

# The Low Emission Zone in Utrecht

March 15, 2007

Mark Degenkamp

City of Utrecht

Department of Spatial Development

Traffic and Transport division

# National Covenant on stimulating clean HDV's and LEZ's ("LEZ covenant") (1)



- Signed by national government, 10 cities, shippers and transporters organisations
- Limited to LEZ's for HDV's and city centres
- Careful decision making about introducing LEZ's, municipality has to demonstrate successively that:
  - air quality problems (hot spots) occur
  - these are related to freight traffic to / from the city centre
  - A LEZ is an efficient measure, also compared to other measures
  - The chosen zone size is reasonably related to the hot spots it intends to solve / decrease

## National Covenant on stimulating clean HDV's and LEZ's ("LEZ covenant") (2)



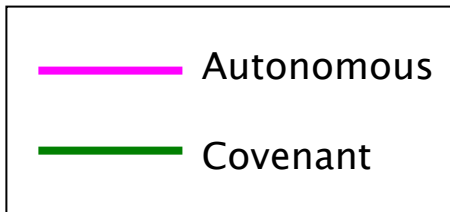
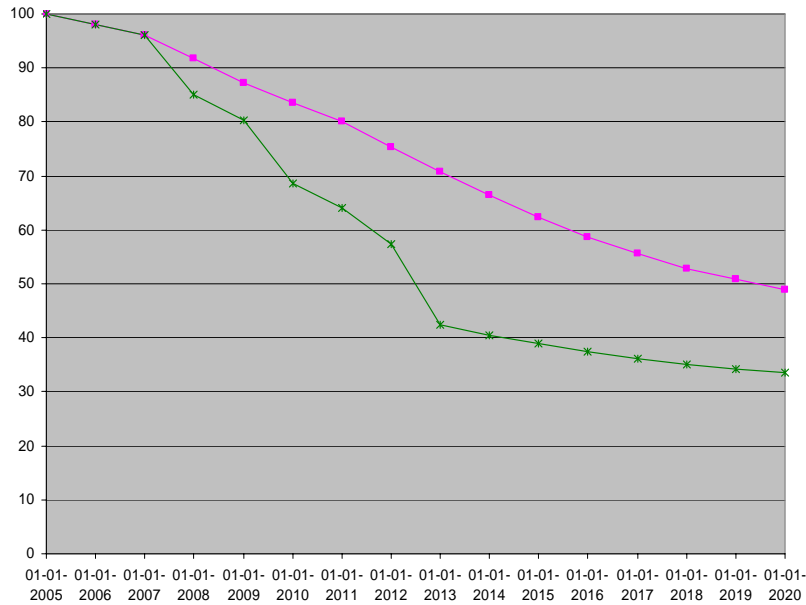
- Access criteria and schedule for introduction
- Commitment to put effort in compensating / stimulating city distribution measures (which also have a positive environmental effect)
- Preconditions for the introduction

## Access criteria LEZ

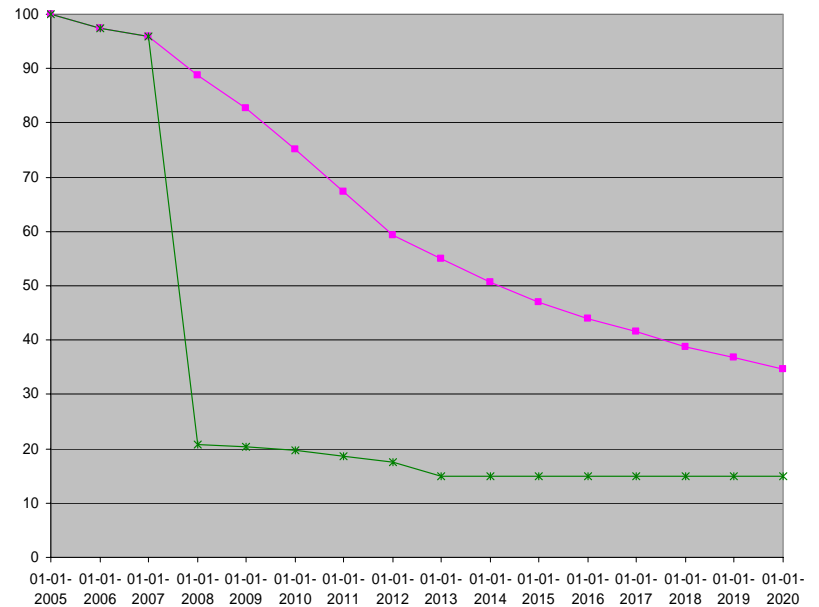
- July 1st, 2007: HDV's at least Euro2; in case of Euro2 and Euro3 provided a certified particulate trap has been fitted
- January 1st, 2010: HDV's at least Euro4; or Euro3 less than 8 years old and provided a certified particulate trap has been fitted
- Exceptions:
  - Special HDV's (permanent)
  - Euro2 / Euro 3 HDV'S for which a certified particulate trap is not yet available or for which a particulate trap has been certified less than 5 months ago.
  - HDV's the municipality wants to give single access

# Effect: Emissions of HDV's within LEZ

### NOx-emissions per year



### PM10-emissions per year



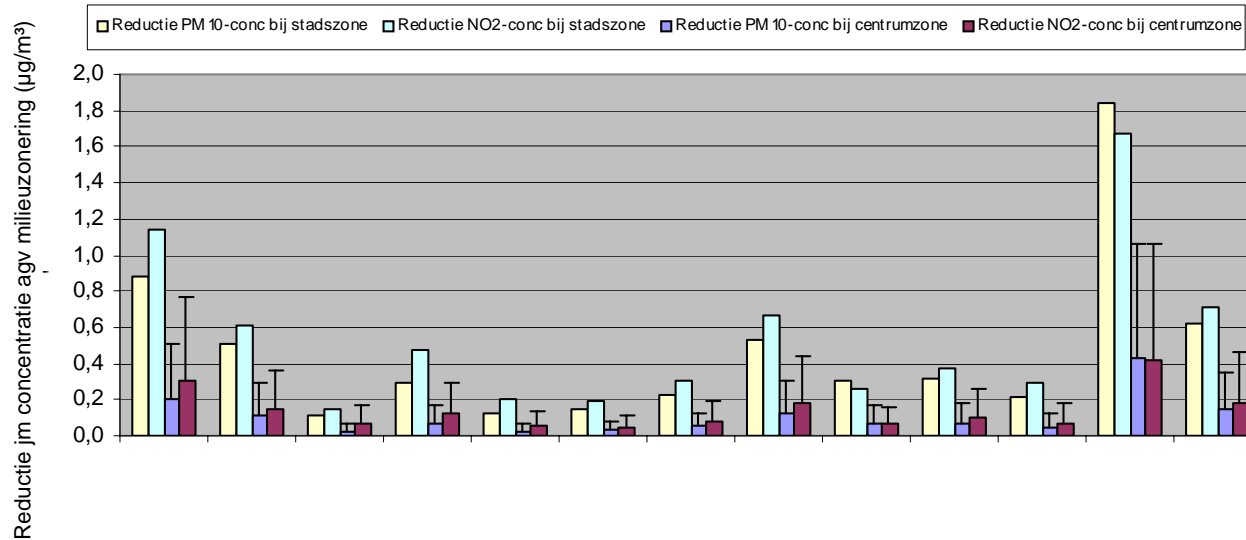
## Environmental effects (1)



### Environmental effects centre zone

- Border of centre zone: 0,2 – 0,6 µg/m<sup>3</sup> reduction
  - Disappearing through traffic not taken into account

## Environmental effects (2)



### Environmental effects bigger zone

- Border town zone: 0,2 – 1,8 µg/m<sup>3</sup> reduction
  - Disappearing through traffic not taken into account
- 25% – 60% already achieved with centre zone

## Economy (1)

### Economic effects centre zone

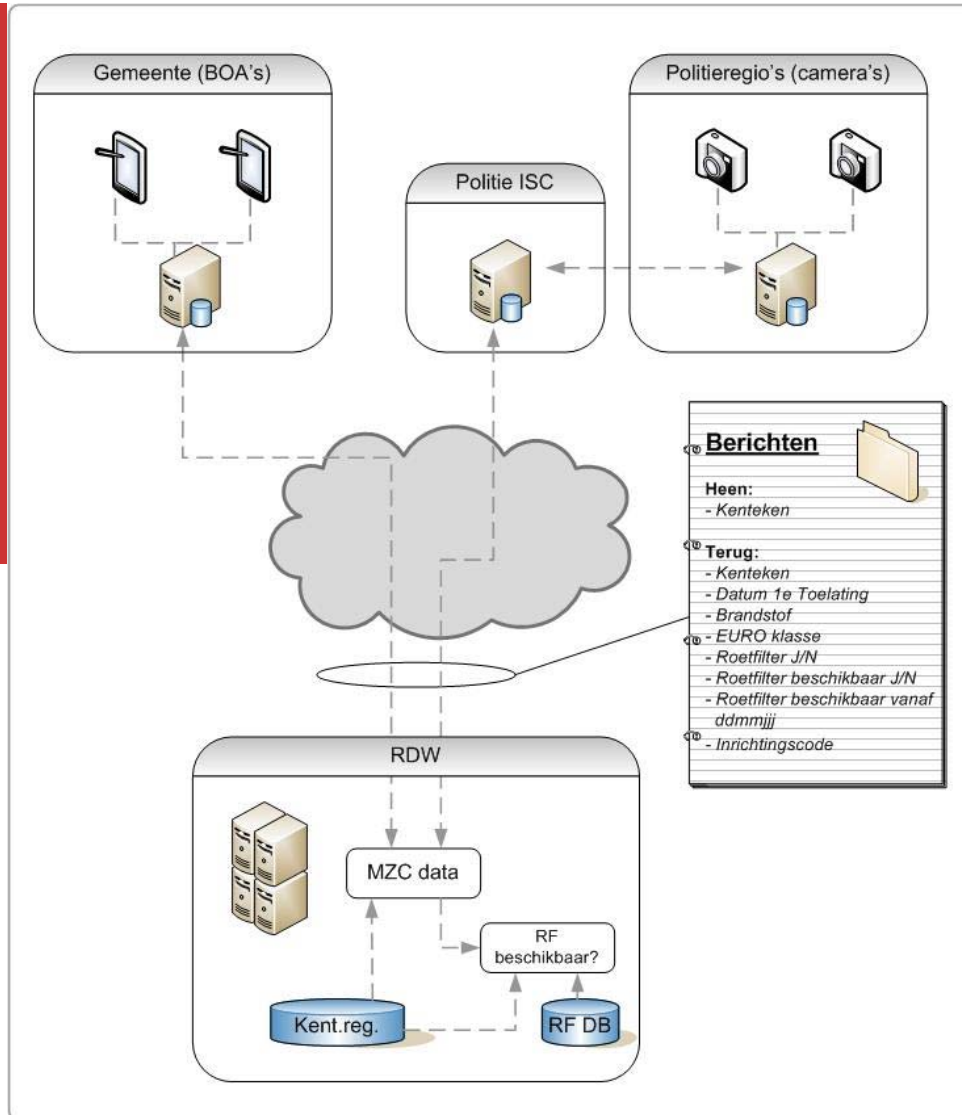
- 6500 HDV's on a regular basis ( $\geq 1$  x/week)
- 99% needs to be adapted or replaced
- Costs for private enterprises (sophisticated variant):  
€69 mln
  - € 10.000 per vehicle
- No disproportionately affected companies (companies owning HDV's, based within the LEZ)

## Economy (2)

### Economic effects bigger zone

- 4000 HDV's extra adapted or replaced
- € 46 mln extra (total € 115 mln)
- Many disproportionately affected companies (companies owning HDV's, based within the LEZ), amongst which big transporters and DC's
- Many small and medium enterprises with a small number of HDV's, for which adaptation costs are a relatively heavy burden

# Enforcement



1. Filtered observations sent from camera to police
2. Police automatically asks vehicle data (engine, particulate trap, etc) at RDW (national vehicle register)
3. RDW gives result
- 4A (violation) camera requested to send photo data
- 4B (no violation) camera requested to delete photo data
5. after 4A: photo data to police
6. Order sent to fine handling system

## Future

### Measures on vans

- Almost not affected by current air quality action plan (only partially, by higher parking fees)
- 10% of total traffic emissions in Utrecht
- LEZ for HDV'S: HDV's replaced by dirty vans?

### Linking real time air quality information on route information

- (Freight) traffic guided to the most desirable routes of that moment