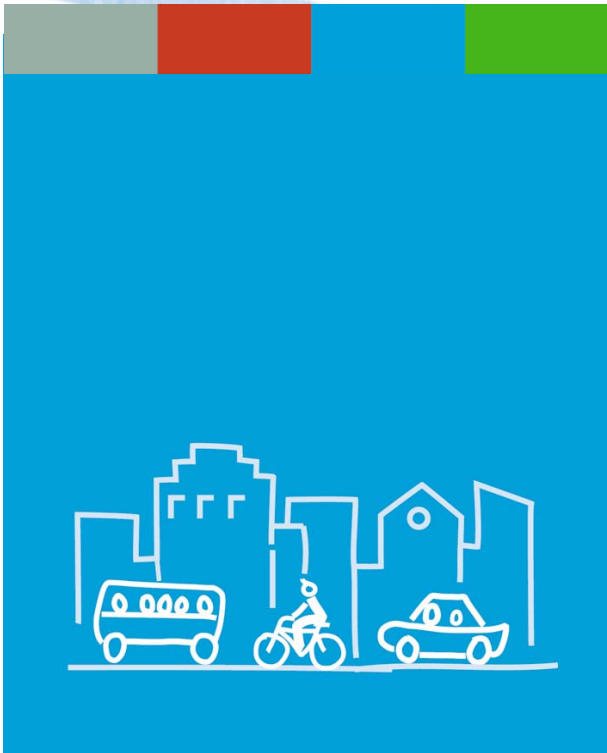




# Towards clean mobility: ...some remarks from Bremen...



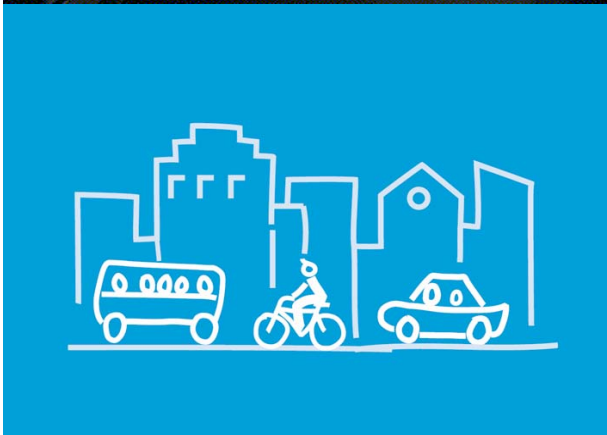
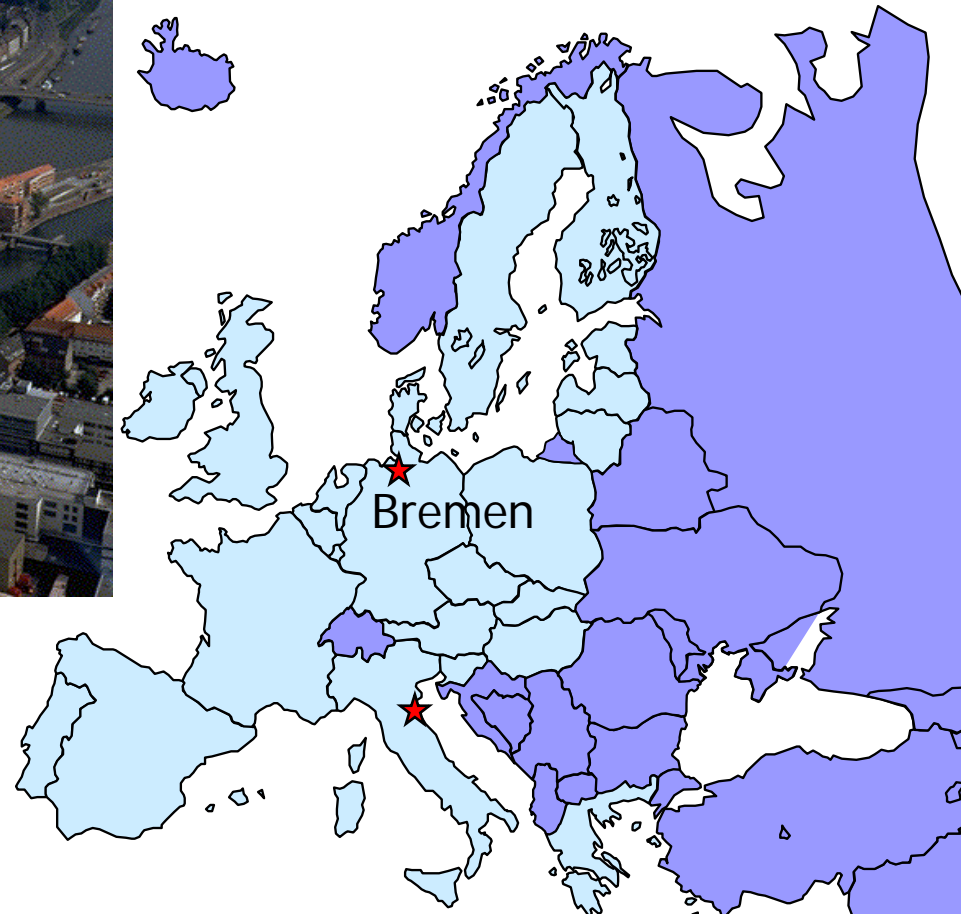
Michael Glotz-Richter, City of Bremen



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# Bremen in Europe





# Bremen in Europe



Free Hanseatic City of Bremen  
540.000 inhabitants (city)



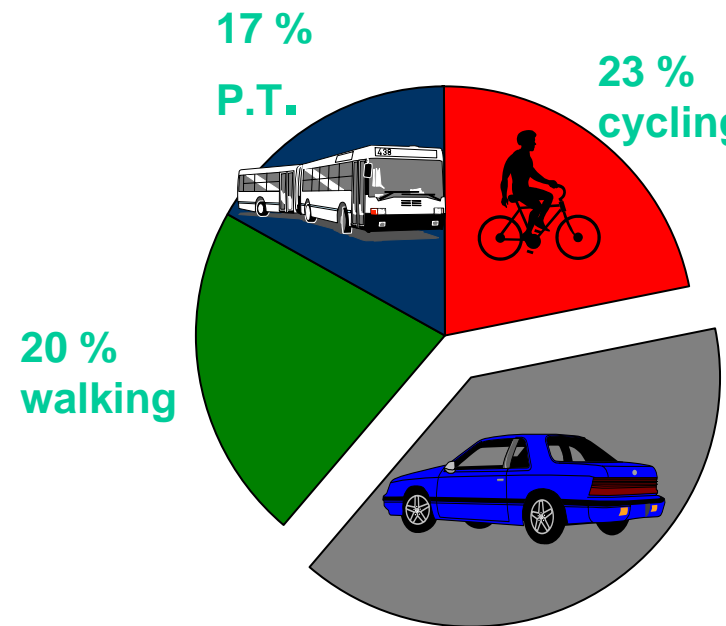
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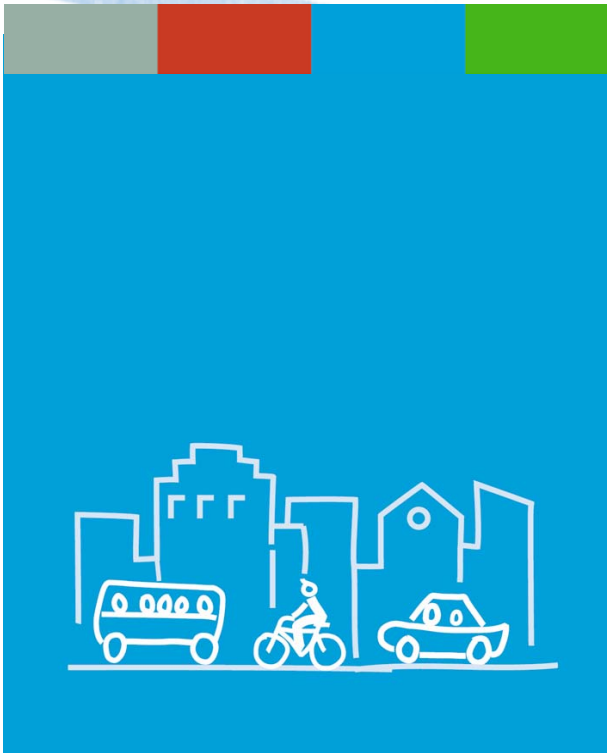
# Modal-split

## Bremen city dwellers

**60 % altern.  
modes**



**40 % car**



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# Air Quality Problems



Motorised transport - a key source of urban air quality problems



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# Bremen strategies

- Concentration on **CNG**
- Achieve market breakthrough  
(number of vehicles → impacts)
- targeting vehicles with  
high inner-city mileage  
(improve air quality)



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# Bremen strategies

- Integrating all players along the local product chain:
  - energy provider
  - car dealers and producers
  - fueling infrastructure
  - multipliers (guilts, media, VIPs,...)
  - administration/politicians



**BREMER OFFENSIVE**

**DAS  
ERDGASFAHRZEUG**

**Sparsam. Sicher. Sauberer.**

swb Enordia

Bremer Energie-Konsens

CiViTAS  
Cleaner and better transport in cities

vivaldi

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# Bremen strategies

- Campaign "Bremer Offensive – Das Erdgasfahrzeug" (CIVITAS Vivaldi project)
- Incentive Programme
- Targeted information for
  - potential corporate customers
  - private households
  - car dealers



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Sparsam. Sicher.  
Sauberer.

... jetzt auch  
für Gewerbetreibende



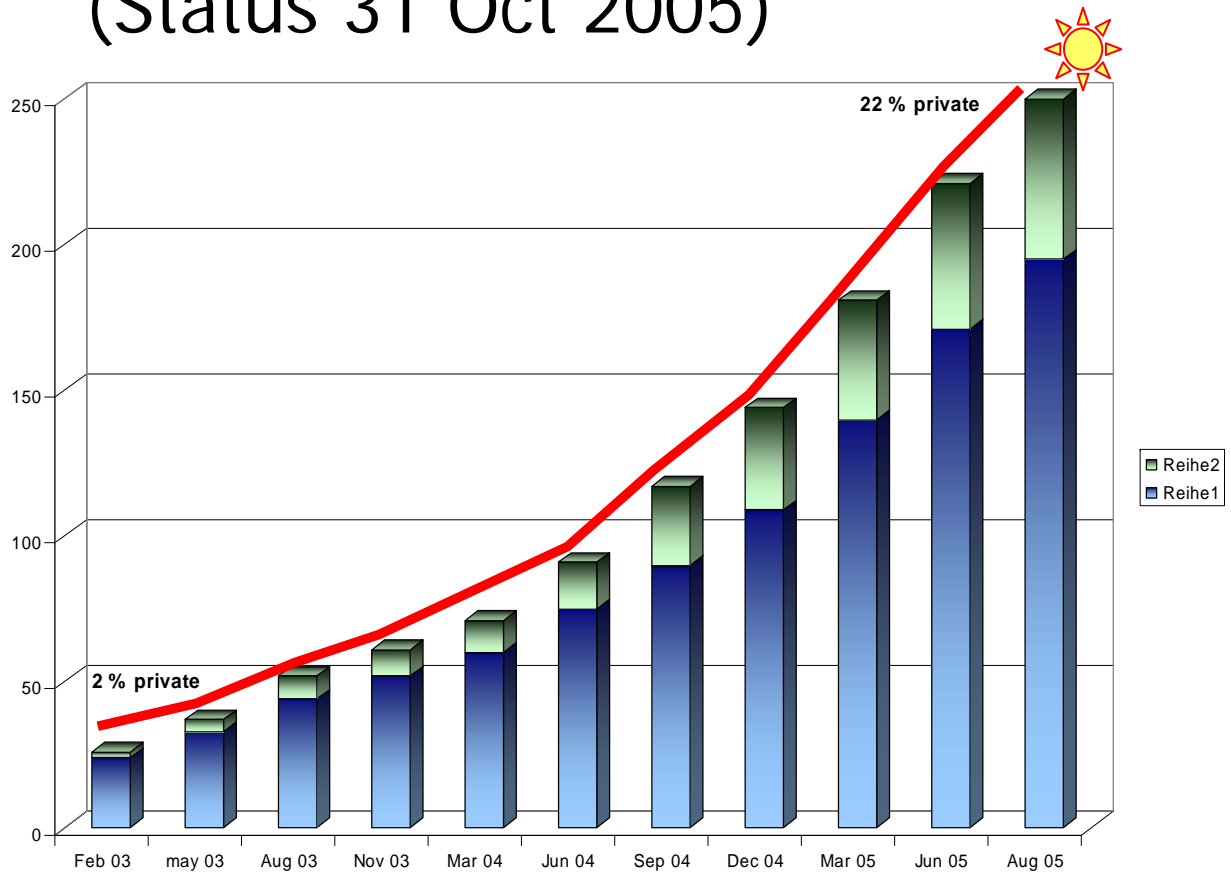
Bis zu 2.500 € Zuschuss für  
Erwerb/Umrüstung auf ein erdgas-  
betriebenes Fahrzeug bis 3,5 t

ENERGIE OFFENSIVE  
Mit Erdgasfahrern  
sparsam, sicher, sauber.



# Bremen strategies

Ongoing promotion  
upto now 330 applications  
(Status 31 Oct 2005)



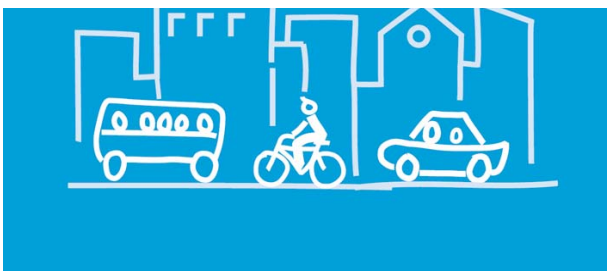
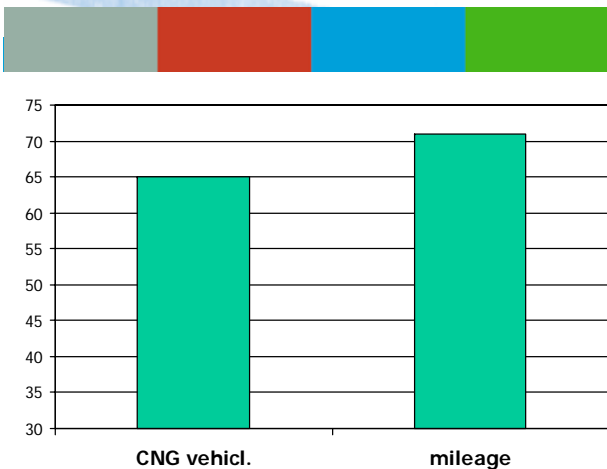


# Bremen strategies

**Promoting CNG cars for business use:**

Higher incentive for the business cars effective:

65 % of CNG vehicles  
71% mileage driven



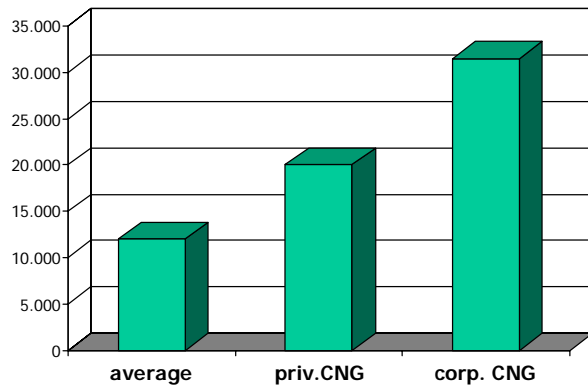
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# Bremen strategies

## Promoting CNG cars for business use:

Annual mileage (average: 12,000 km)



- of private CNG users: 20,000 km
- of business CNG users: 31,500 km

mainly replacing Diesel vehicles !



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# Unloved child ?

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Produkte Dienstleistungen Erlebnisswelt Wir über uns

Opel. Frisches Denken für bessere Autos.

**DEUTSCHLAND LEAST DIE TESTSIEGER!**

Der neue Opel Zafira

Opel Astra GTC.

**Schnellstart**

- > Konfigurator
- > Kataloge
- > Probefahrt
- > Newsletter
- > Händleruche
- > Finanzierung

Dieselpartikelfilter für 1.9 CDTI serienmäßig.

Opel Corsa Edition mit TomTom GO Navigationssystem

Wählen Sie Ihr Automobil:

Impressum | Datenschutz | Rechtlicher Hinweis | Seitenhilfe | Copyright 2005 Adam Opel AG

- Opel Agila
- Opel Corsa
- Opel Tigra TwinTop
- Opel Combo Tour
- Opel Meriva
- Opel Astra GTC
- Opel Astra
- Neuer Opel Astra Caravan
- Opel Astra Cabrio
- Neuer Opel Zafira
- Opel Zafira
- Opel Vectra / Vectra GTS
- Opel Vectra Caravan
- Opel Signum
- Opel Speedster Turbo
- Opel Vivaro Life

## CNG types ?????..

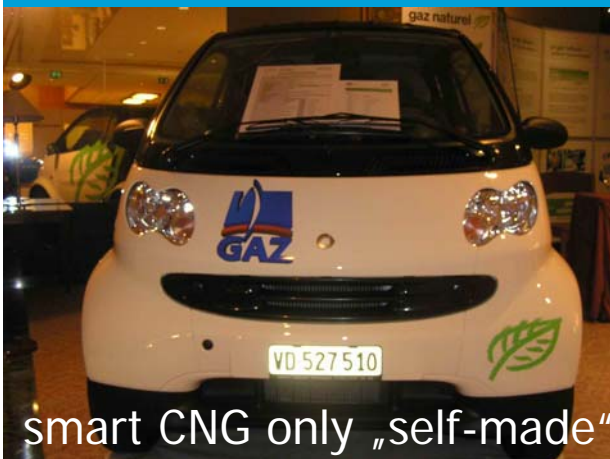


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# Small cars?

- What about the segment of the mass market of small class vehicles?
- Most of the fleet cars of our Department are Opel Corsa  
*- no CNG type available*



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„heavy smokers“



the Diesel problem

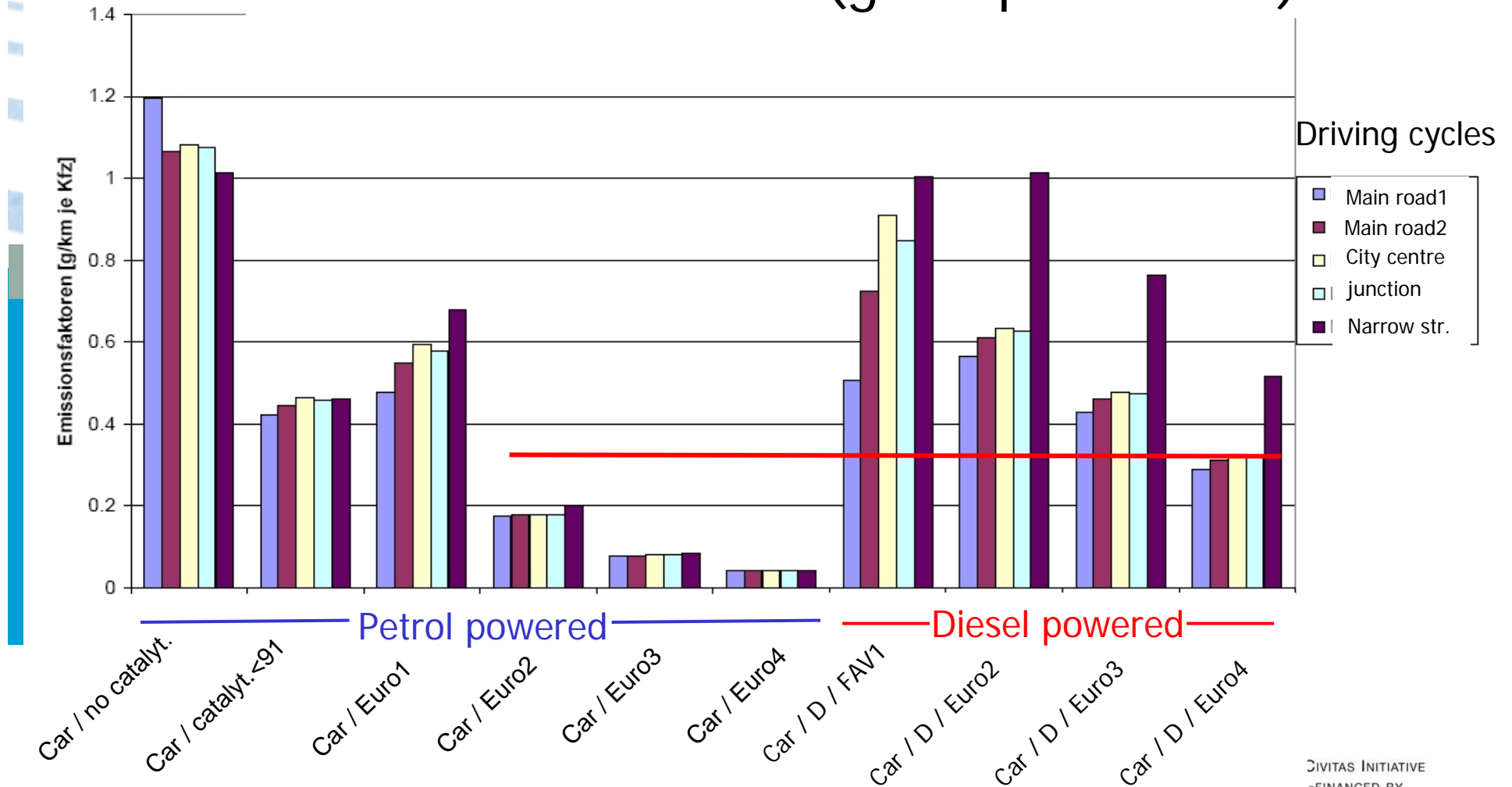


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# Nitrodioxid (NO<sub>2</sub>)

NOx-emission factors (g/km per vehicle)

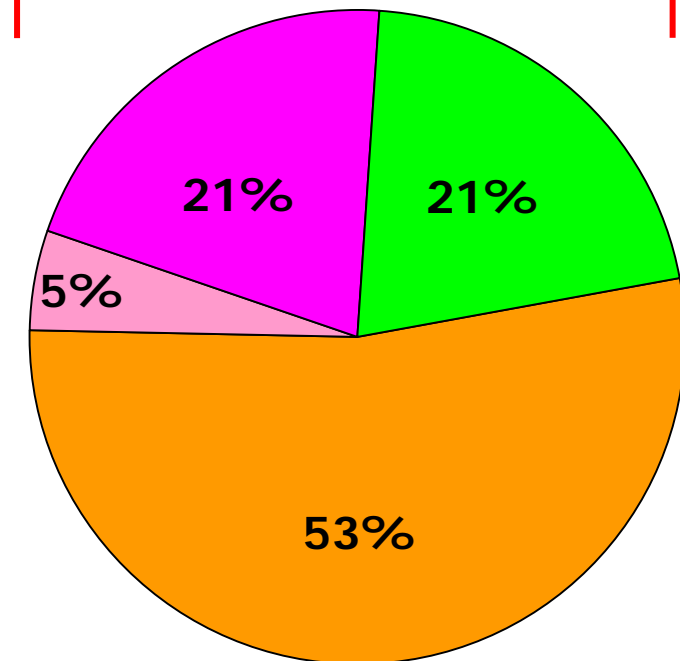
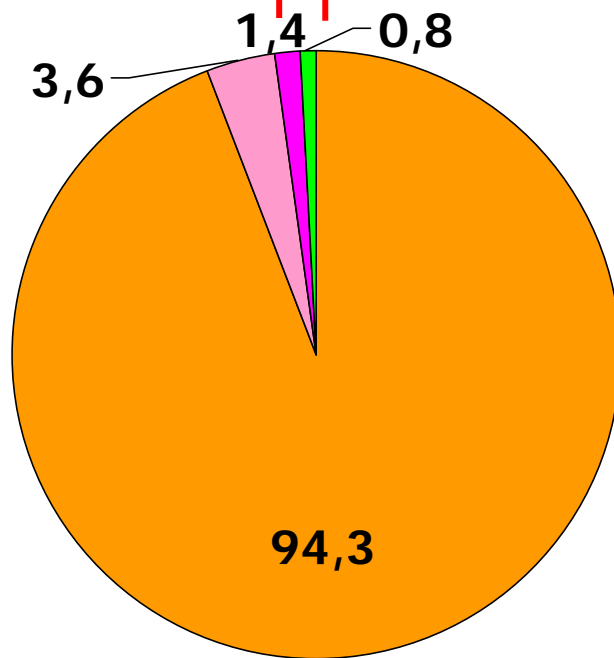




# Nitrodioxid (NO<sub>2</sub>)

trucks (>3.5 to) + busses  
2,2 % of vehicles

trucks (>3.5 to) + busses  
42 % of NO<sub>2</sub> emissions



cars LDV < 3.5t HDV > 3.5t busses





# Clean trucks ?

## Urban delivery vehicles:

- usually Diesel vehicles
- overproportional share of urban pollution (especially NO<sub>x</sub>)
- noise problems as well



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# Clean trucks ?

## Mercedes Atego 12 ton CNG:

- Offer 2002 by Mercedes
- additional costs: **+45% !!!**
- After acceptance: **no delivery !!**



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# Clean trucks ?

## IVECO Eurocargo 12 ton CNG:

- Offer 2005
- pilot vehicle(s) for Bremen (City Logistics update)
- schedule for introduction:

June 2005



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# Clean trucks ?

## IVECO Eurocargo 12 ton CNG:

- IVECO decided **not to deliver** 12 – 16 ton CNG truck !!!



IVECO CNG EuroCargo 12t – 16t neu ab Juni 2005!

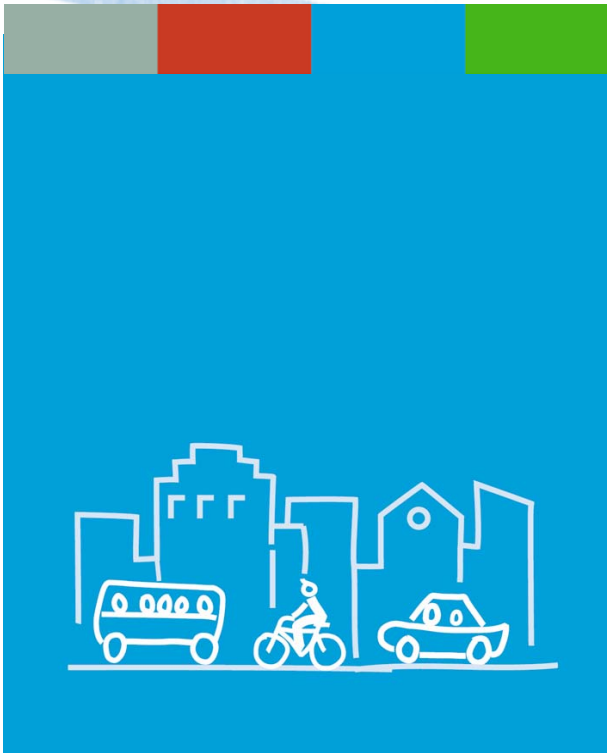


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No CNG trucks available  
in the size 7.5 – 18 tons

...size very important for  
urban delivery!



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# Clean delivery

DHL / Deutsche Post introduces clean delivery vehicles in 5 German pilot cities (incl. all CIVITAS cities)

7 IVECO Daily 5 ton CNG in Bremen



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# Clean delivery



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# More than air quality



**before introducing clean cars...**



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# More than air quality



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# Sustainable transport



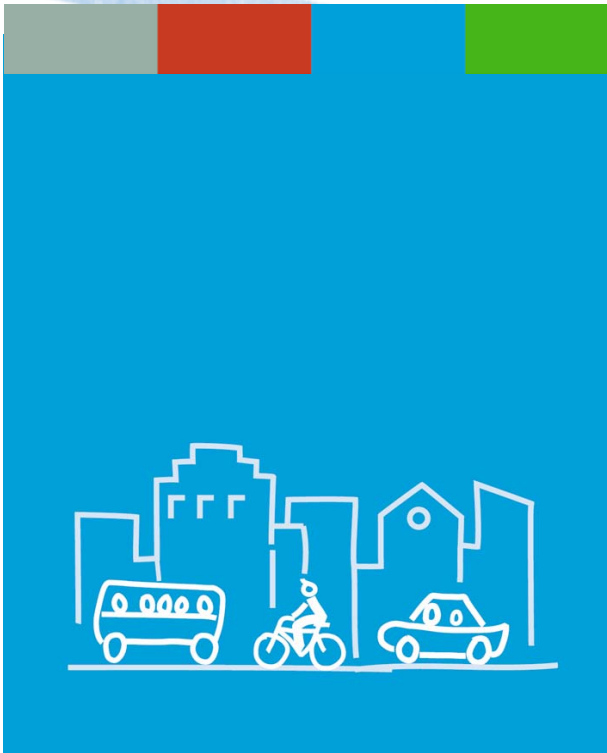
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Thank you for your  
attention !

Vivaldi National Conference  
19. January 2006 Bremen

[www.vivaldiproject.org](http://www.vivaldiproject.org)



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