### Municipal co-distribution of goods in Sweden

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## OCEAN Norrbotten Västerbotten Väster-Jämtland FINLAND Gulf of Bothnia Dalarna Värmland LATVIA Baltic Sea LITHUANIA

### Sweden

- Area 450,295 km2 (55<sup>th</sup> global)
- Population 10,207,086 (90<sup>th</sup> global)
- Density 23/km<sup>2</sup> (198<sup>th</sup> global)
- Sweden an urbanized country
- Administrative division;
  - 24 Counties
  - 290 Municipalities
- Kronoberg county
  - 8 municipalities



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### Sweden background

- Social welfare state based on taxes
- High taxes High service
- Swedish Public Procurement Act (EU)
- The public buys 6 procent of all food in Sweden;
  - Schools
  - Pre-schools
  - Elederly homes
  - Hospitals



### Improvement of transport efficiency in Sweden?





Scania

Technical development with cleaner engines and lower fuel consumption



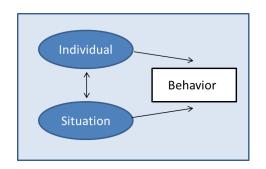
56 %

Increased use of renewable fuels



38 %

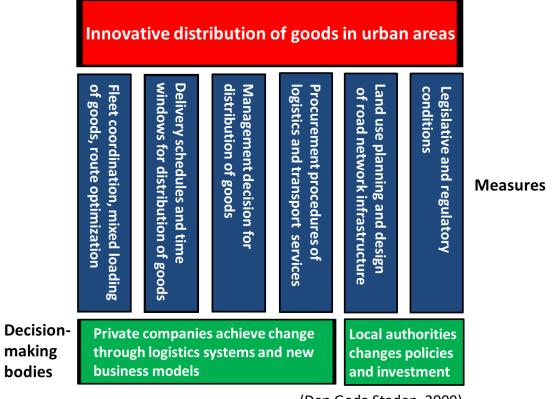
Changed behavior and efficiency improvement in the transport system



6 %



# The difference between city logistics and municipal co-distribution of goods

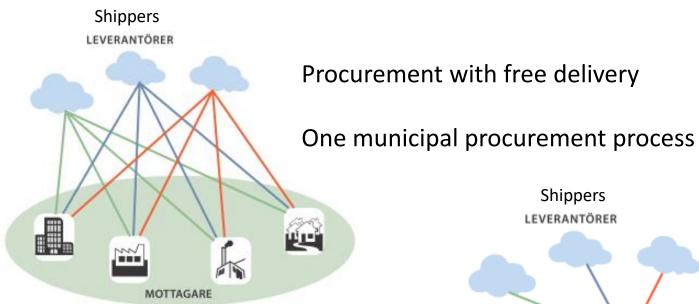


(Den Goda Staden, 2009)

- City logistics the municipality as traffic regulating authority
- Co-distribution of goods municipality as goods owner



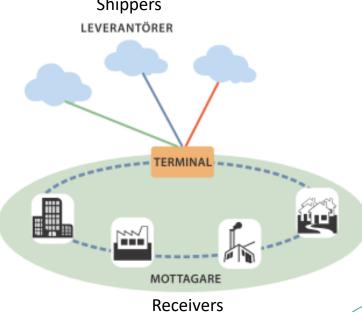
# Municipal co-distribution of goods - A question of procurement



Procurement with municipal co-distribution of goods

Receivers

Two municipal procurement processes



## Swedish Parliament Proposed bill 2015/16: 2124

Regulation of urban freight?

In view of the obviously high potential gains, both from a societal perspective and an environmental perspective, which exist in a co-distribution of goods, there is also reason to consider allowing municipalities to introduce mandatory co-distribution of goods even for non-municipal recipients within parts or throughout the municipality.

If the municipal experience is correct, such mandatory coordination should not only lead to significantly fewer transports and lower emissions but also to overall lower transport costs and thus improved competitiveness for the activities covered, which may be positive not only for stores in city centers but also to the same extent in rural areas and in small towns.



### Driving forces for change

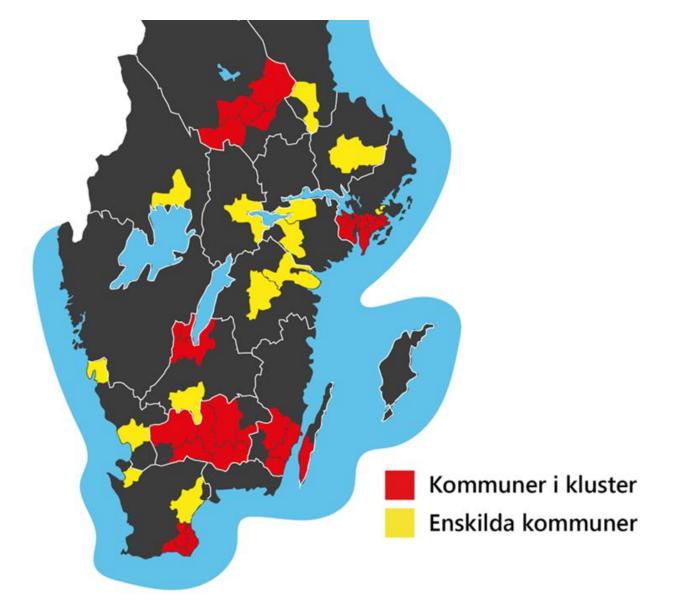
- Reduce negative environmental impact (CO2) by 70-80 percent due to consolidation
- Increase accessibility and improve traffic safety in metropolitan areas of Stockholm and Gothenburg (congestion tax)

### But equally important:

- Increased share of local food producers with regard to the Swedish Public Procurement Act
- Better control of the municipal purchasing process and save taxpayers money



### Municiplaities with co-distribution of goods



45 out of 290 municipalities (15 %)



# 28 municipalities (70 %) in clusters *Collaboration is key*

Cluster		Municipalities	Total inhabitants
•	Borlänge	5 municipalities	157 483 (1999, enlarged 2011)
•	Växjö/Kronoberg	6 municipalities	175 129 (2010, enlarged 2015)
•	Ystad-Österlen	3 municipalities	62 263 (2013)
•	Södertörn	8 municipalities	453 431 (2015)
•	Kalmar	3 municipalities	93 945 (2015)
•	Jönköping	3 municipalities	154 109 (2015)





### Kronoberg county

### Municipalities

- Alvesta
- Lessebo
- Ljungby
- Markaryd
- Tingsryd
- Uppvidinge
- Växjö
- Älmhult



### Växjö municipacity

### Results

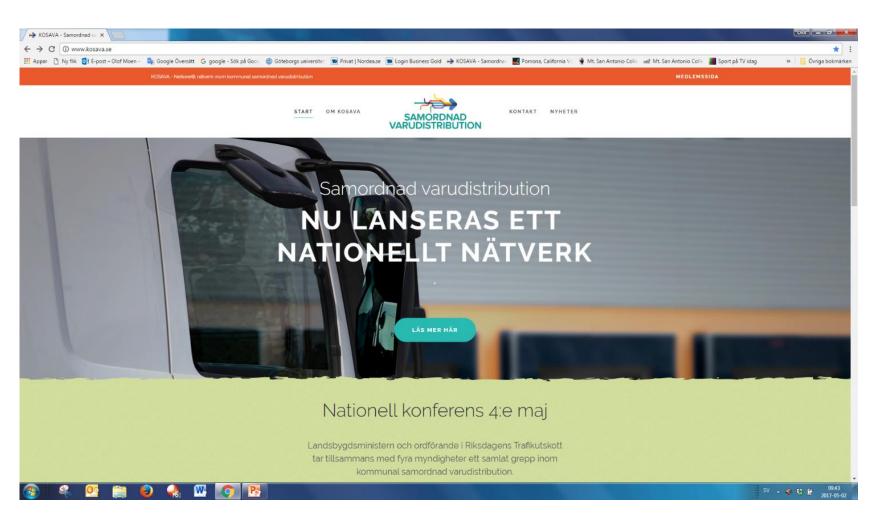
- CO2-emissions for driving routes within Växjö municipality have decreased substantially thru only use of HVO or RME fuel (requirements in procurement of transport and logistics services)
- Number of deliveries to 450 municipal entities
  - Before co-distribution: 1 900 deliveries/week
  - With co-distribution: 350 deliveries/week (reduction by 82%)
- Number of reduced deliveries per week 1 550,
  - Estimated that a delivery reception takes about 10 minutes x 1 550 = 258 hours per week in savings in time
  - Approximately 12,000 hours per year in time savings, which corresponds to 6-8 full-time positions (more time for core business)

Source: David Braic, Växjö municipality



### A National Center with its own website

### www.samordnadvarudistribution.com



Agencies and authorities endorsing the National Center;

- The Swedish Energy Agency
- The Swedish Association of Local Authorities and Regions
- The Swedish Transport Administration
- The Swedish Competition Authority
- 60 municipality members in the network



### Finalisterna i PostNord Logistics Award utsedda

28 feb 2014 11:00

För tolfte året i rad delas Sveriges ledande logistikpris ut - PostNord Logistics Award. Årets finalister är BEAst/Peab, Lidl, X-Sam och Ystad-Österlenmodellen. Vid en ceremoni på PostNords huvudkontor den 26 mars utses vinnaren som får ta emot priset för 2013 års bästa logistiklösning.

2014-03-20

Nomination to "PostNord Logistic Award"

2014-05-07

"Logistics municipality of the year"







#### Ystad blev Årets Logistikkommun

2014/05/08. Kategorier: LOGISTIK, MLJÖ, PRODUKTION, TRANSPORT



The National Transport Administration Award "Best improvement of the year"

2018-09-14

"Low Carbon Logistics Award"

2015-05-06





### Thank You

### References

Moen, O. (2014) "Co-distribution of Municipal Goods in Sweden - Procurement from a New Standpoint." *Procedia – Social and Behavioral Sciences* 125: 484-495.

Moen, O. (2018) Municipal co-distribution of goods – Business models, stakeholders and driving forces for change. In; *City Logistics 2. New Oppurtuinties and Challenges.* p. 303-323. (eds) E. Taniguchi and R. G. Thompson. London: Wiley.

Moen, O (2019) The procurement process: a key to improved urban logistics efficiency. In; *Urban Logistics Management. Policy and innovation in a rapidly changing environment,* p. 312-335. (eds) Browne, M., Behrends, S., Woxenius, J., Giuliano, G., Holguín-Veras, J. Londan: Kogan Page.

