

LIFE

Clean vehicles & Fuels



Jonas Ericson
Clean Vehicles in Stockholm



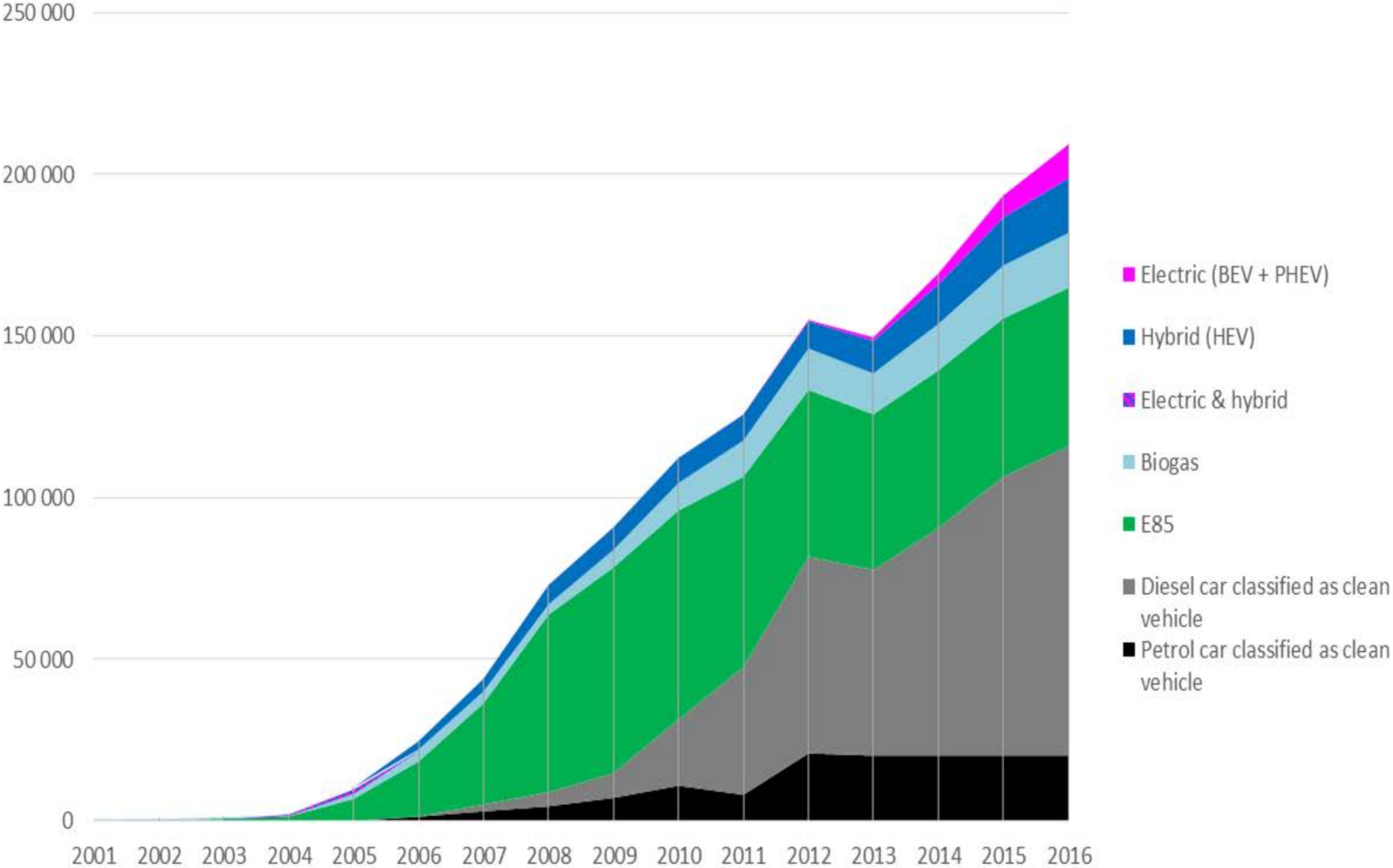
220.000 clean vehicles
25 %!



300.000 ton CO₂/year



Clean Vehicles in Stockholm



How?

5 basic strategies

1. Testing/evaluating close-to-market technologies



Keolis

ELECTRIC HYBRID

4904

STB 469

100

STÄNDLA FÖR I

ROSTEN

5 basic strategies

1. Testing/evaluating close-to-market technologies
2. Coordinate large joint procurements



Make the cars Joint procurement! available!

- 1994 National EV procurements (300)
- 1996 International EV procurem. (500)
- 2000 Ford Focus Ethanol (3,000)
- 2002 Clean vehicles (5,000)
- 2008 Ethanol Van (3,000)
- 2011 National EV (6,000)



- Introduction on market
- Develop new technology
- Introduce battery leasing
- 10-50 % Lower price
- Doubling fuel stations

5 basic strategies

1. Testing/evaluating close-to-market technologies
2. Coordinate large joint procurements
3. Introduce incentives/push for others to incentivise

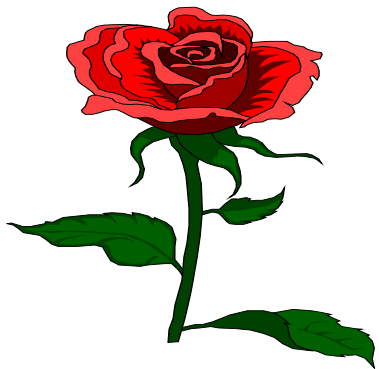
Make cost even

Mayors of Stockholm, Göteborg, Malmö met with ministers over and over again - for more than 10 years

Result:

- Long term tax discount for biofuels/vehicles
- Special discount for Company cars
- Mandatory clean fuels at fuel stations
- Government procure clean vehicles
- Definition of clean vehicles
 - Free parking and other local incentives
 - Grants for Clean Vehicles





Reduce the cost

Local incentives

- ✓ No congestion charges
 - ✓ No parking fees
 - ✓ Test fleet
 - ✓ Taxi priority
 - ✓ Subsidies for special vehicles
-
- Permission to use bus lanes
 - Access to restricted areas
 - Designated parking spaces



5 basic strategies

1. Testing/evaluating close-to-market technologies
2. Coordinate large joint procurements
3. Introduce incentives/push for others to incentivise
4. Requirements in procurement of goods & services



Greening transport through procurement

Companies working for the city

- Public transport
- Waste collection
- Taxis
- Courier service
- Disabled transport
- School transports
- Sick transports
- Security guards
- Moving
- Internal mail service

Clean Vehicles in Stockholm

Biogas vehicles

- 340 Buses: Regional procurement
- 90 waste collectors: City procurement requirement
- 13.300 light duty vehicles
 - Taxi: Regional/City procurement requirement
Arlanda's clean taxi priority
 - Company vehicles: City procurement requirement
Internal/customer driven policy
 - Fringe benefit cars: Company Tax incentives
 - Municipal fleet: Local procurement
 - Privat citizens: Environmental awareness/incentives



5 basic strategies

1. Testing/evaluating close-to-market technologies
2. Coordinate large joint procurements
3. Introduce incentives/push for others to incentivise
4. Requirements in procurement of goods & services
5. Information

Information

- Campaigns
- Demonstration events
- Newspapers, TV
- Web
- Telephone advise





Sveriges portal för miljöbilar – miljöfordon.se

Sveriges ledande resurs för fakta om miljöklassade personbilar, lätta transportfordon och tunga lastbilar, miljöbränslen samt regler och förmåner för miljöbilar.

Annonsplats

Se filmen

Här finns en introduktion till miljöfordon.se och de funktioner du hittar här.

› Se filmen



Sök fordon

Sök bland alla miljöfordon på den svenska nybilsmarknaden

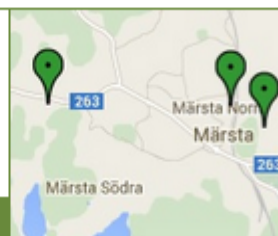
› Sök miljöbil



Hitta laddstolpe

Sök fram laddplatser på karta eller utifrån din nuvarande position.

› Hitta laddstolpe



Drivmedelskalkyl

Beräkna utsläpp, energianvändning och kostnad för din drivmedelsanvändning

› Gör drivmedelskalkyl



Stockholm och Malmö driver miljöfordon.se

Stockholm och Malmö driver miljöfordon.se med stöd från Energimyndigheten.

Aktuellt

- 22/03 [Regeringen vill slopa energiskatt på E85 och höginblandad fame](#)
- 09/02 [Fjärde tankstationen för vätgas](#)
- 20/12 [Bidrag ger många nya laddplatser](#)
- 15/11 [Renault Zoe och Tesla Model S Årets Miljöbästa Bilar 2017](#)
- 13/10 [Beräkna koldioxidutsläpp från HVO](#)
[Visa fler...](#)

Miljöbilsnyheter utifrån

- 09/05 [Fyrhjulsdrevet ökar olycksrisken vid vinterväglag](#)
- 08/05 [Minskad försäljning av begagnade bilar](#)
- 05/05 [Litet utbud av förarnas tjänstebilfavoriter](#)
- 04/05 [Tar sikte på förmånsbilarna för att klimatanpassa fordonsflottan](#)
- 04/05 [Ny metod gör bakterier till vätgasfabriker](#)
[Visa fler...](#)

Heavy
Goods
vehicles

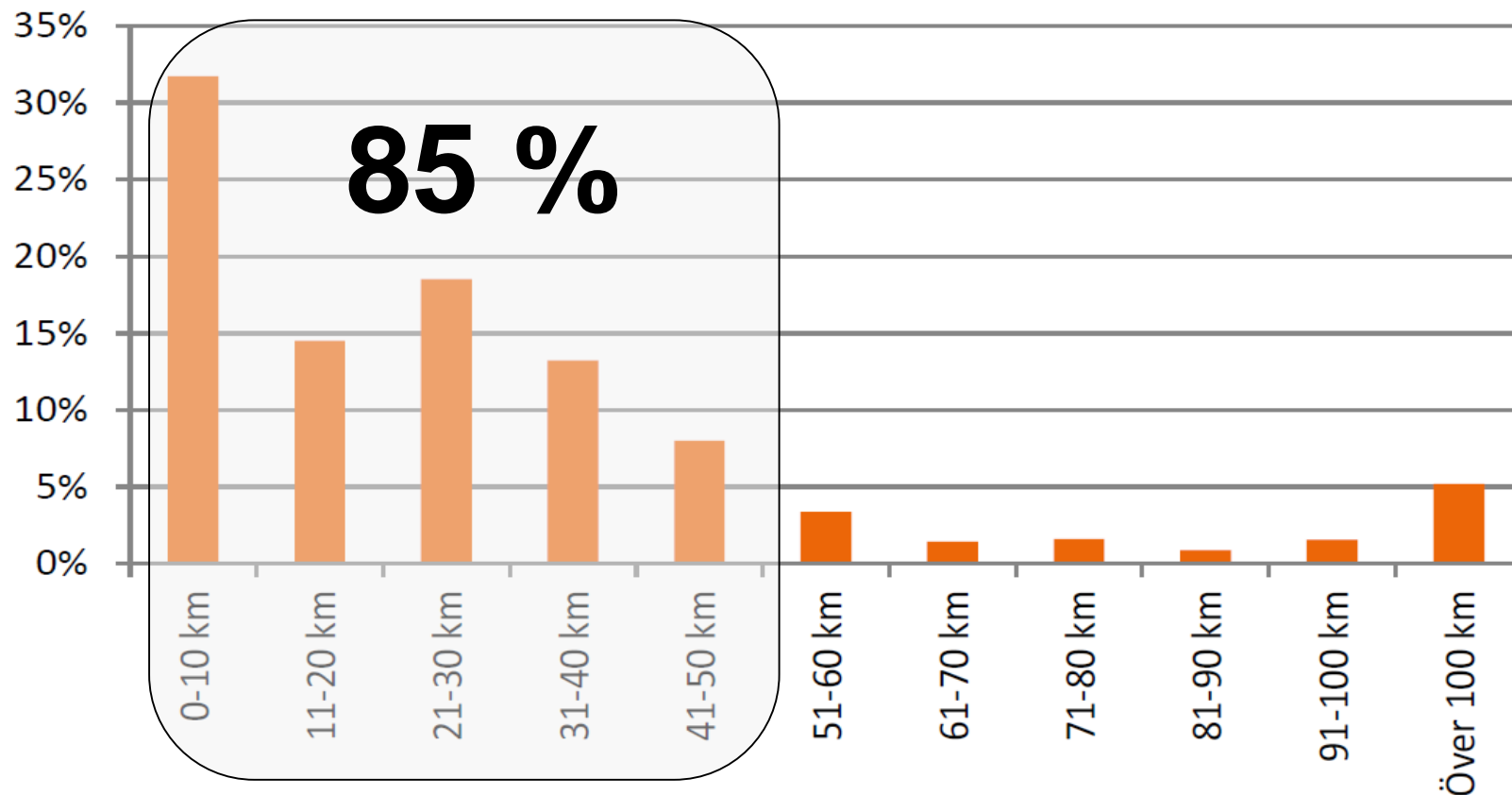
10 000

10 % of
transportkm

40% of
emissions



How far is the goods transported?

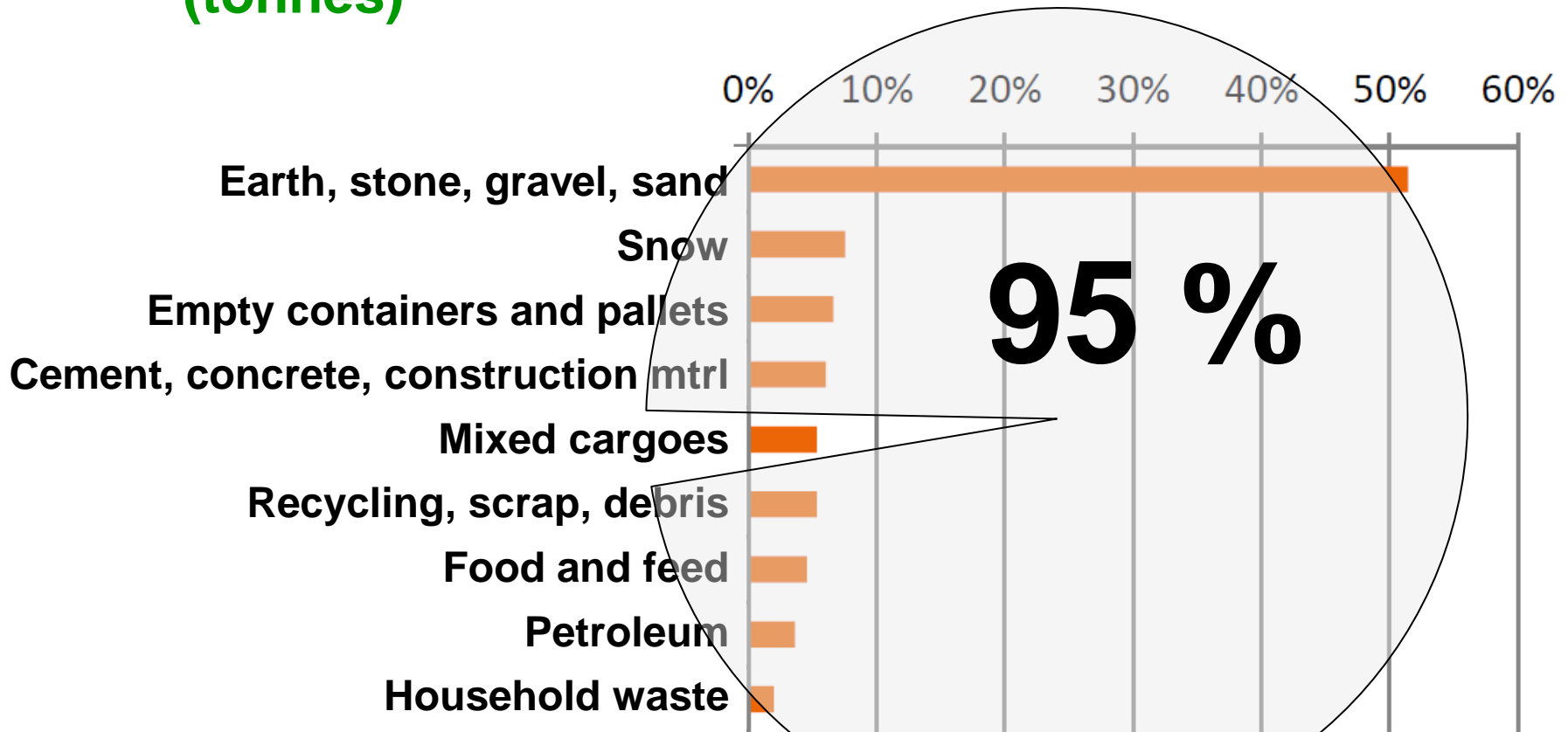


Clean Vehicles in Stockholm



CLEAN VEHICLES IN STOCKHOLM
ENVIRONMENT & HEALTH ADM
www.miljobilar.stockholm.se

What goods is transported? (tonnes)







Clean Vehicles in Stockholm



Largest clean urban fleet in the world



**Methan-diesel
Biogas + Fossil diesel**

**Hybrid-Electric
Fossil Diesel**

**ED95
Ethanol**



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Clean Vehicles in Stockholm



Largest clean urban fleet in the world



- **60 distribution trucks**
- **18 companies**
- **4 years**
- **5 million km**



Conclusions



Long-haulage:

Methan-diesel / Ethanol

City distribution:

Ethanol

Waste management:

Ethanol / normal Biogas / (Hybrid)

Aftermath



Night Delivery



Clean truck definition

- 1. Pure electric**
- 2. Hybrid-electric**
- 3. Approved for 100 % Renewable fuel
(ED95, Biogas, RME, HVO, DME, Hydrogen etc)**



Clean Vehicles in Stockholm

Aftermath



Food to schools and daycare centres

If > 5 trucks \Rightarrow minimum 1 clean truck



What's next?



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Thank you!

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