

# ROMA



Comune di Roma

## Rome's Commitment for Kyoto Protocol. **Renewable energies: an answer for climate and energy future problems?**

Transport and Climate Change:  
Challenges and Opportunities for Local and  
Regional Authorities

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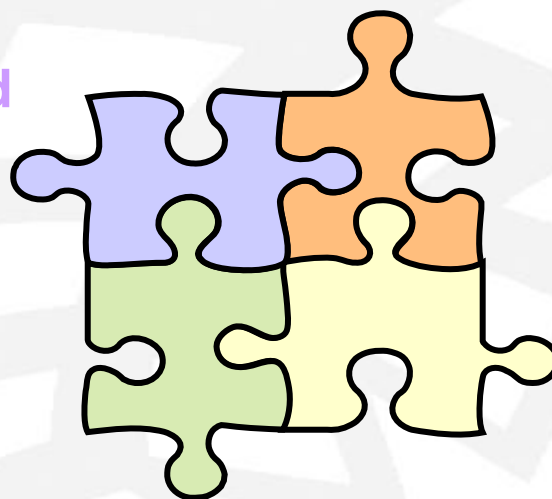
Brussels, Belgium, December 18, 2007

Cllr. Dario Esposito, Deputy for Environment, City of Rome

# An Integrated Strategy

Transport and  
mobility

Waste



Business and  
Household

Energy

Goal: Definition in 2008 of a City Action Plan for the overall reduction of the GHG emissions of 6,5% (compared to 1990 emissions) within 2012 inside the whole municipality territory.

# What we are doing: some examples

- **Mobility**: new underground lines (C and B1 lines). new buses for PT with limited CO2 impact: 30 electric trolleybus, 400 CNG buses (last 60 buses supply to be completed by January 31, 2008), 100 electric light buses, low CO2 impact replacement of the all Euro 2 diesel jumbo-bus.
- **Waste**: extension of the door-to-door differentiated waste collection (100.000 city users within 2008).
- **Energy saving**: in the New City Construction Regulation the need of producing by renewable sources at least 30% of power supply and 50% of hot water for new buildings is introduced (City Council Act n. 48/2006)



# Some detail on mobility in Rome



- surface	1.285 (Km <sup>2</sup> )
-residents	2,8 (ml)
-Metropolitan Area	4,5 (ml)
- road network	5.000 (Km)
- vehicles	2,6 (ml)
cars	1.960.000
2 wheels	505.000
delivery of goods	150.000
- daily trips	6,1 (ml)

## Rome and...

- Historic heritage across centuries
- Narrow roads: no modifications possible
- Italian Capital City (Gov / Institutions)
- Presence inside of **Vatican State**
- The Attitude towards private cars
- The Tourists (>23 millions per year)
- Tourist coaches: 200.000 per year

# From the problem to the solution: the Management of Mobility issues.

- **Traffic Demand Management** (Urban traffic Masterplan with PT priority, access limitations, area pricing)
- **New “Hard” Mobility Infrastructures** (Underground and Urban Rails)
- **New “Mobility Corridors” and Reserved Lanes** (Surface Transport)
- **Fleet Renewal & Monitoring** (bus and cars, towards lower emissions)
- **Sustainable Mobility (EC CIVITAS Initiative) package** (car sharing, car pooling, mobility soft measures, awareness)
- **Technologies and ITS** for mgmt, monitoring & enforcement
- **International co-operation:** Sharing experiences, benchmarking, test of new technologies

# The model: 5 concentric zones

zone

constraints

**Municipality Area**  
1285 s.km

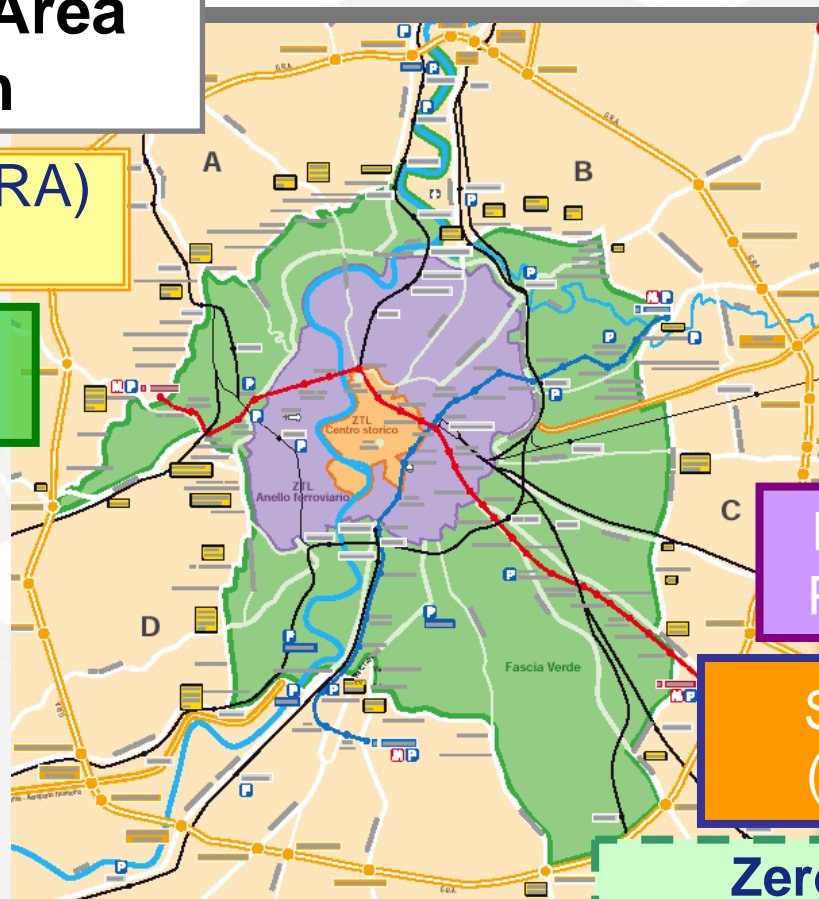
**External Ring (GRA)**  
344 s.km

**Green Belt**  
154 s.km

**Rail Ring**  
48.4 s.km

**LTZ**  
9.5 s.km

**Pedestrian**  
1 s.km



**Outside External Ring No Constraints**

**Tourist Coaches Regulation**

**Pollution emergencies Multi-modal nodes Park&ride**

**Emission Constraints Pay parking schemes**

**Stop to All Vehicles (only permit older)**

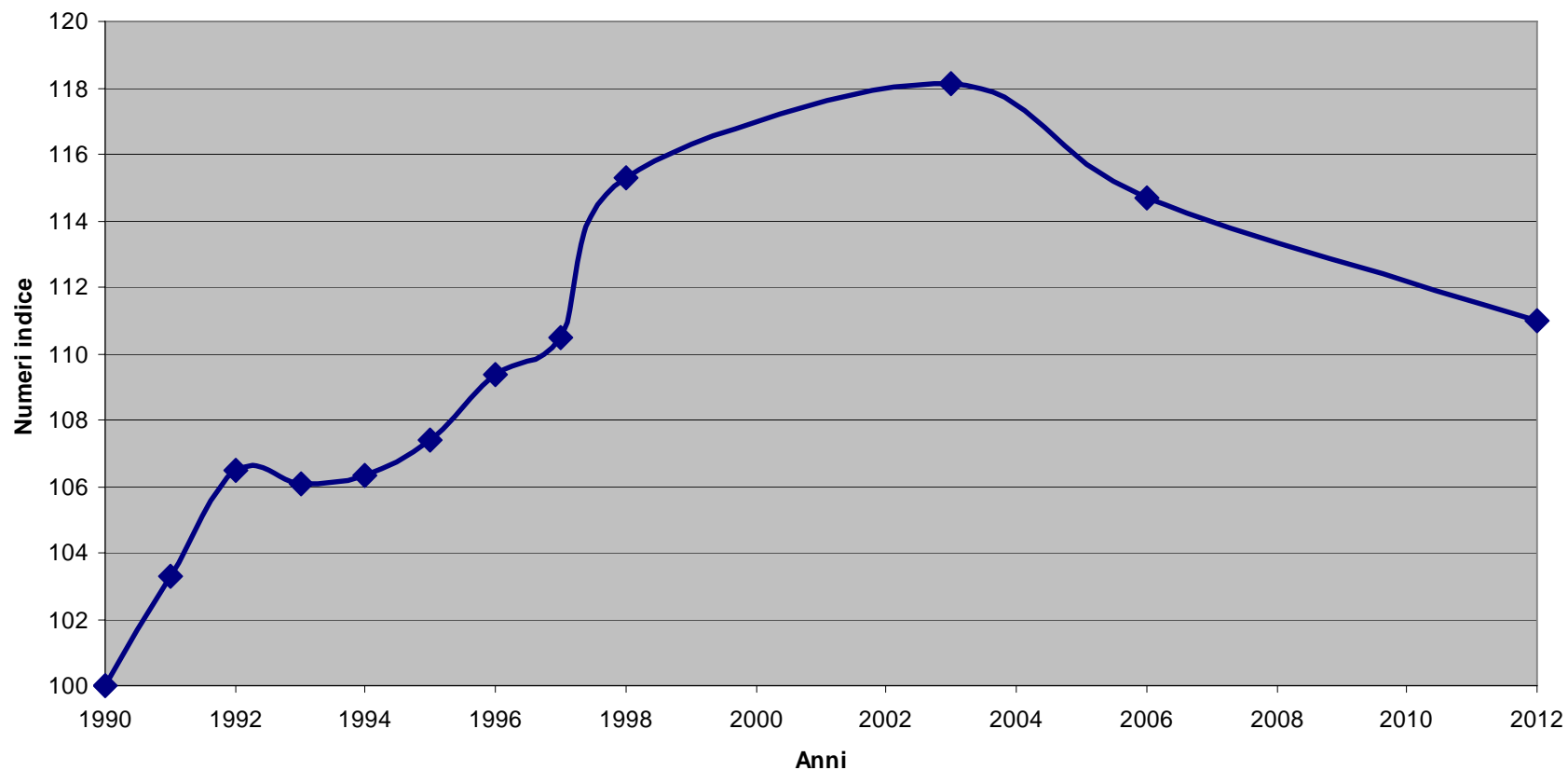
**Zero Emission Area (walking & electric)**

# Evolution of PT infrastructure offer

Investment Plan of 3.000 MEuro until 2011, 9.200 until 2020

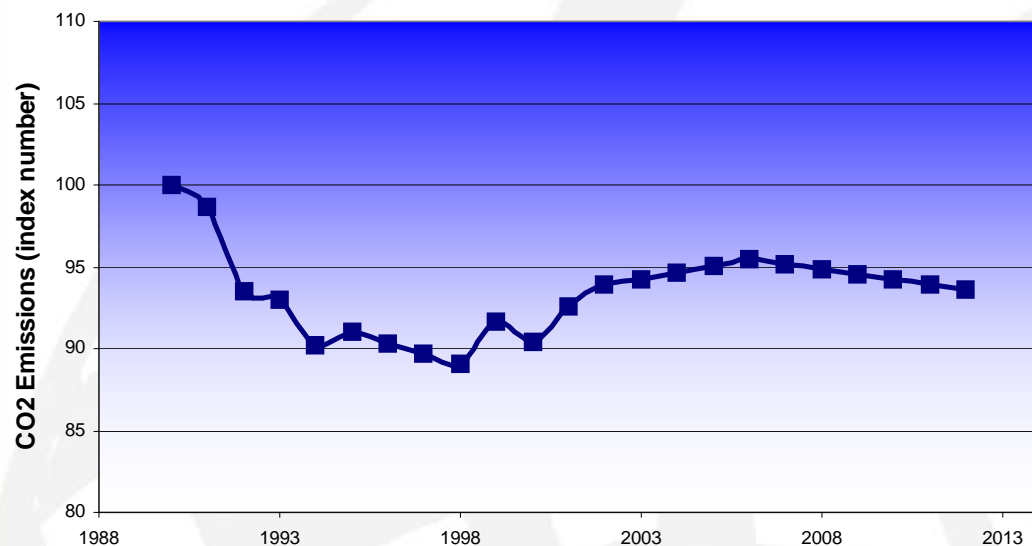
	2006	2012	
■ Urban railways (km)	112	123	(+10%)
■ Underground (km)	36	47	(+30%)
■ Bus Corridors (km)	13	130	(+900%)
■ Rail Network (km)	206	395	(+190%)
■ Stops (n.)	365	586	(+160%)
■ Seats/km (ml)	5,8	8,2	(+140%)

# CO2 from mobility until 2012

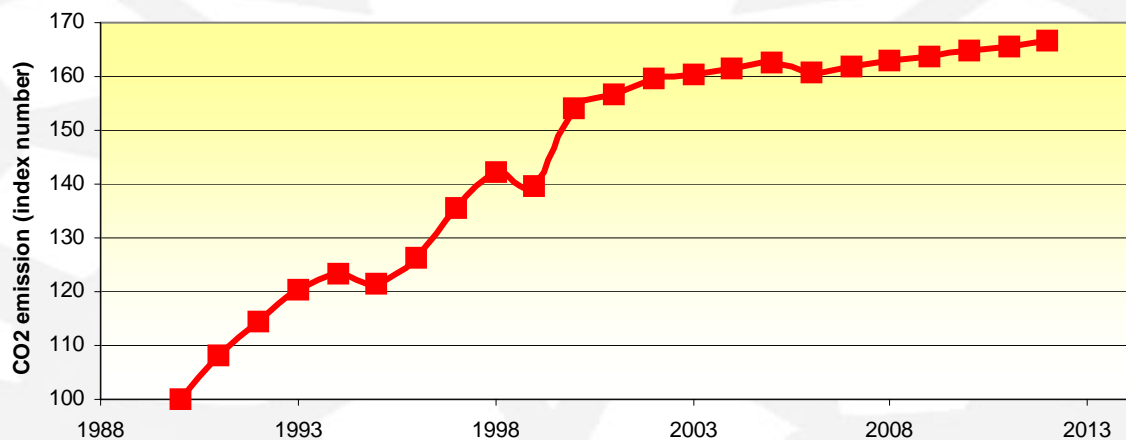




# CO2 emission from Household ...



.. and from  
Commercial  
Sector until 2012



## CUMULATIVE TABLE (CO2 Kton)

Sectors	1990	2012 (Kyoto objective)	2012 (Present Status)	Distance from the objective
Residential	4260	3980	3990	10
Transport	4000	3740	4450	710
Commercial	1860	1740	3110	1370
Waste	1200	1120	250	-870
Energy	1160	1090	1020	-70
Industry	410	390	390	0
Agriculture	260	240	150	-90
Gross Emissions	13150	12300	13360	1060

# Voluntary Agreement

- Rome Municipality, in order to prepare the Action Plan to achieve the goals of Kyoto Protocol for the City of Rome, decided to use the “**Participated process**” tool.
- Through the signature of this Voluntary Agreement, 39 subjects, among them companies, trade associations, energy societies, trade-union organizations, environmental agencies and other stakeholders operating in the City of Rome, are having an **active participation** to exchange data and elaborate sector analysis in order **to promote joint operational proposals**.



## **“Clinton Climate Initiative” Program**



**C40CITIES**  
CLIMATE LEADERSHIP GROUP

- implementation of photovoltaic panels and thermic solar technology in 650 municipal buildings (schools, sport plants, public offices and markets)
- Substitution of the traffic lights with 75.000 high efficiency leds (-10.000 tons/year of CO2)

# Urban reforestation plan

- Completion of the urban reforestation plan, already started in “Trullo park” in the “Riserva Naturale Valle dei Casali”, with the insertion of 12.500 trees in 10 hectares of land (Monte Cucco)
- Goal: half million of trees in 5 years (- 29 thousand tons per year of CO2)







Trullo Park in the Riserva Naturale Valle dei Casali – XV City Bourough

# Thank you for your kind attention!

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