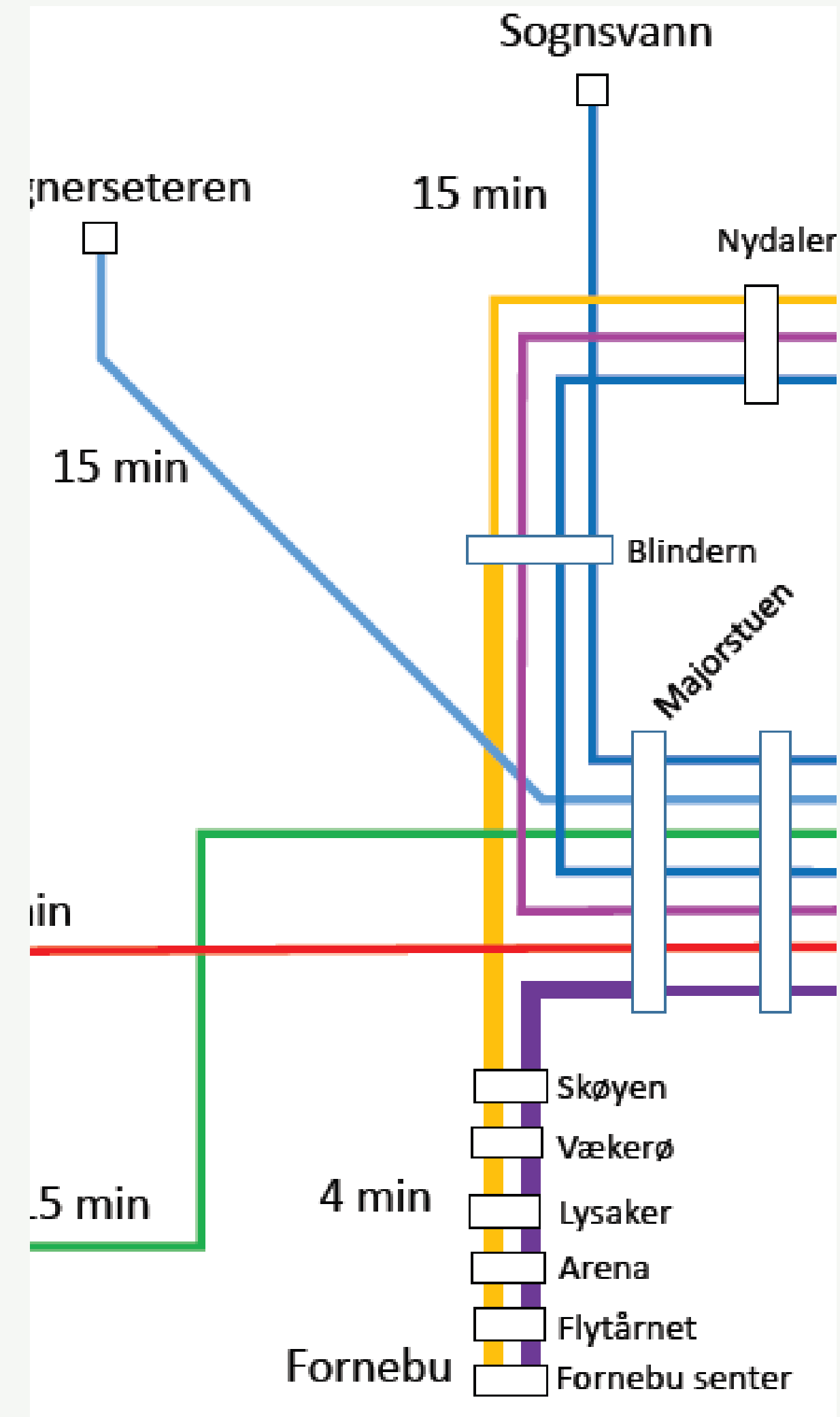


Masterplan Fornebu



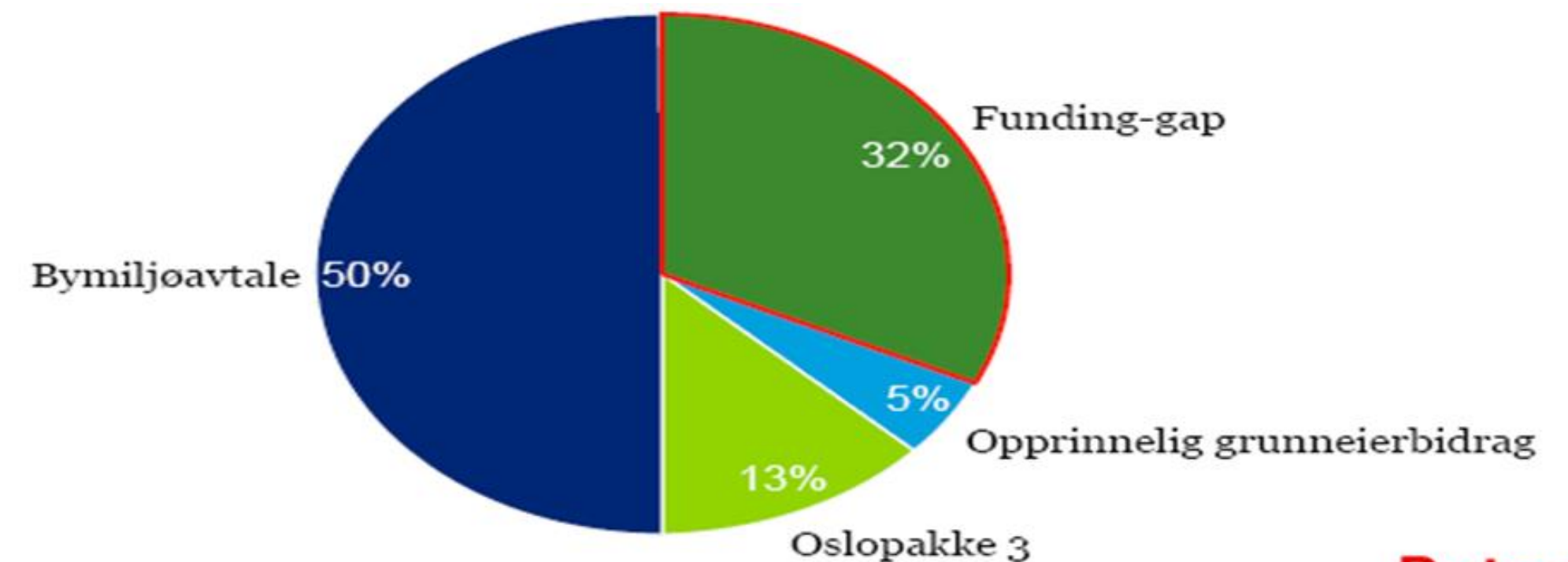
Transportation

- ▶ There are plans to extend the metro system to Fornebu (2025).
- ▶ A restrictive parking strategy limits the number of cars per housing unit and per job. The strategy and rules are stricter than those which apply to the rest of the municipality.
- ▶ A high-quality network of walkways and bike paths with differentiated paths for pedestrians and cyclists has been built.
- ▶ Two carpools have been established. The cars are available for those who normally use other forms of transportation to get to work, but need a car for a few hours, perhaps to go to a meeting.



Fornebubane -the new metro – finance

- Cost ca 11 (++) mrd NOK
- 50% Government
- 1, 4 mrd Oslopakke 3 (Toll road)
- **3 mrd from the land owners according to possibilities for a more extensiv land use**



Ruter#

Energy supply, consumption and climate

- A plant with two powerful **heat pumps** has been built under the Telenor building, which utilises the heat in the seawater. This is one of the most environmentally friendly district heating systems in existence.
- One of the world's most environmentally friendly **shopping malls** can be found here. It has been certified BREEAM Outstanding, has one of Norway's largest photovoltaic parks and has a green rooftop with 84 different species.
- Storøya kindergarden is the first kindergarden with **passive-house standard** in the Nordic countries. It uses extremely little energy for heating, ventilation and lighting. In addition, a solar collector plant provides hot water for the building and its associated sports facility.



- ▶ Building materials, waste and mass management
- ▶ All building projects must provide an environmental declaration of all materials used.
- ▶ A zero-balance principle for mass management means everything must be deposited or recycled at the site.
- ▶ Waste is transported through an underground vacuum system. As the waste is stored and handled underground we eliminate disruption caused by conventional waste collection methods. It is also quicker and more cost effective.



Creating our futures

ECTP-CEU

European Council of Spatial Planners
Conseil européen des Urbanistes

hosted by
EUROPEAN UNION



Committee of the Regions

THE 10TH EUROPEAN URBAN AND REGIONAL PLANNING AWARD 2014
LE X^E GRAND PRIX EUROPÉEN DE L'URBANISME 2014

WINNER - LAURÉAT

Awarded to / Décerné à :

THE MUNICIPALITY OF BÆRUM, NORWAY, REPRESENTED BY PLANNERS PEDRO ARDILA,
HANS KRISTIAN LINGSOM AND COMUNITY DIRECTOR ARTHUR WØHNI

for the project / pour le projet :

FORNEBU - A GREEN TOWN BUILT ON OUTSTANDING NATIONAL AND INTERNATIONAL EXPERTISE

Petter Wiberg
Chairman of the international jury
Président du jury international

Henk van der Kamp
President of the European Council of Spatial Planners
Président du Conseil Européen des Urbanistes

Brussels, Committee of the Regions, 5th May 2014
Bruxelles, Comité des Régions, le 5 mai 2014

Replanning Fornebu



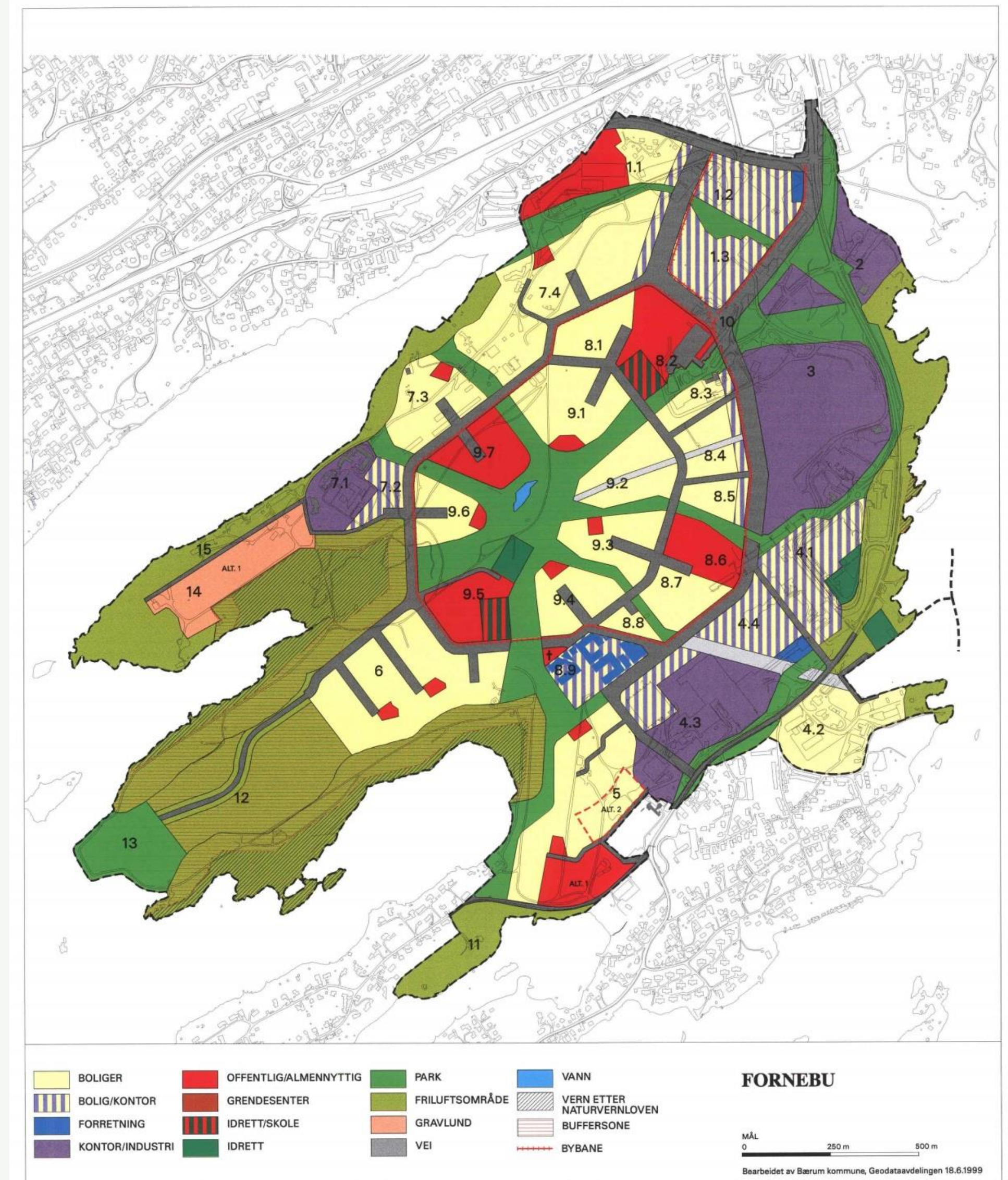
Replanning Fornebu

Modernisation of the Master plan from 1999

New challenges :

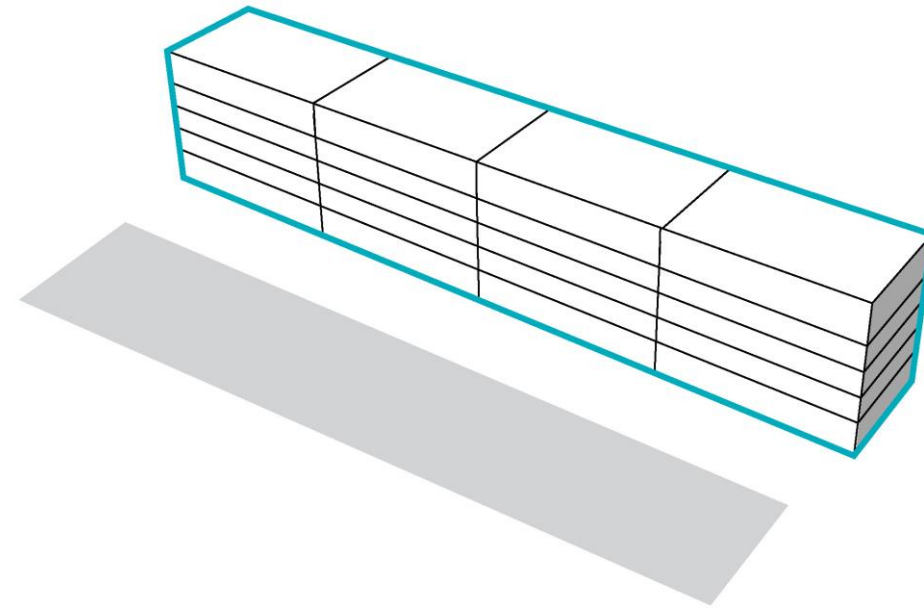
- *Metroline as main transport mode –new metrostation defines new centerstructure*
- *Near doubling the number of flats from 6300 til near 11000*
- *New climate ambitions*
- *Mending the negative side of zoning – mix flats, offices, and other workplaces*
- *From a strict regulation code to allow variations in form, hights, structure, colore*

Building a city are more than placing building in landcape

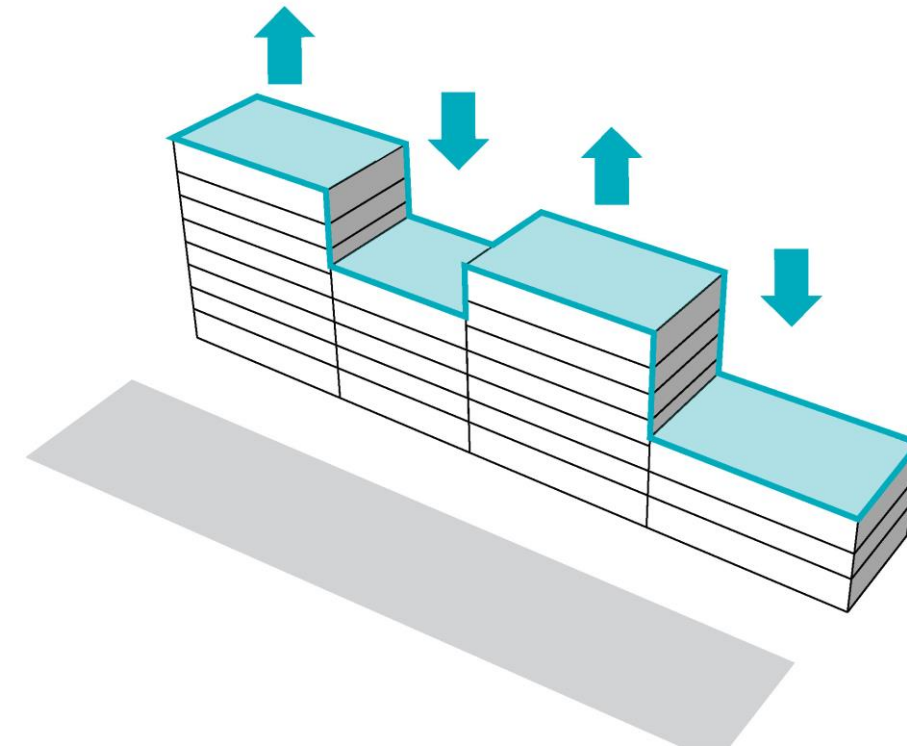


Variation in volum - prinsipp:

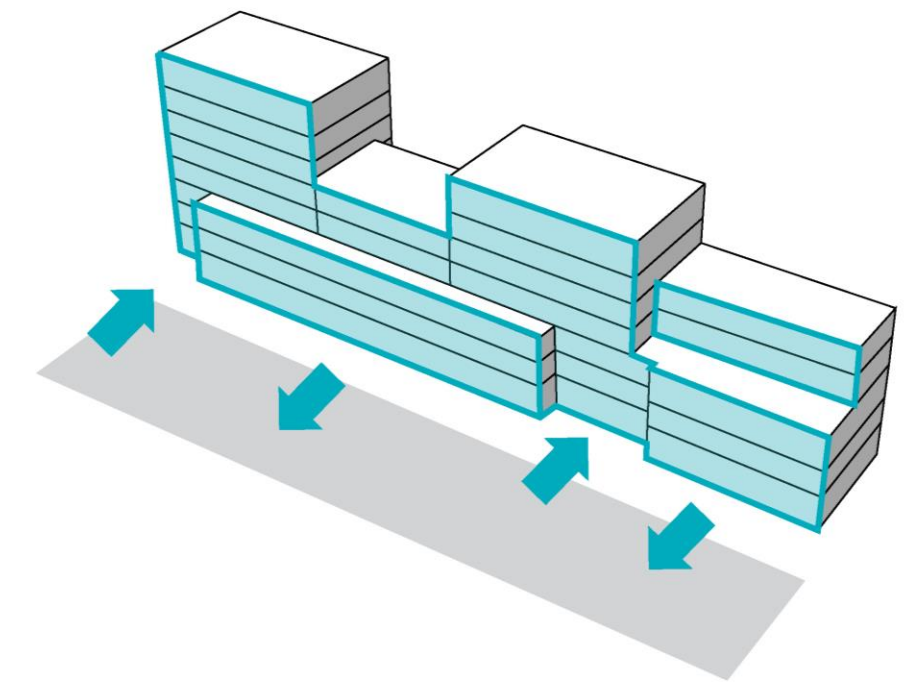
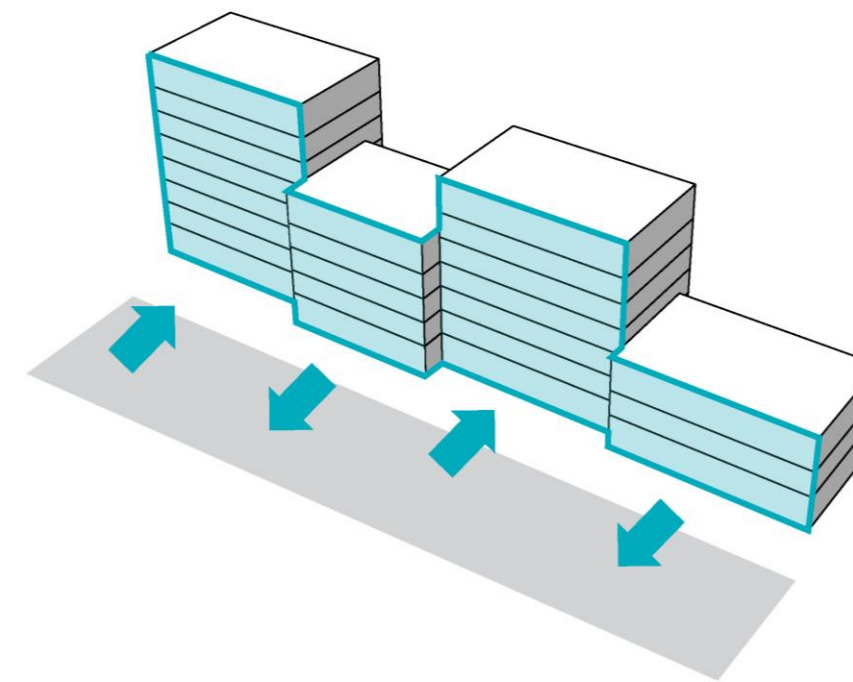
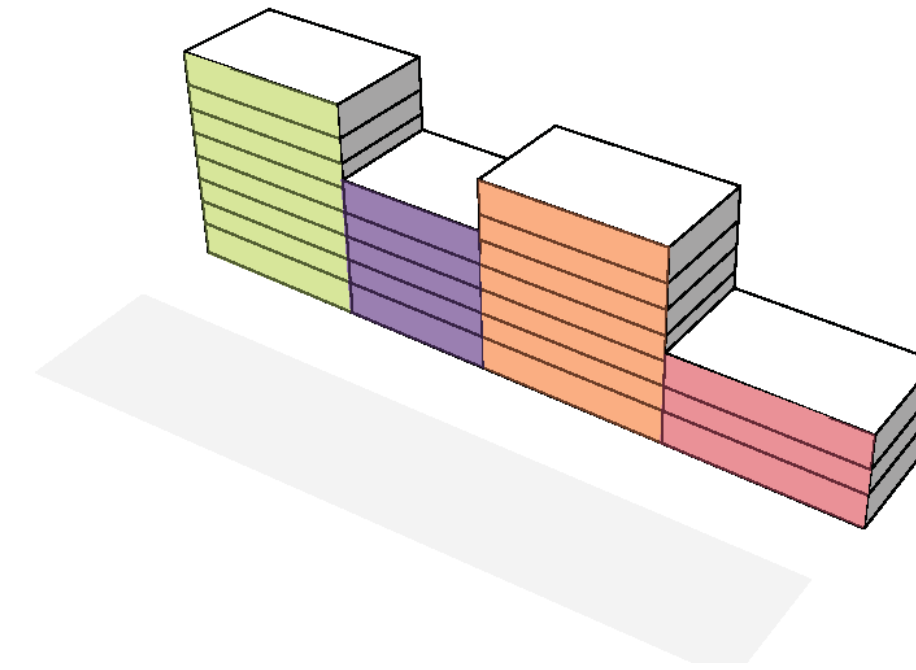
Prinsipp 1:
Sammenhengende støyskjermede bebyggelse



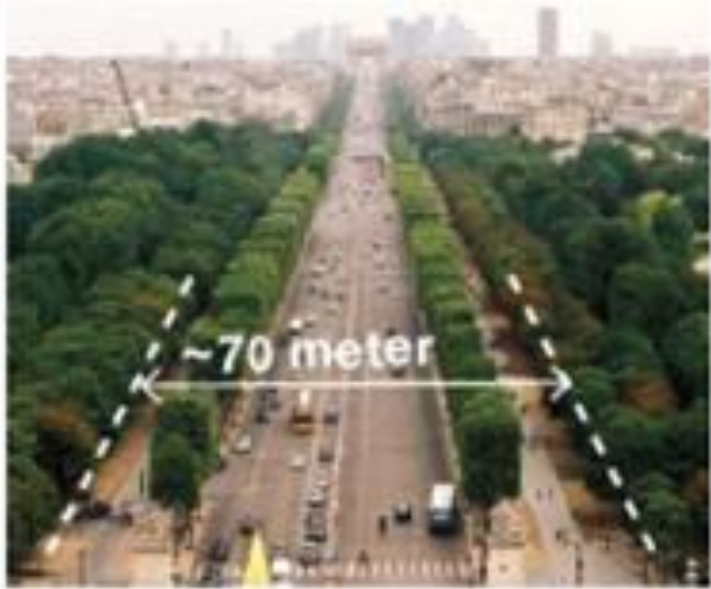
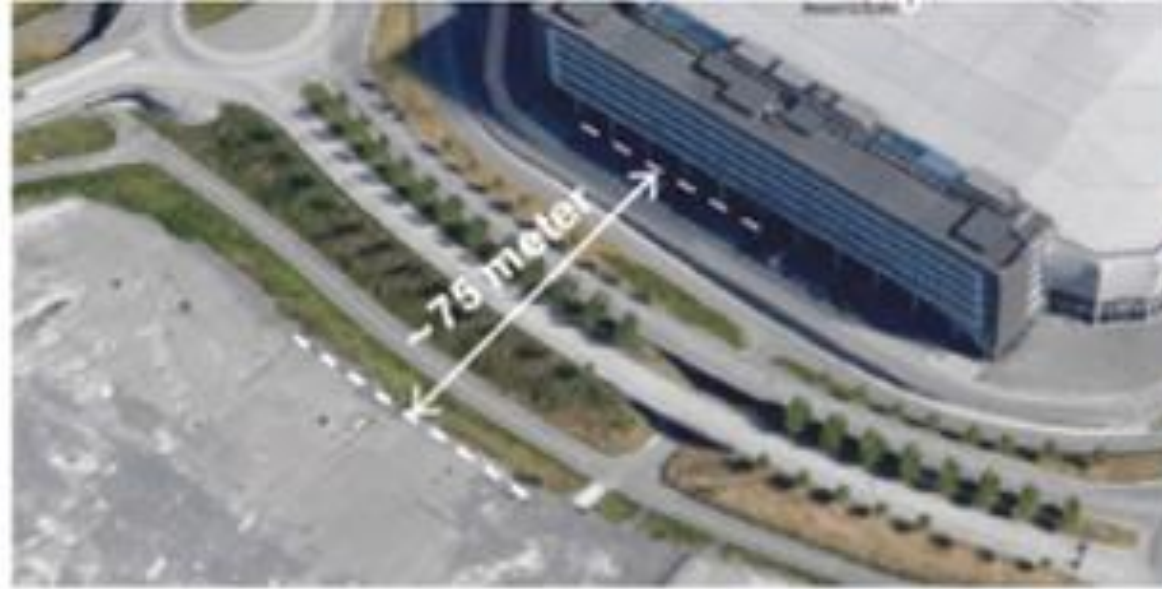
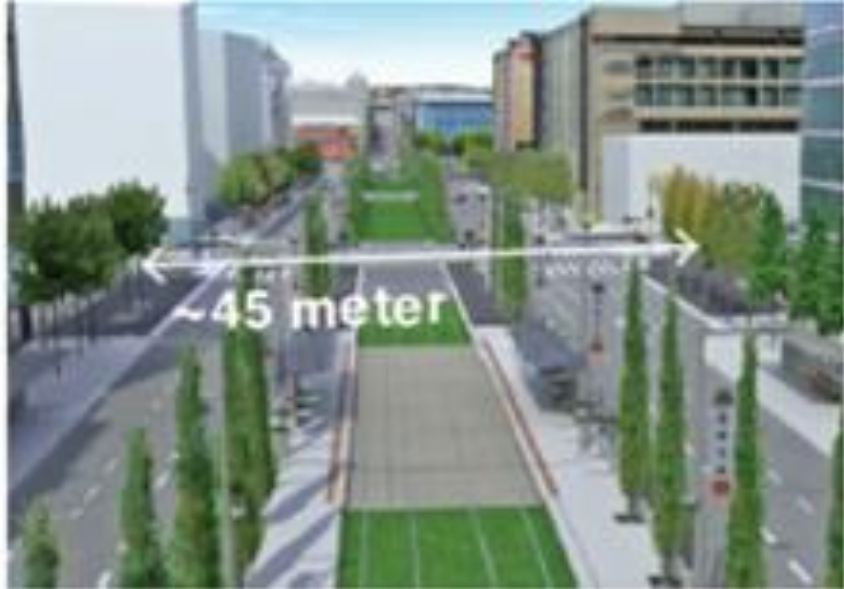
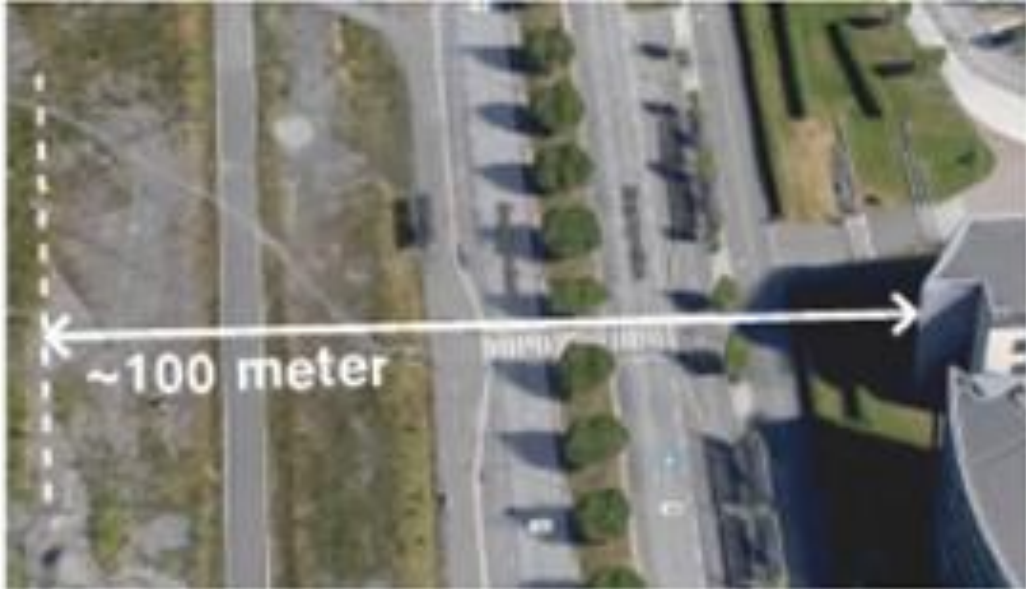
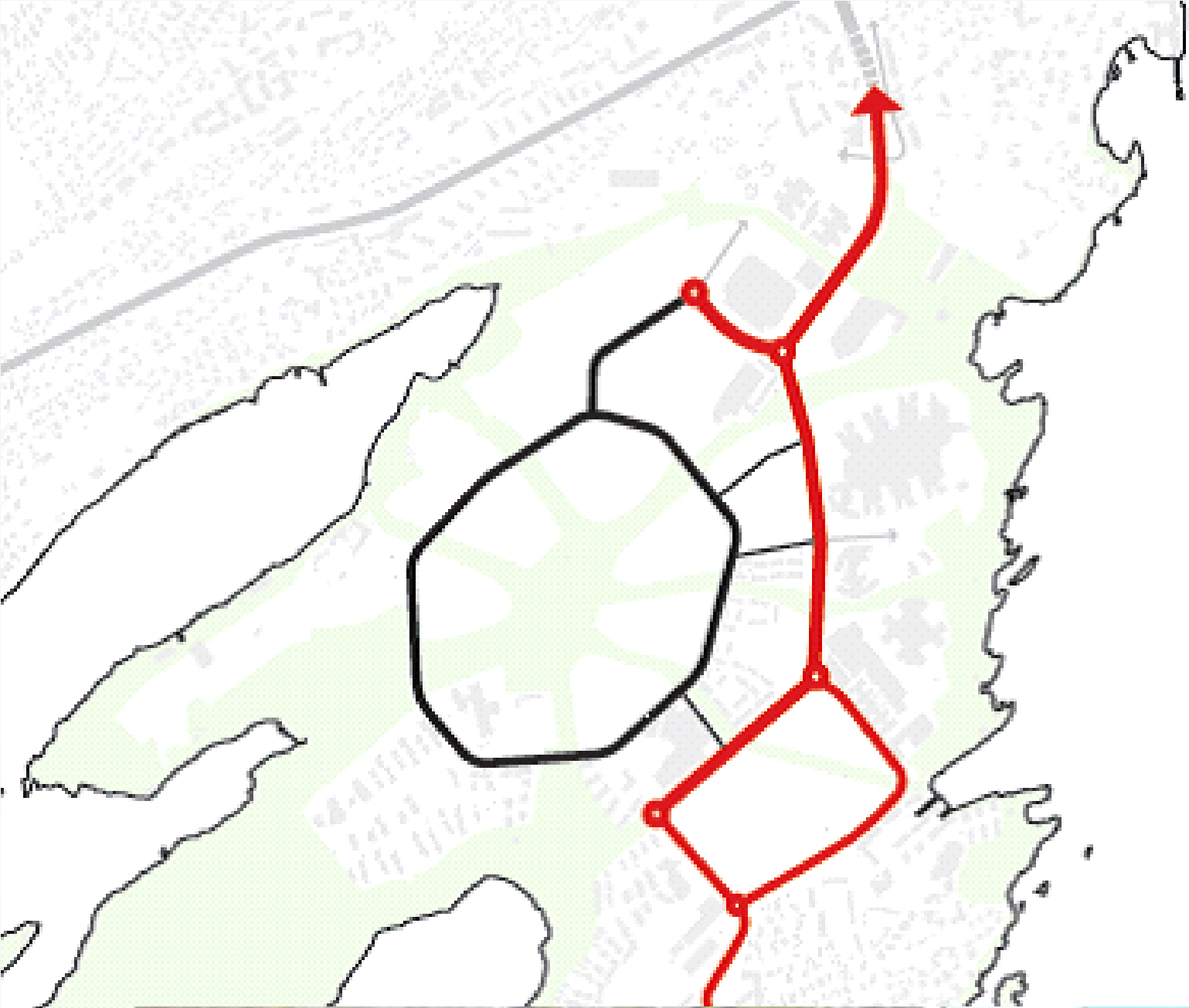
Prinsipp 2:
Variasjon i byggehøyder
(i hovedsak 5-8 etasjer)



Prinsipp 3:
Variasjon i fasader minst hver 25-30m
(materialitet, innganger, brudd i fasadeliv etc.)



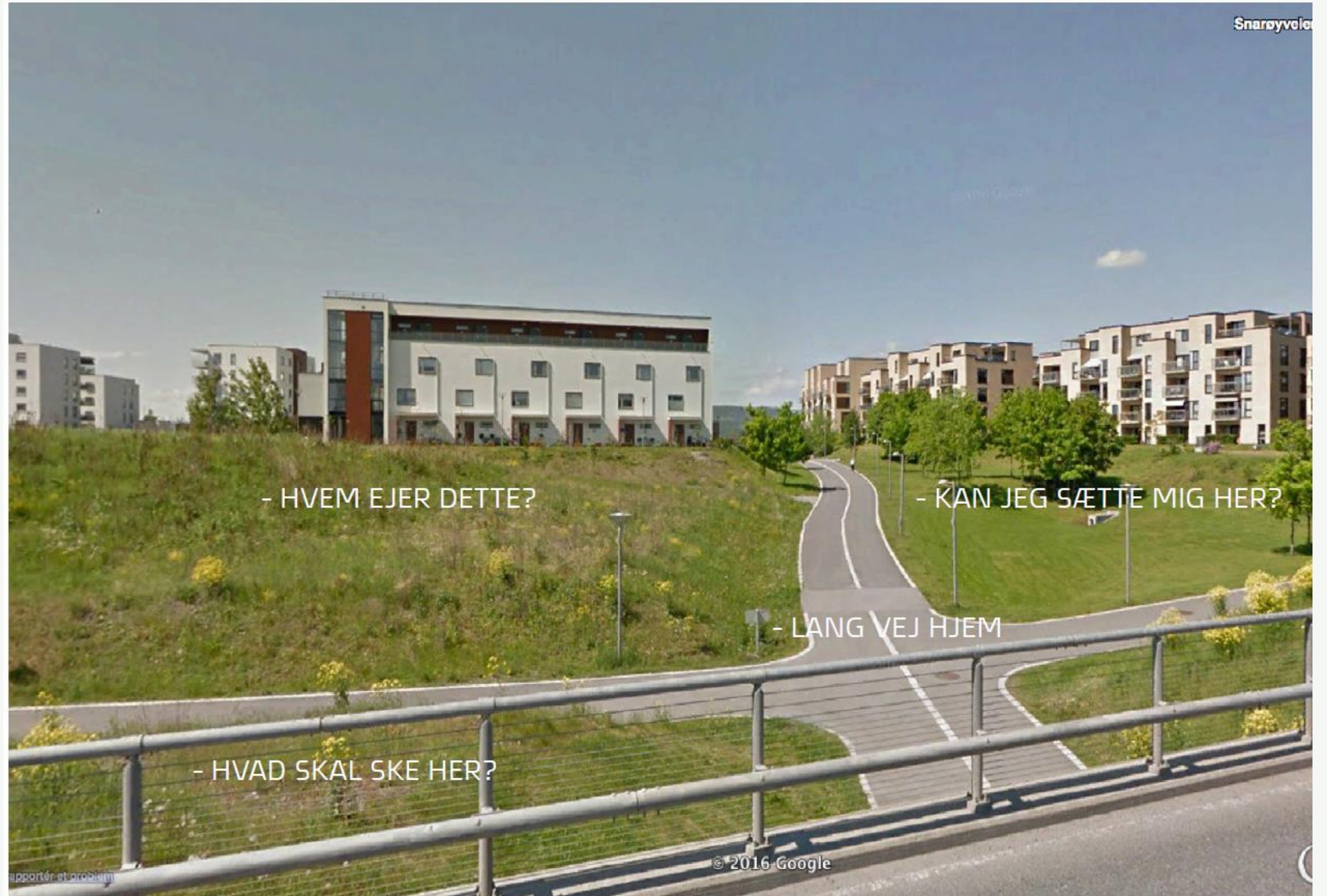
Snarøyveien –the road as a barriere



ulike trafikantgrupper

SLOAP: Space Left Over After Planning

-



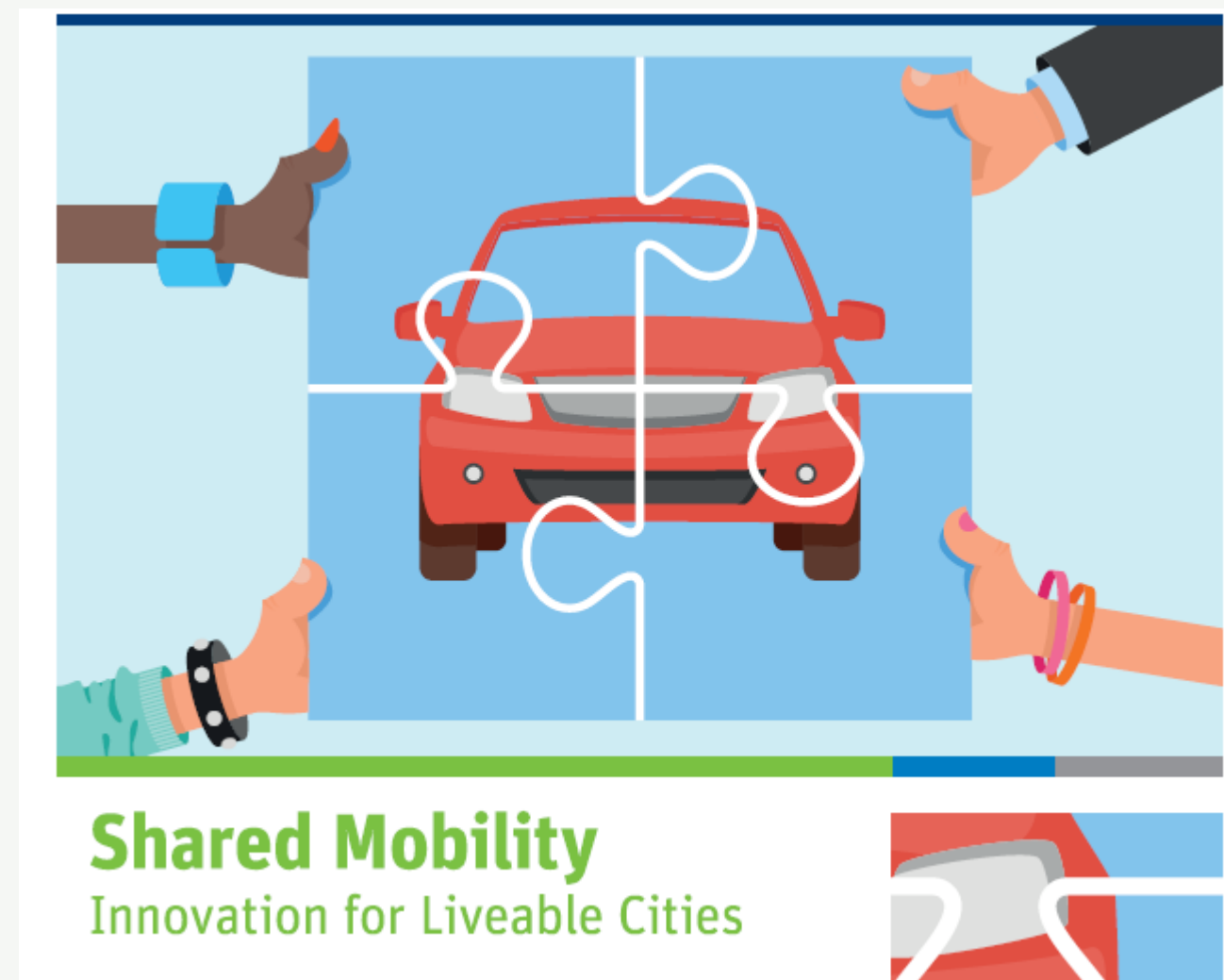
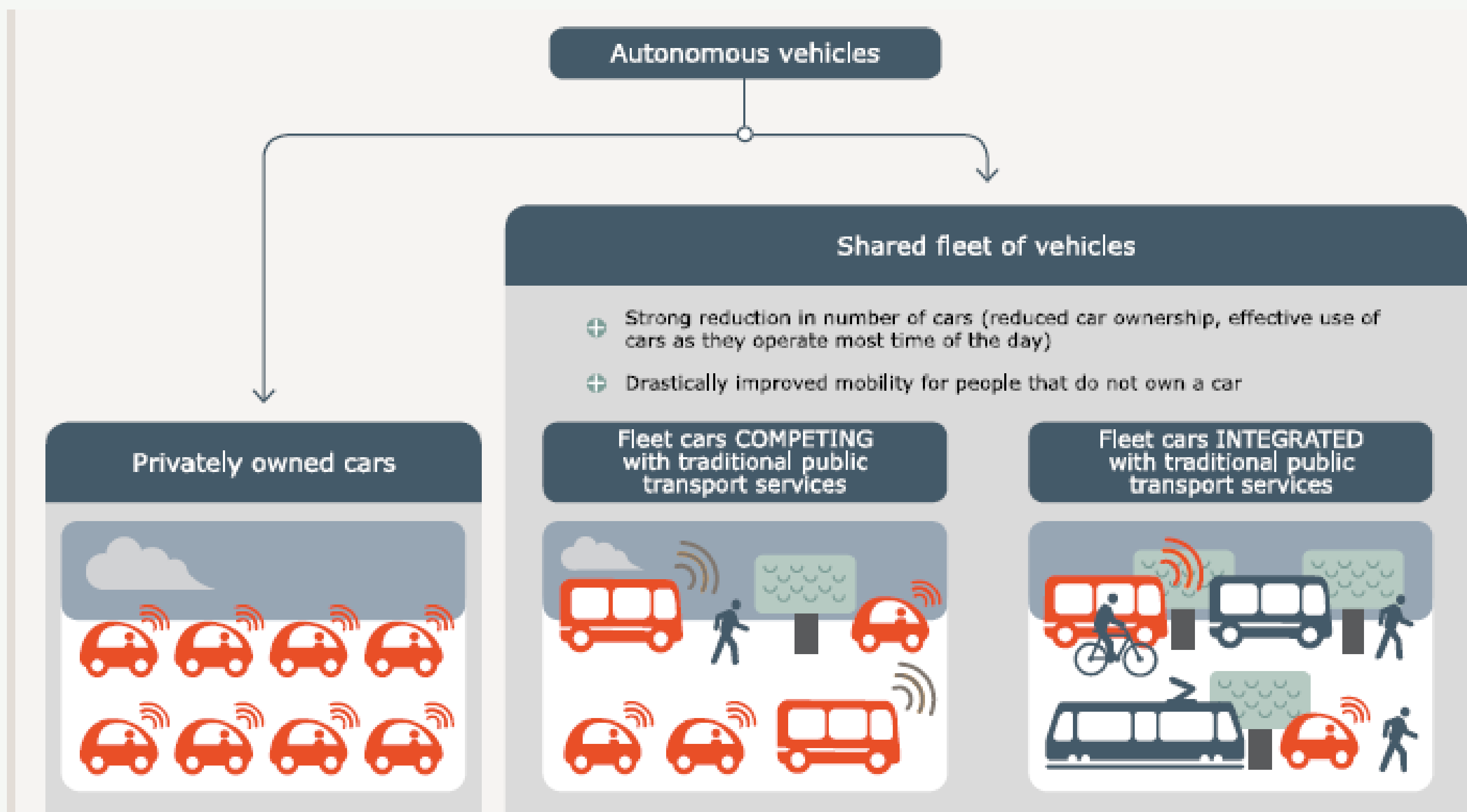


Vestre
Hamnen
, Malmö
Sweden



Planning Under Uncertainty - Transportation





Autonomous vehicles – private or intergrated
 Shared mobility – the future?
 What parkering norm shall we use in 2020-2025-2030?
 A «green» electric car are still a car – need of road capacity ?
 « the last person to obtain a driverlicens are born..»



Nansenparken Fornebu



Godt oppvekstmiljø (Vandkunsten)



Attraktivt næringsliv (Vulkan i Oslo)



Variert arkitektur (MAD Arkitekter)



Flytårnet Fornebu



Bydel for barn og unge (EFFEKT skatepark)



Storøyodden Fornebu



Fokus på gående og syklister
(Gehl Architects - Brighton)



Levende vannkant - Havnepromenaden i Oslo

Fremtidens Fornebu skal benytte eksisterende kvaliteter og introdusere nye