



Greening freight transport in Göteborg –

From emissions and efficiency to breakfast cereals

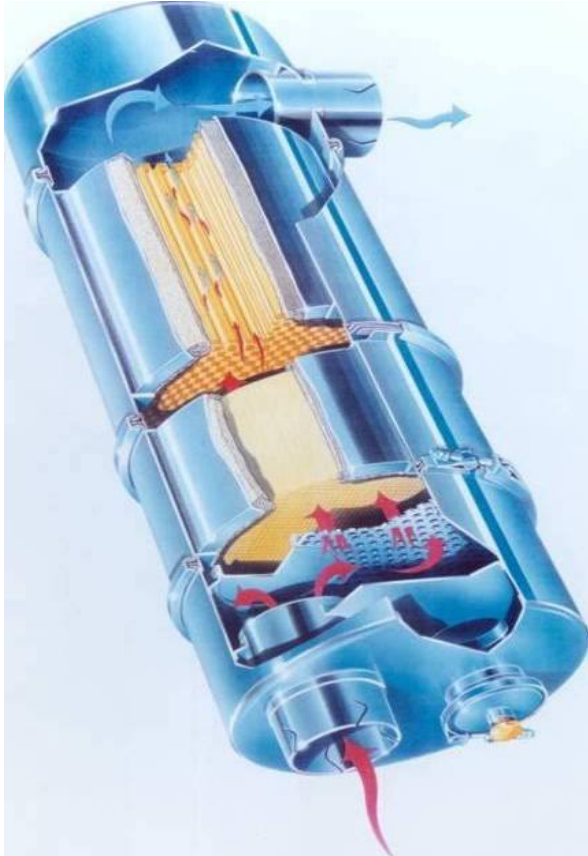
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City of Göteborg



City of Göteborg
Traffic & Public Transport Authority

Environmental Zone



- Introduced 1996
- 15 km² central area
- Trucks and buses > 3,5 tonnes
- 8 + 4 years
- - 30 % PM, 10 % NO_x
- 95 % following regulations



New zone regulation

from 2007-01-01

- Emission based
- National regulation
- Euro 3: 6 years
- Euro 4: 2016
- Euro 5: 2020
- Possible to install Ad Blue



Enlargement in 10 days

- 1, 4, 5. Ferry terminals
- 2. Truck & rail terminals
- 3. Central station
- 6. Residential area



Incentives for improving the load factor in inner-city freight distribution

- I have access to
- bus lanes
 - special loading spots

thanks to a high load factor



How it works

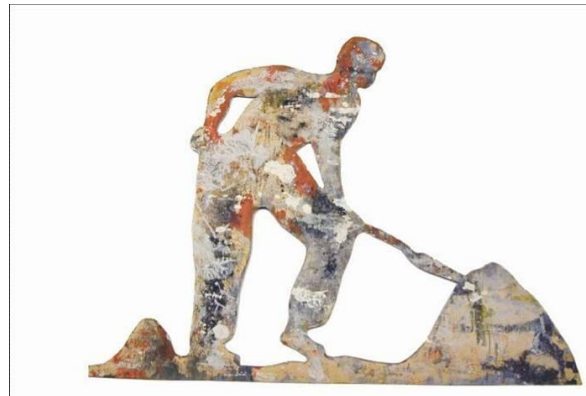


- Voluntarily system for vehicles over 3 tonnes
- Load factor demand : > 65 % or 50 stops
- 3 areas with congestion
- 2 -1 or 1 - 2
- Clean vehicle: Euro 4 + biofuels or Euro 5
- 15 extra loading spots
- 3 bus lines



Terminals

- Göteborg in 30 years
- Terminal functions
- City terminals have to move-important from a rail combi perspective
- Terminal south from the city?
- Building logistics
 - a lot of tonnes



Consolidation areas

- Campus Lindholmen - School area north of the river
- Frequency of ordering
- Consolidation plan
- Central city area next step



Stakeholder cooperation

- Hauliers, customers and authority
- City development
- Exchange of information and experiences
- Both stick and carrot



Procurement demands

- Taxi, parcel service:
 - Clean vehicles
 - 90 % 2008
- Distribution transport:
 - Clean vehicles
 - B A T
 - Eco labelled services



Good example



Separate goods from transport

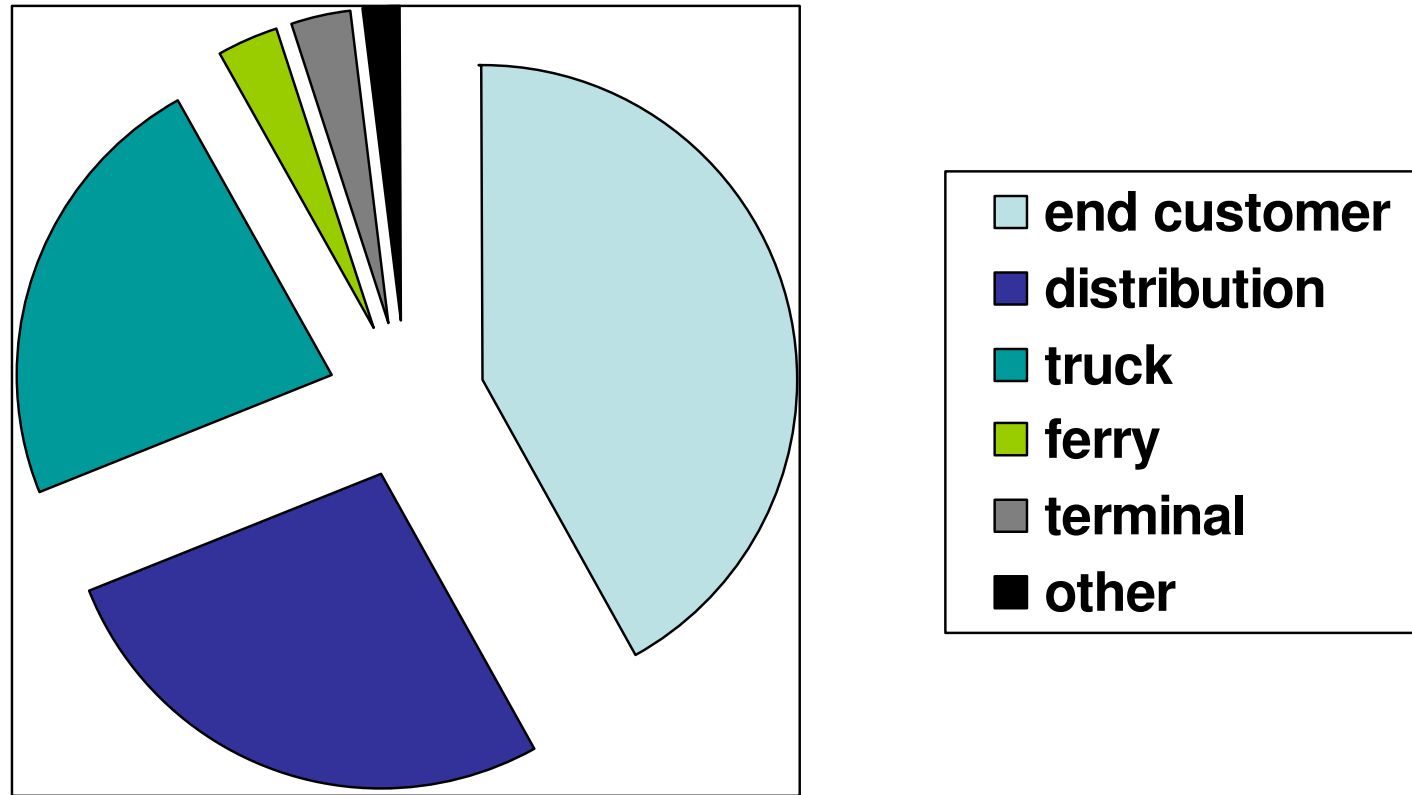
- Food - first product category
- Environmental demand on transport service – as buses
- Optimisation of logistics
- Competition
- Size of area?
- One or two terminals?



What to learn from a breakfast?



Breakfast cereals logistics



Home delivery of groceries

- E-commerce system
- Together with municipal procurement
- Transport service in place
- Efficient service concept?



Strategy

1. Clean vehicles; environmental zone
2. Better load factor, with incentives
3. New criteria in the Environmental Zone: load factor?
4. Procurement; separate goods from transport service
5. City distribution terminals for goods consolidation
6. Home delivery



