

# Welcome to Bremen



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Free Hanseatic City of Bremen



Workshop on Public Transport Examples – Nantes, 19.5.2010

# Welcome to Bremen



Pedestrianised  
centre

# Modal split in Bremen

547.000 inhabitants

Harbour city – urban goods situation

Trade city – important employers

Industrial city - commuters



Area 1:

Clean Vehicles for  
clean Transport

# Example Tram City

## Tram extension:

- investment costs
- lower operational costs
- reduced emissions
- new vehicles

[illegible]

## Port Examples – Nantes, 19.5.2010

# PT vehicles

## **Straßenbahn GT8N-I**

**Länge:** 35,8 m

**Breite:** 2650 mm

**Kapazität:** 108 / 135 (4 Pers./m<sup>2</sup>)

**Leistung:** 4 x 125 kW

**Hersteller:** Bombardier / Kiepe

## **Bus Solaris Urbino 18**

**Länge:** 18,0 m

**Breite:** 2550 mm

**Kapazität:** 45 / 104 (4 Pers./m<sup>2</sup>)

**Leistung:** 228 kW (Euro 5/EEV)

**Hersteller:** Solaris

## **Straßenbahn GT8N**

**Länge:** 35,8 m

**Breite:** 2300 mm

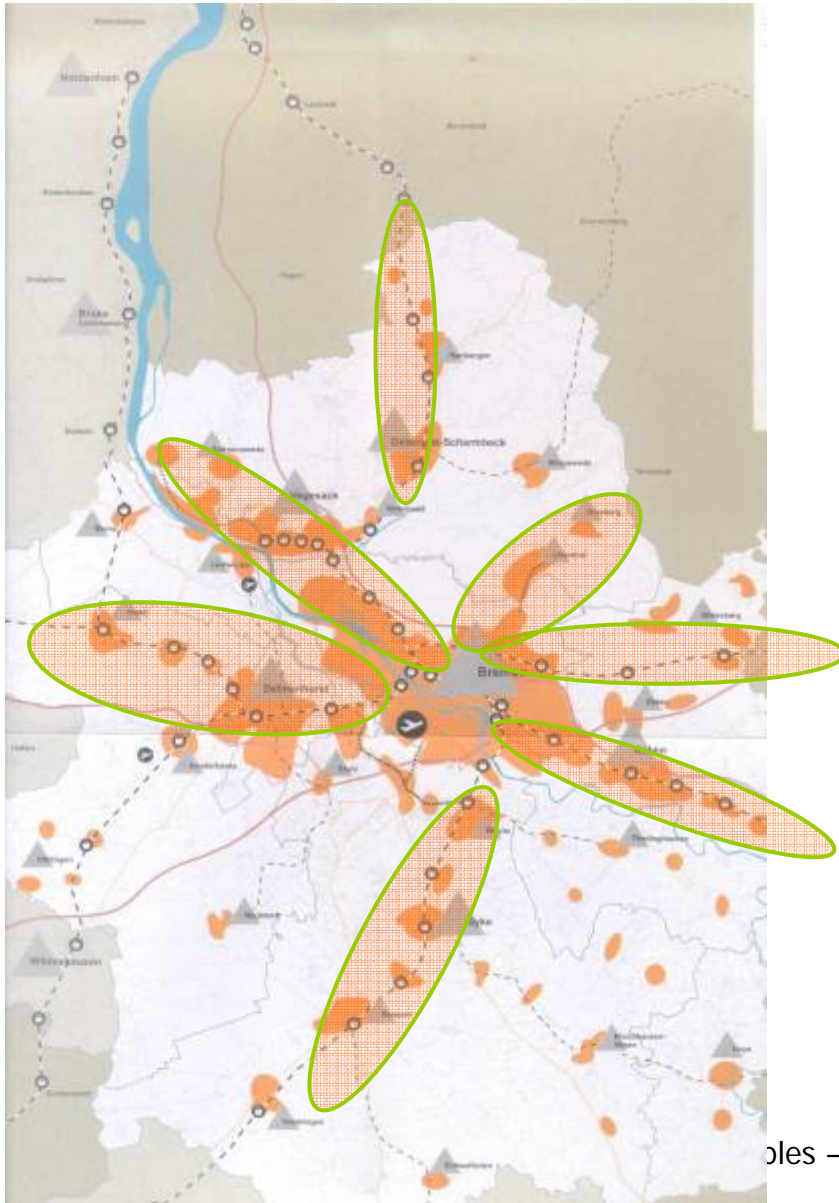
**Kapazität:** 84 / 129 (4 Pers./m<sup>2</sup>)

**Leistung:** 4 x 84 kW

**Hersteller:** ADtranz



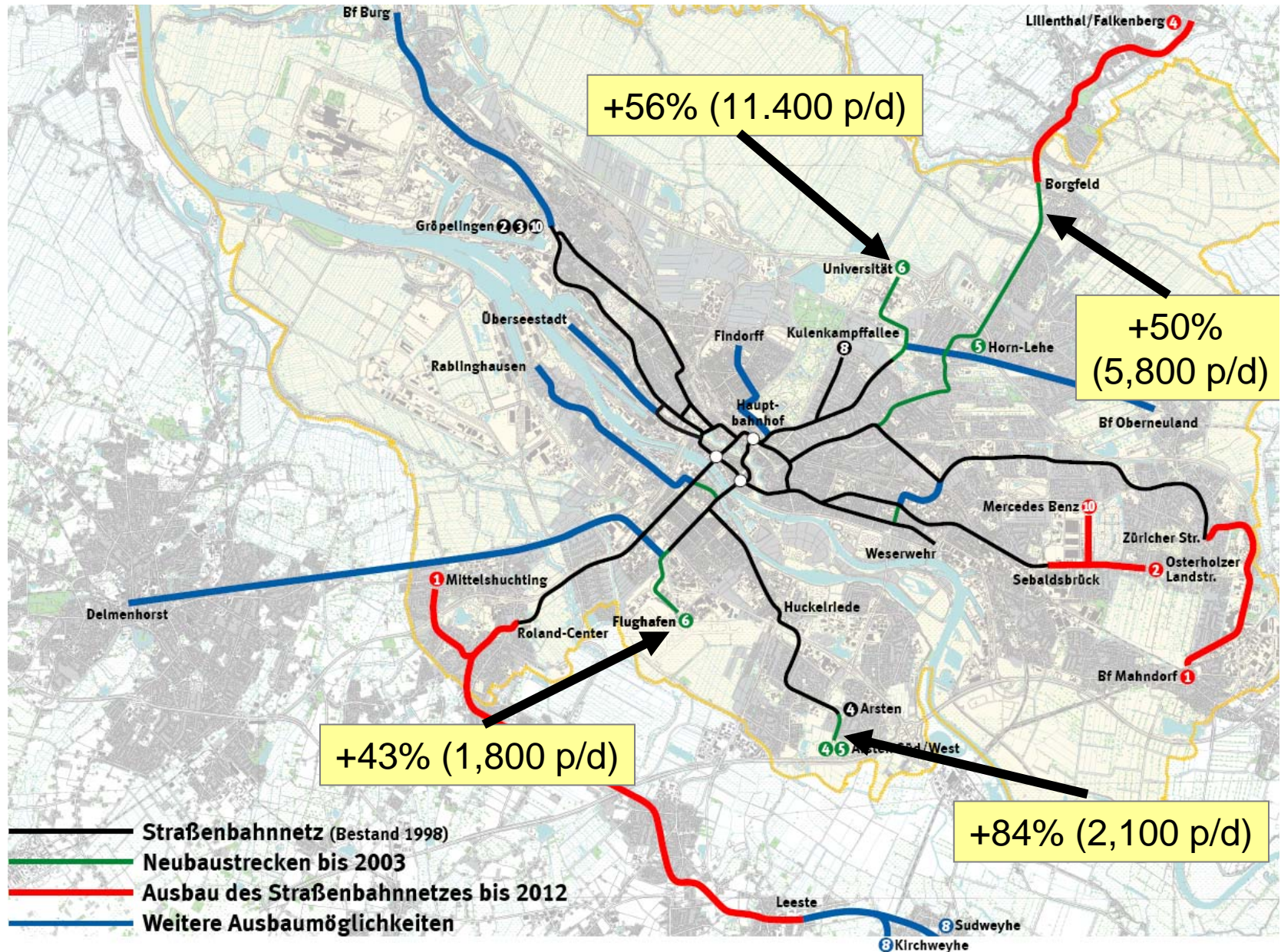
# Regional Planning



## Regional Development:

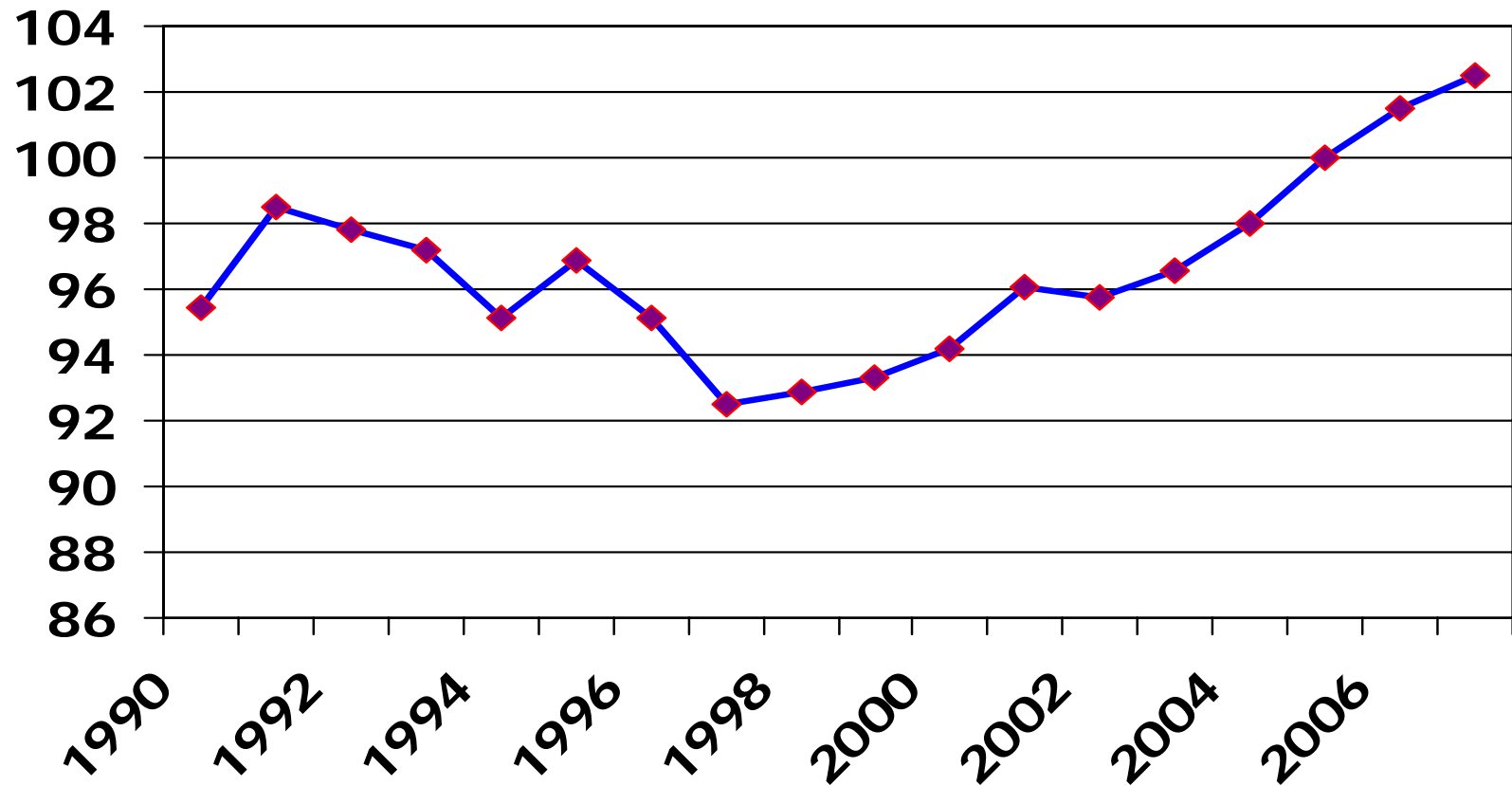
- concentrated along rail / PT corridors
- avoid sprawl
- basis for efficient Public Transport
- requires regional cooperation

# Tram network extension



# PT-Development

Public Transport-passengers Bremen  
(mio passengers p.a.)



# clean buses



Clean Diesel buses:

fulfilling

EEV-standard

(Enhanced  
Environmental Vehicle)



# clean buses

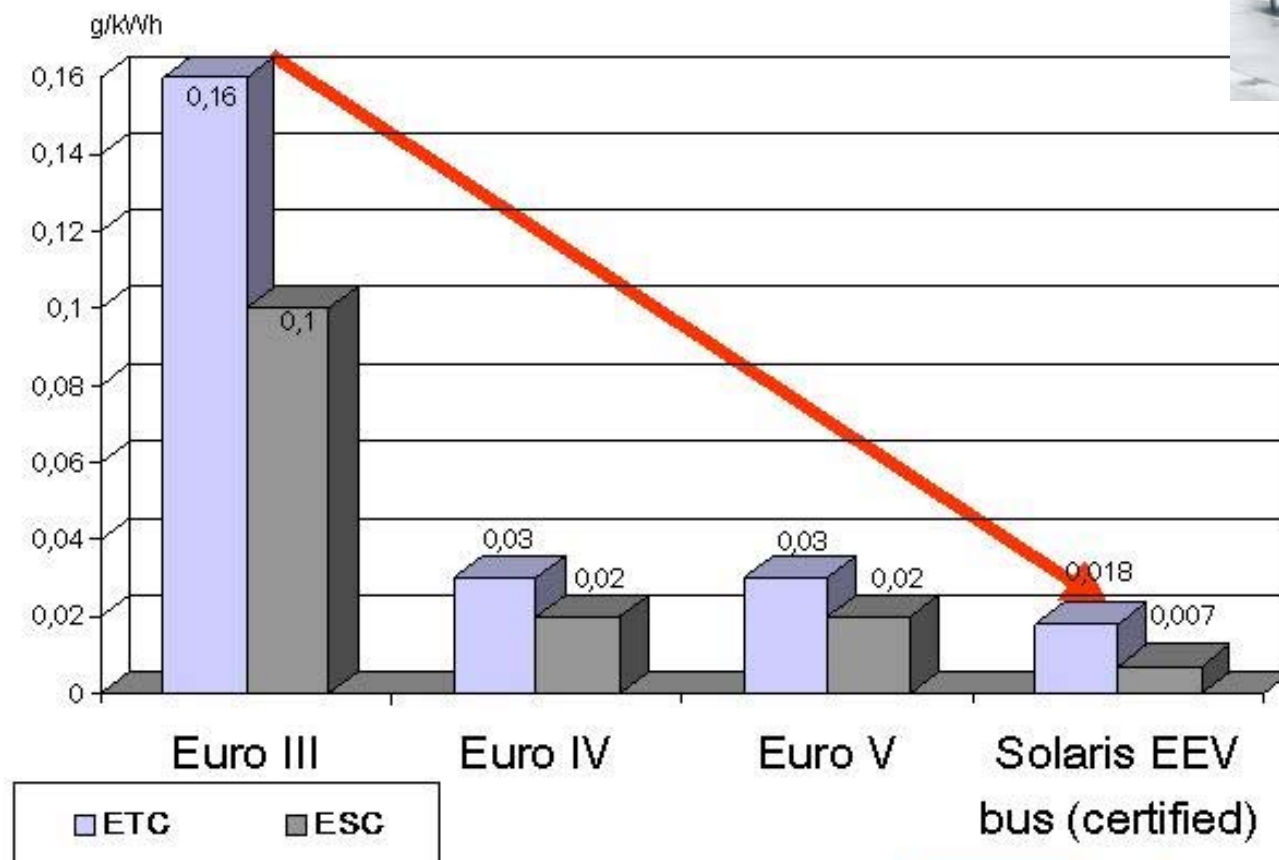


Innovation: on 2006 HDV motor-show (Hanover)

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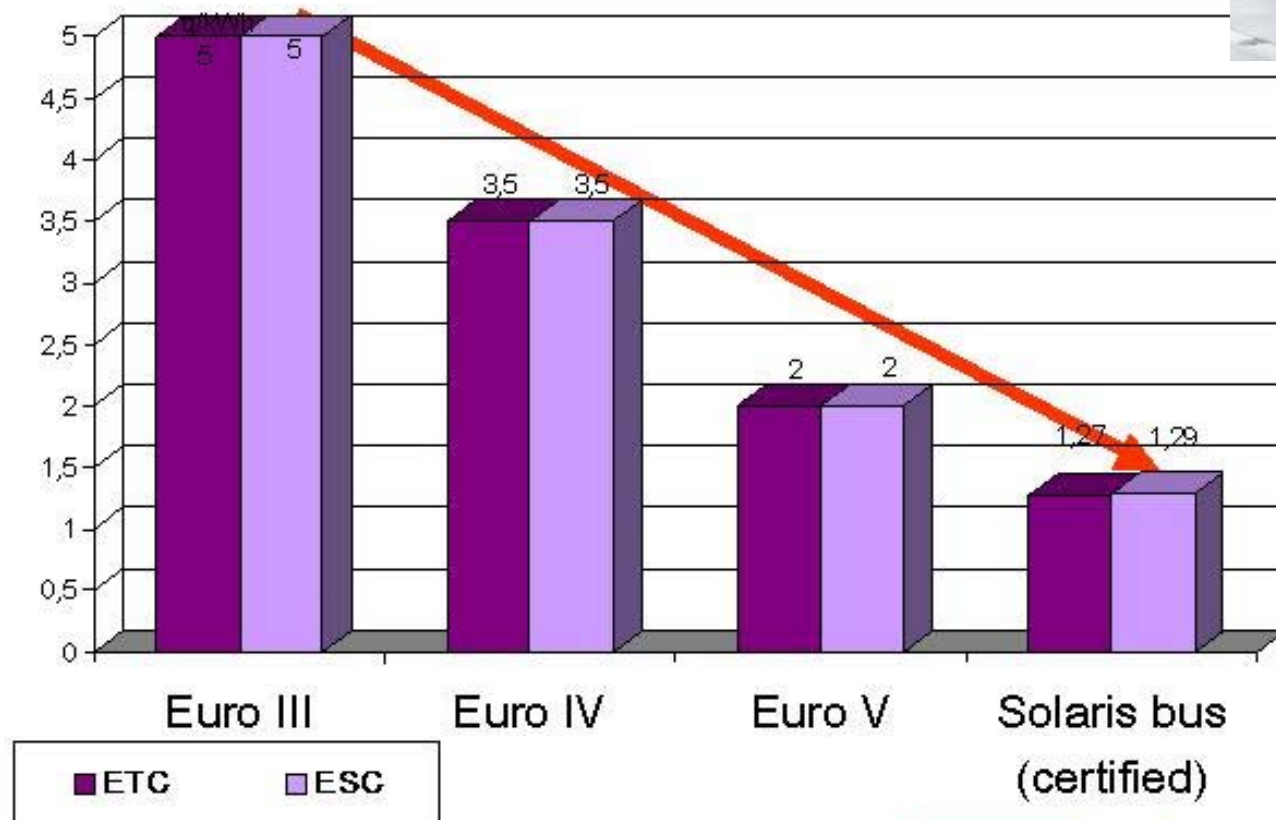
# clean buses

## PM<sub>10</sub>-emission

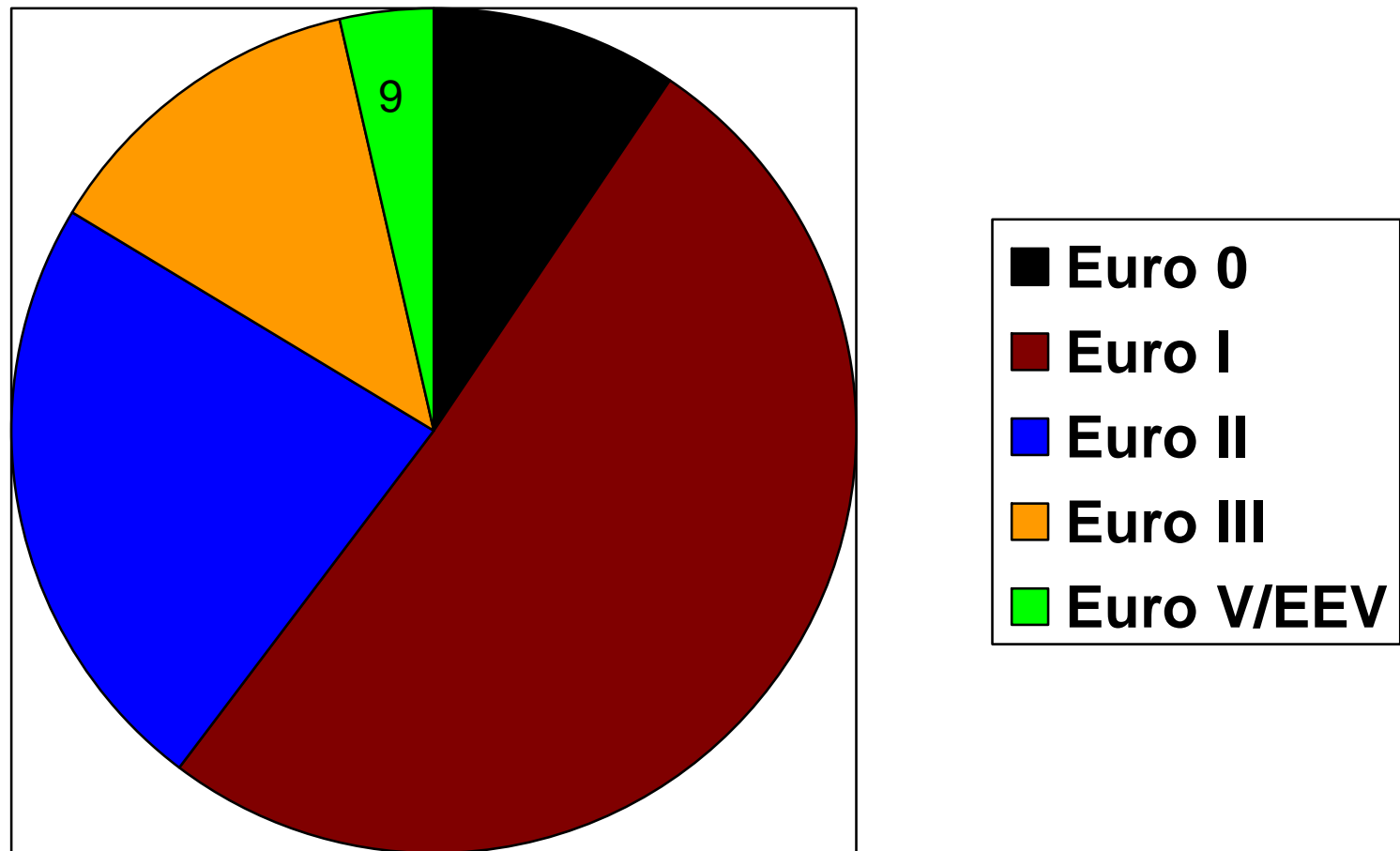


# clean buses

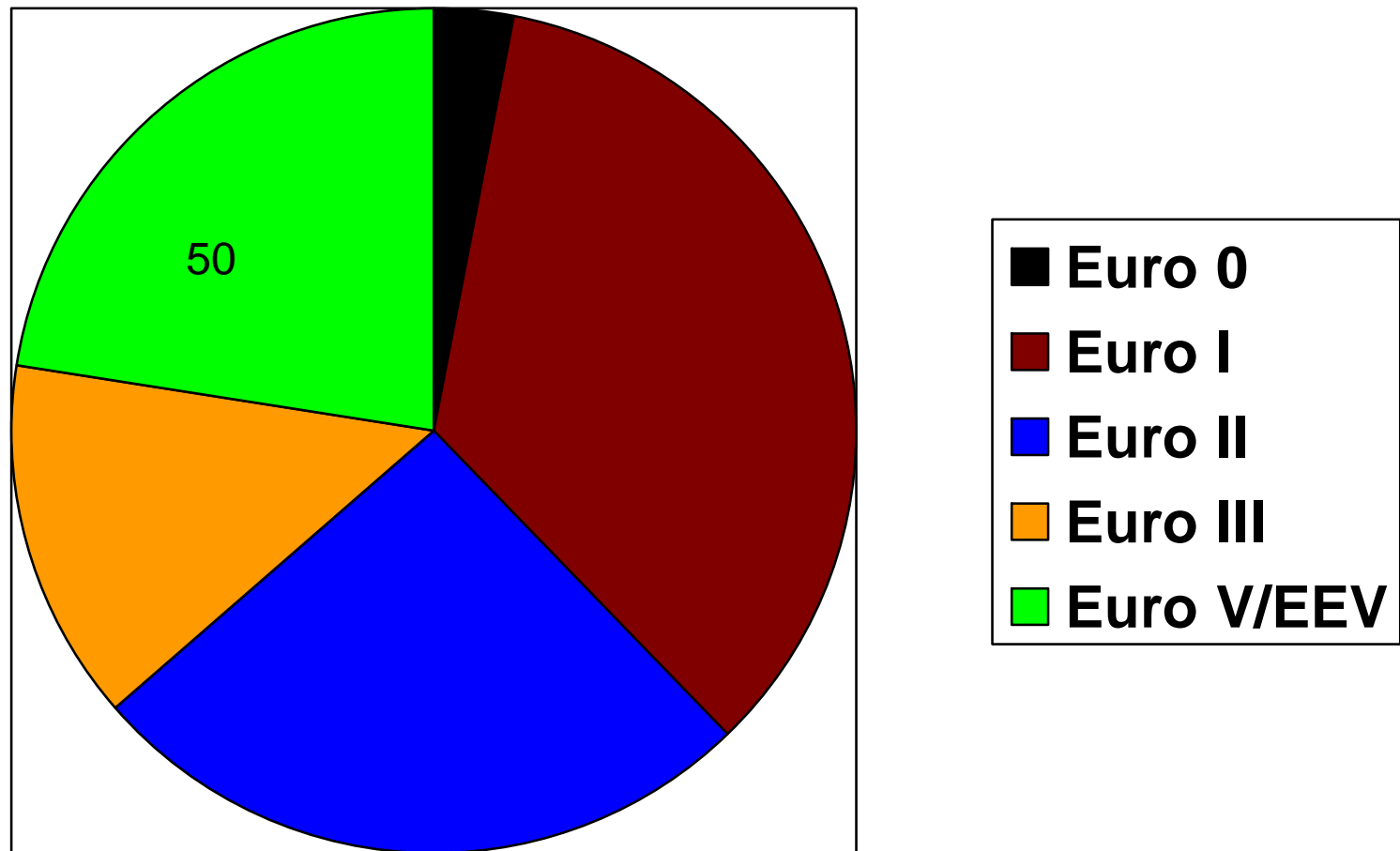
## NO<sub>x</sub>-emission



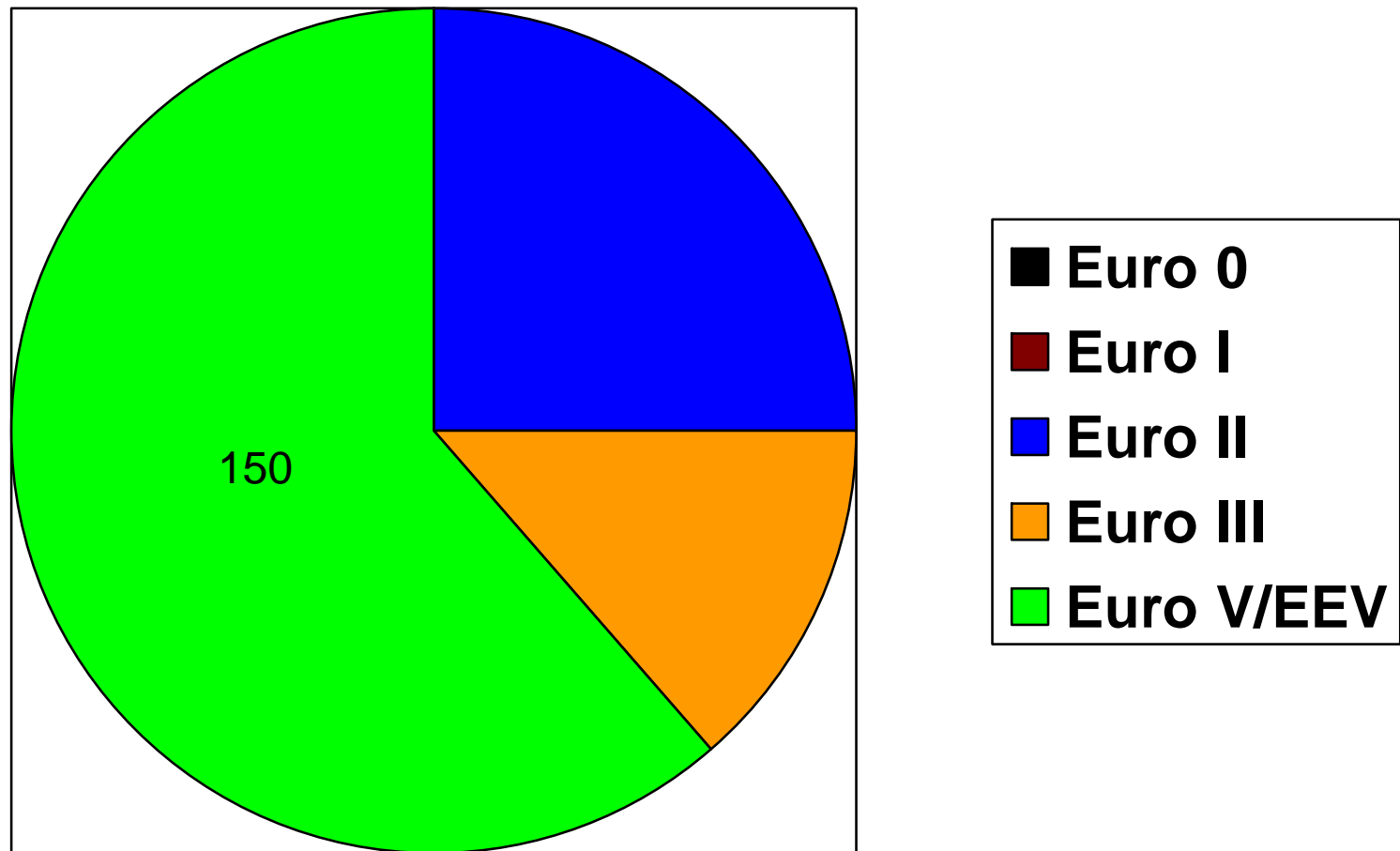
# Fleet composition 2006



# Fleet composition 2008

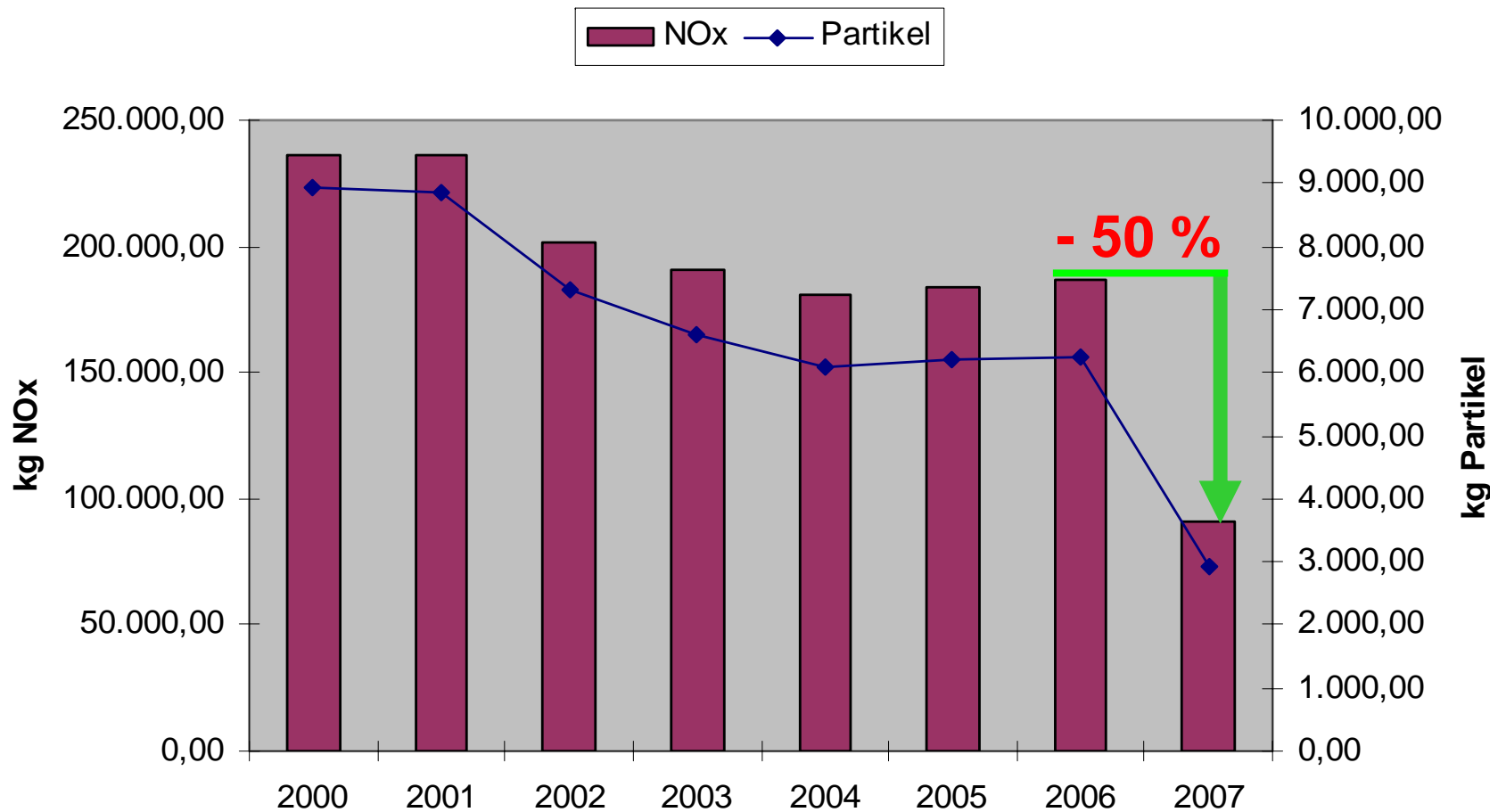


# Fleet composition 2009



# Emission reduction

## Partikel und NOx Emissionen der BSAG-Busse



# Future: Hybrid Propulsion



# Future: Hybrid Propulsion



In practical operation: Diesel-electric hybrid bus in Bremen (articulated)  
Recuperation, low noise 76 db(A), downsized Diesel 178 kW  
Diesel consumption about – 10%



Area 2:

efficient

integrated Public Transport

# Intermodal Integration

easy interchange  
between  
different PT modes



+ Seamless ticketing



# PT Quality standards



- Internet Travel Planner
- Real-Time information
- Displays / announcements in vehicles



# PT Quality standards



- bus lanes
- priority at (intelligent) traffic lights



# Intermodal Cooperation

Intermodal cooperation includes also

- taxi
- Car-Sharing



# Intermodal Cooperation

Intermodal cooperation includes also

- bicycle parking all across the city
- bicycles at all PT stops
- larger ones in the area



Bike-Storage at peripheral station

3.

Walking and Cycling  
- serious part of  
(intermodal) transport

# Walking & Cycling



Important VIP support:  
Former Lord Mayor  
Henning Scherf  
in the election campaigns

# Walking & Cycling

The bicycle is the ultimate zero-emission-vehicle



# Walking & Cycling



- speed reduced zones
- opening one way streets
- on-street bike racks



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# Walking & Cycling



## Infrastructure

- bike parking
- bike racks (decentralised)  
(~ 2500 racks inner city)



# Walking & Cycling

## Bike-Station at the Central Station

- bike-storage
- bike-repair
- bike-rental, maps,...



# Walking & Cycling



Interchange / Bike-Storage

- at all regional train stops



# CIVITAS CATALIST

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with CIVITAS

- Support for study visits,
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- conference participation



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Creating better life quality in  
cities



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