

6^a Conferenza Nazionale Mobility Management

PARMA – 3 Marzo 2006

Il secondo Rapporto APAT sulla qualità dell'ambiente urbano

Mobilità urbana e qualità dell'aria

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con la collaborazione di

Massimiliano Bultrini, Giorgio Cattani, Natascia Di Carlo, Federica Moricci, Ernesto Taurino

Dipartimento Stato dell'Ambiente e Metrologia Ambientale

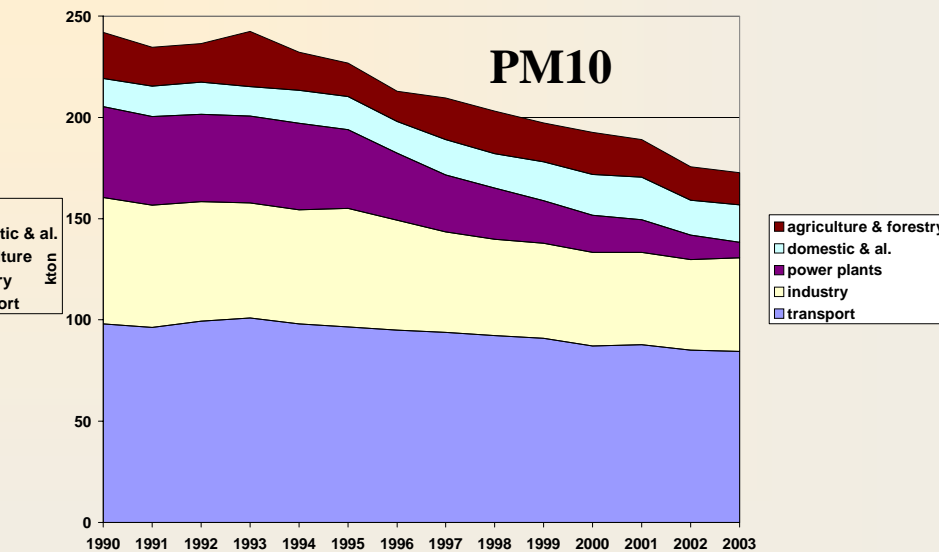
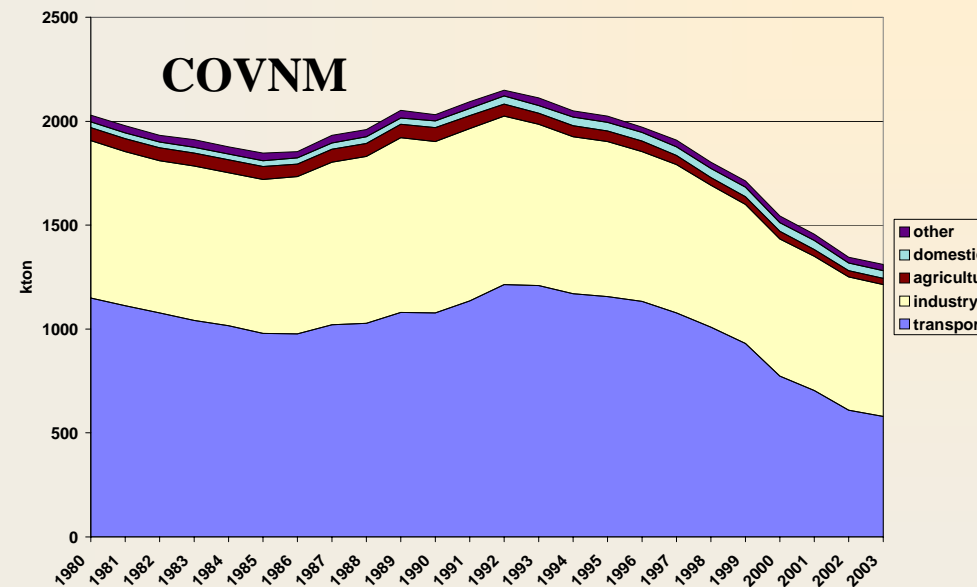
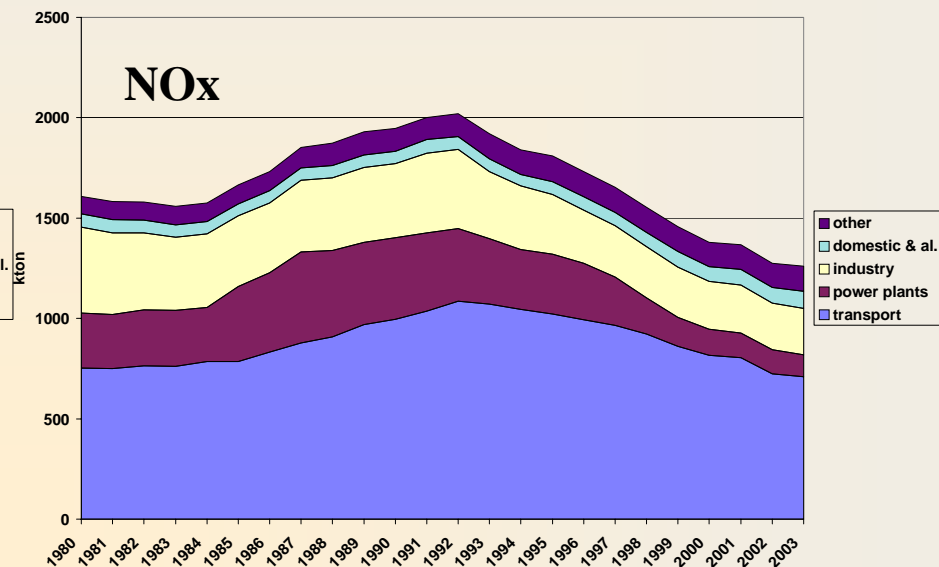
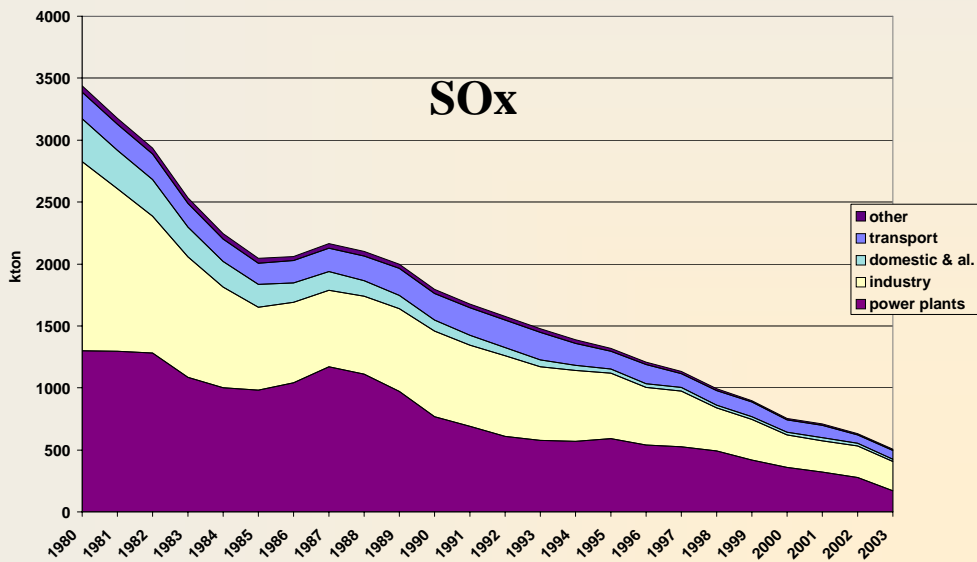
APAT



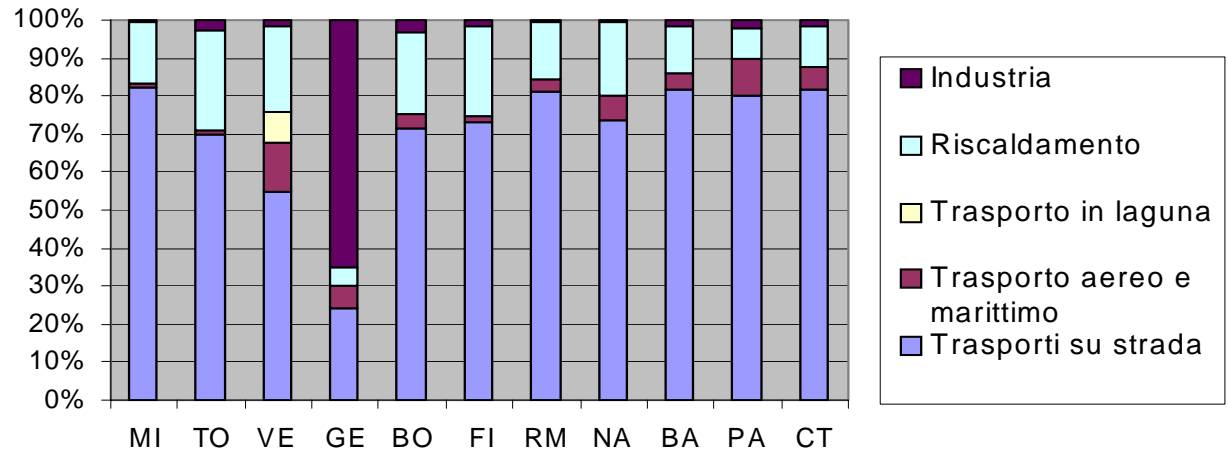
APAT

Agenzia per la protezione dell'ambiente e per i servizi tecnici

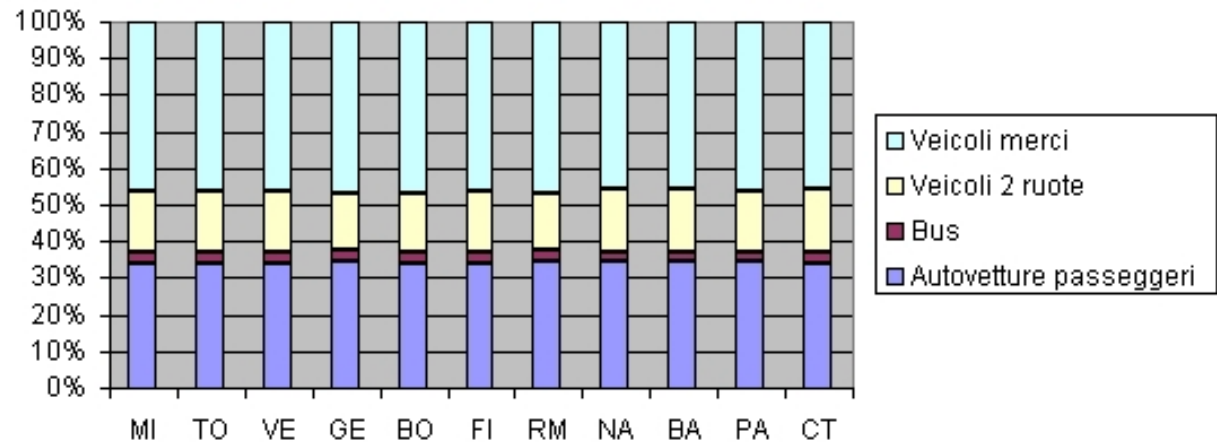
EMISSIONI NAZIONALI DI ALCUNI INQUINANTI



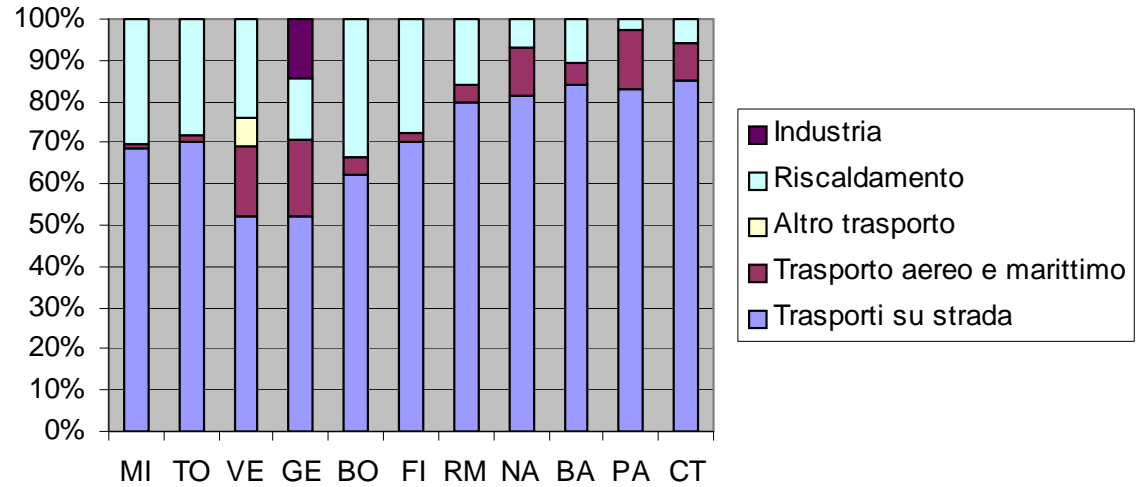
Emissioni comunali di PM10 primario nel 2000



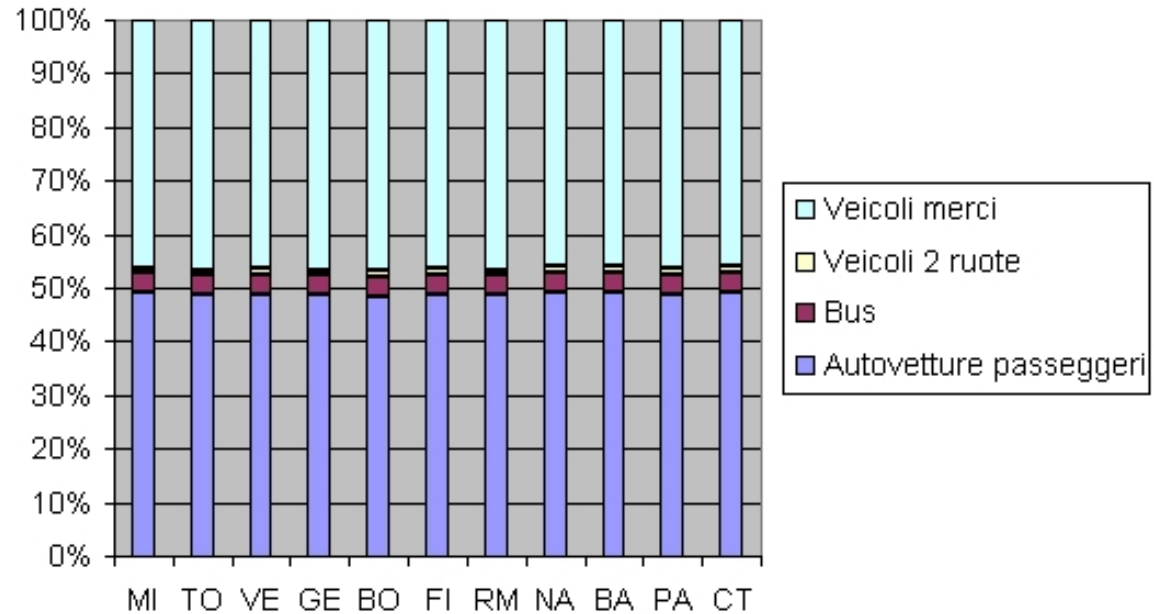
Emissioni comunali di PM10 primario da trasporto stradale nel 2000



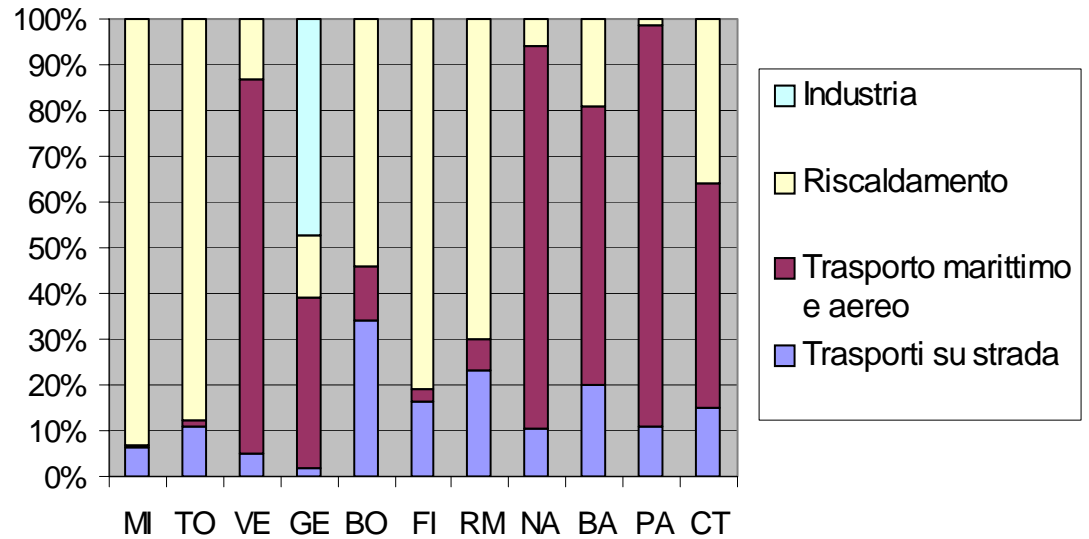
Emissioni comunali di NOx nel 2000



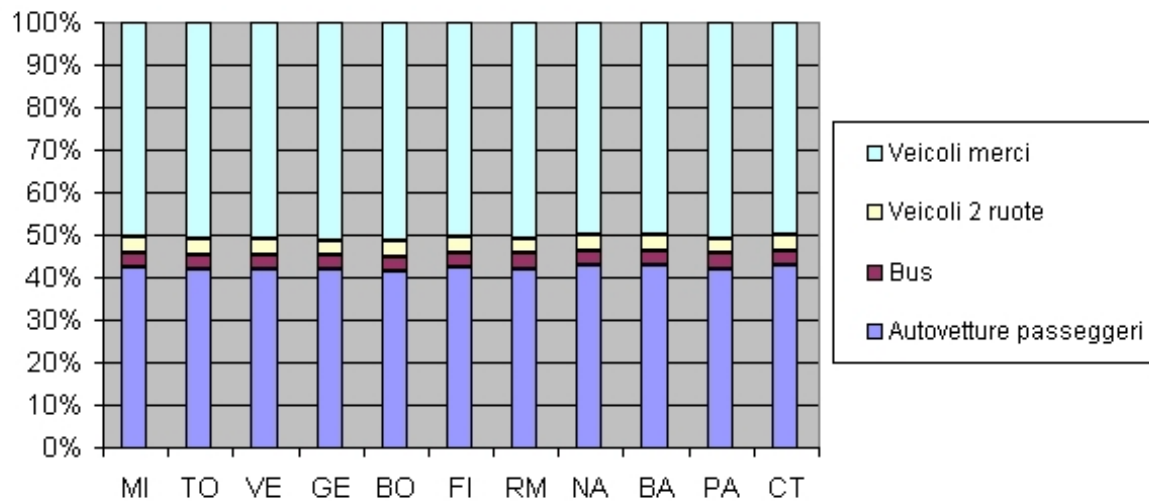
Emissioni comunali NOx da trasporto stradale nel 2000



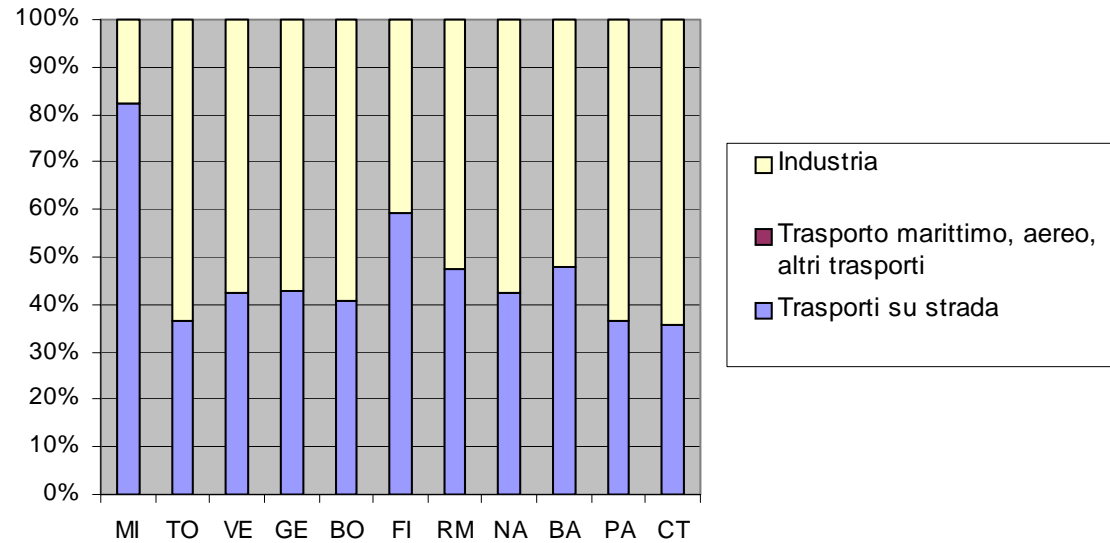
Emissioni comunali di SOx nel 2000



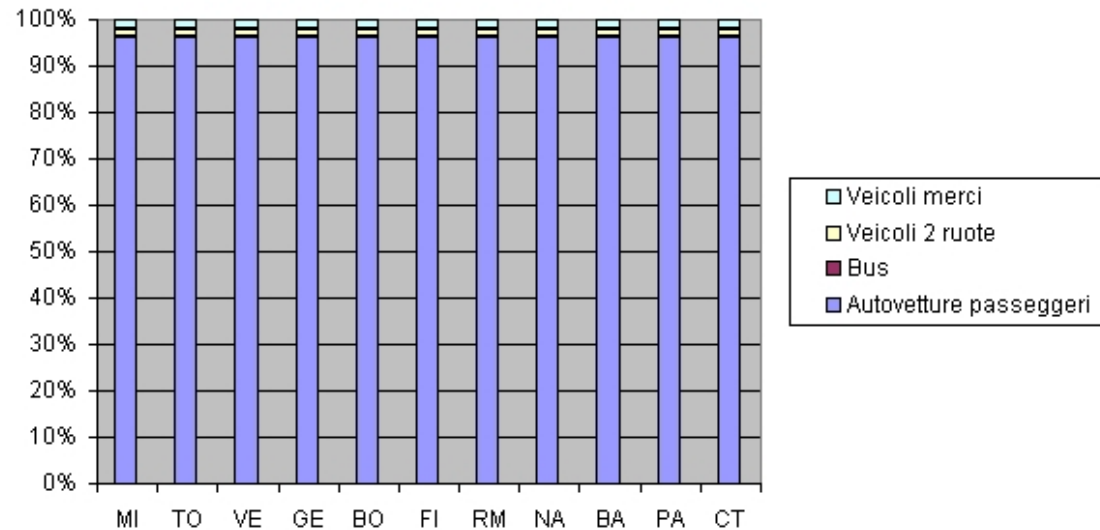
Emissioni comunali di SOx da traffico stradale nel 2000



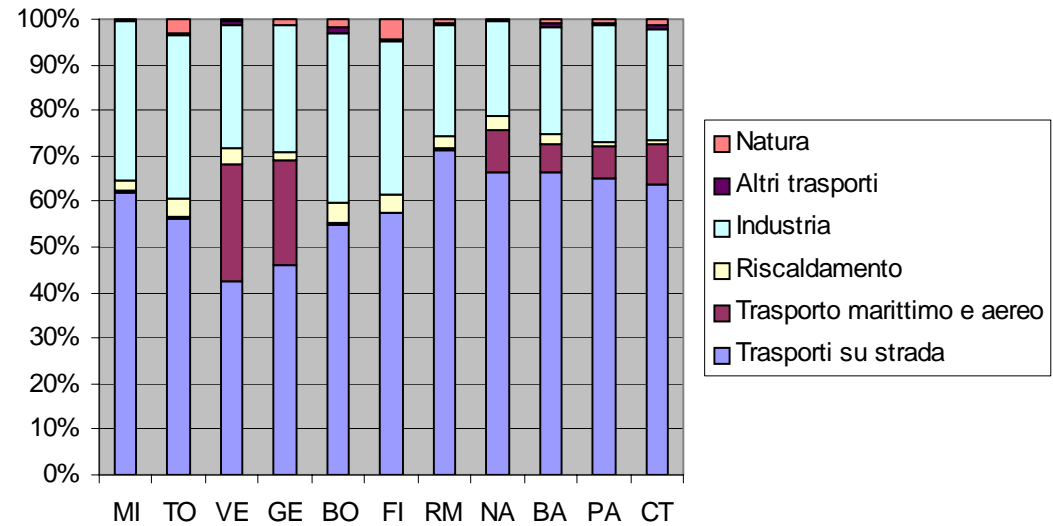
Emissioni comunali di NH3 nel 2000



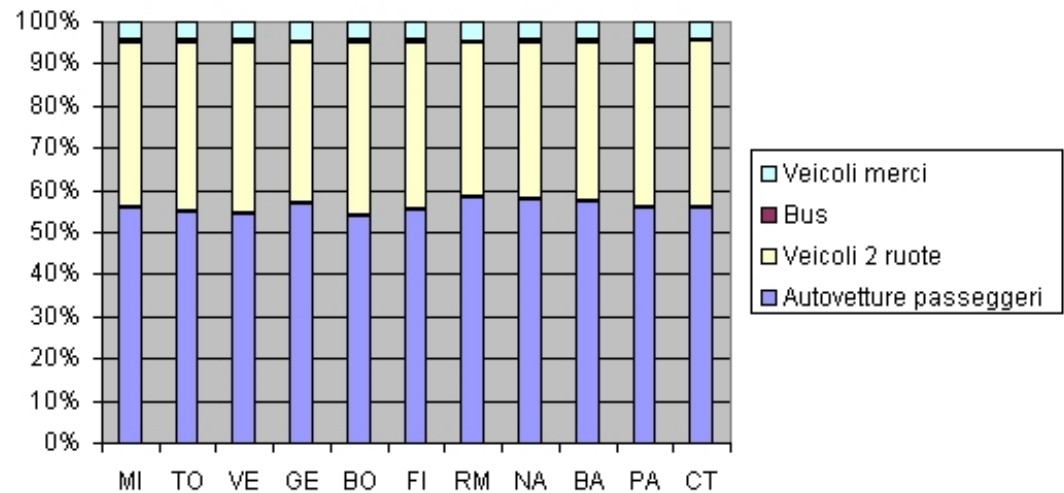
Emissioni comunali di NH3 da trasporto stradale nel 2000



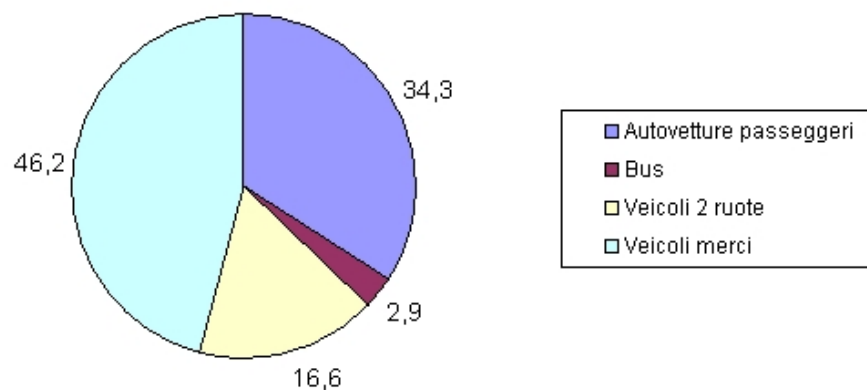
Emissioni comunali di COVNM nel 2000



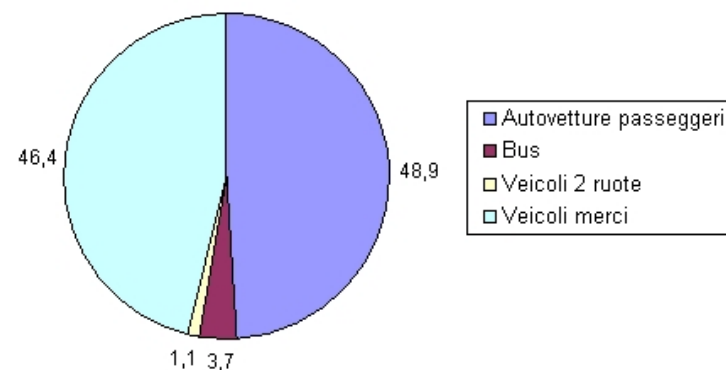
Emissioni urbane di COVNM da trasporto stradale nel 2000



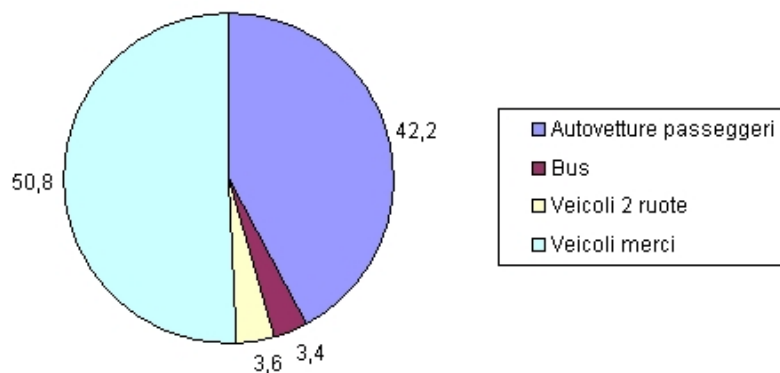
% media di emissioni comunali di PM10 primario da trasporto stradale nel 2000



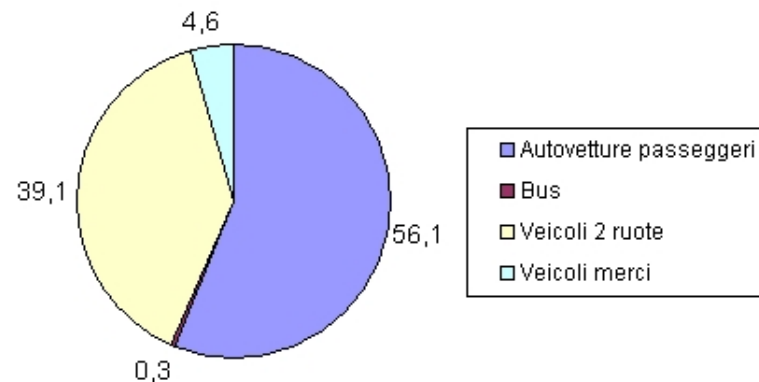
% media di emissioni comunali di NOx da trasporto stradale nel 2000



% medie di emissioni comunali di SOx da trasporto stradale nel 2000



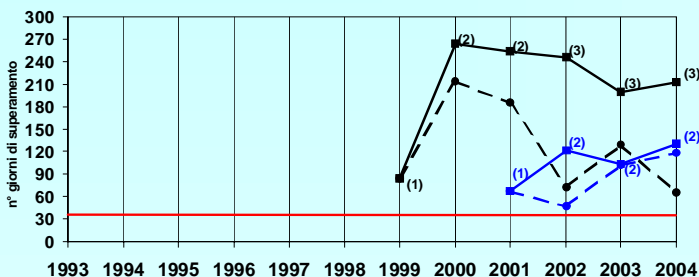
% media di emissioni comunali di COVNM da trasporto stradale nel 2000



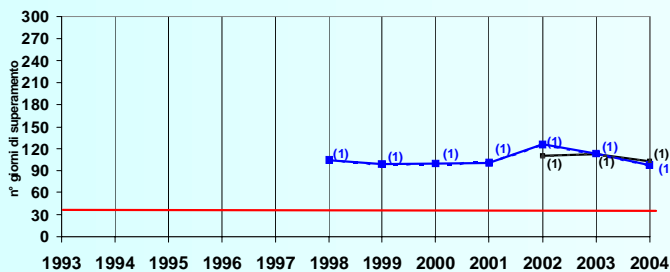
La qualità dell'aria nelle principali città italiane

Numero di giorni di superamento del valore limite giornaliero del PM₁₀

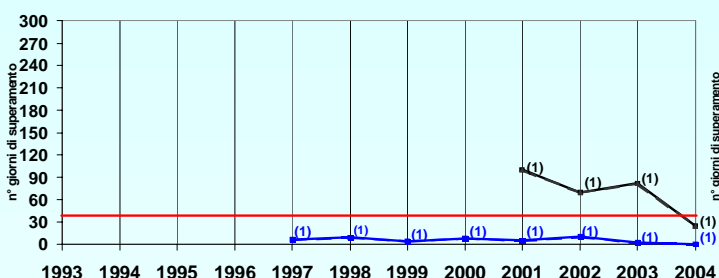
TORINO



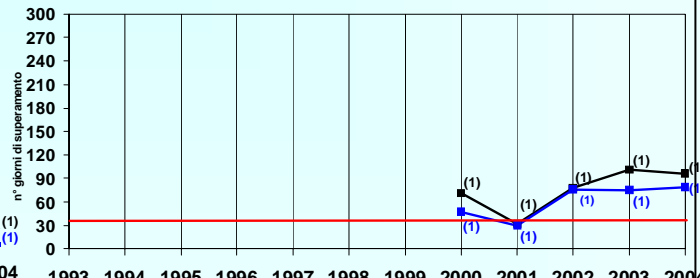
MILANO



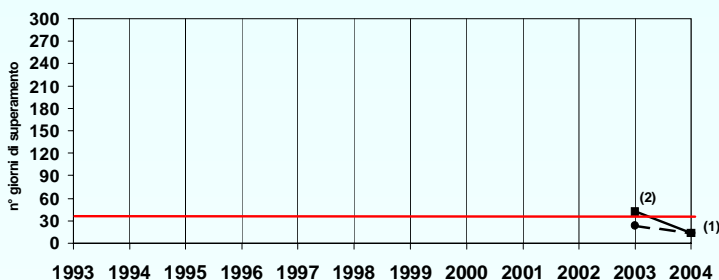
GENOVA



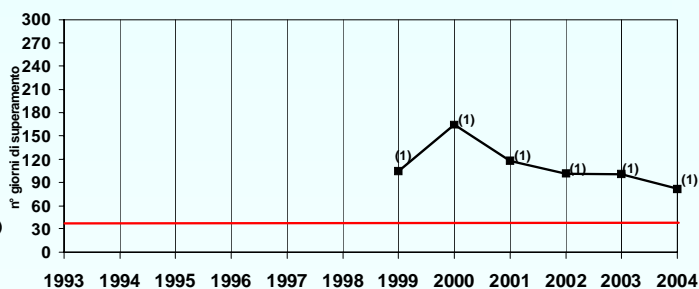
VENEZIA



TRIESTE



BOLOGNA



LEGENDA

STAZIONI TRAFFICO - Valore MAX rilevato

STAZIONI TRAFFICO - Valore min rilevato

STAZIONI FONDO - Valore MAX rilevato

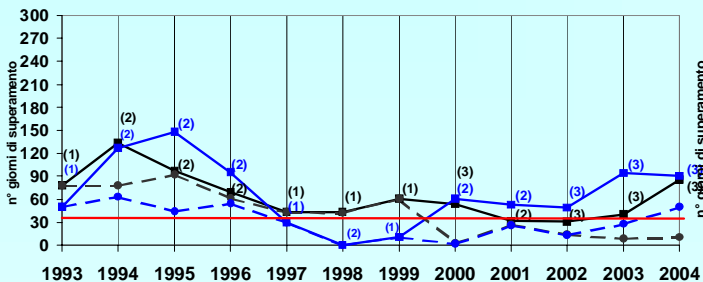
STAZIONI FONDO - Valore min rilevato

VALORE LIMITE

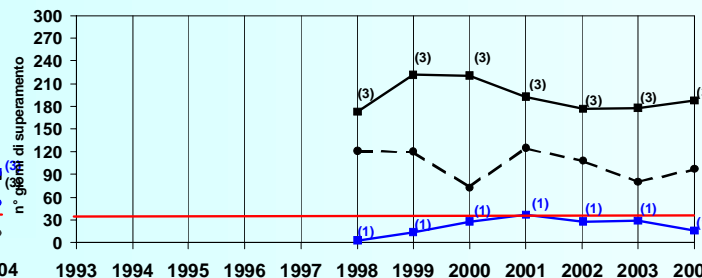
N.B. tra parentesi è riportato il numero di stazioni considerate

Numero di giorni di superamento del valore limite giornaliero del PM₁₀

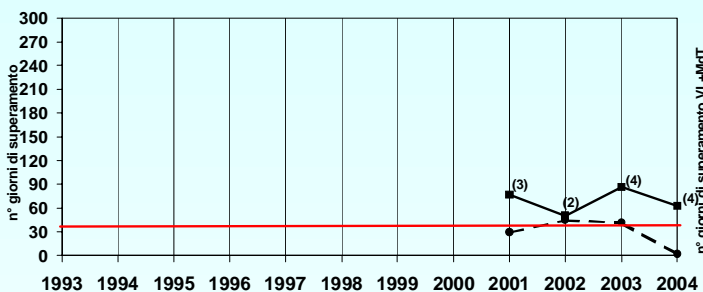
FIRENZE



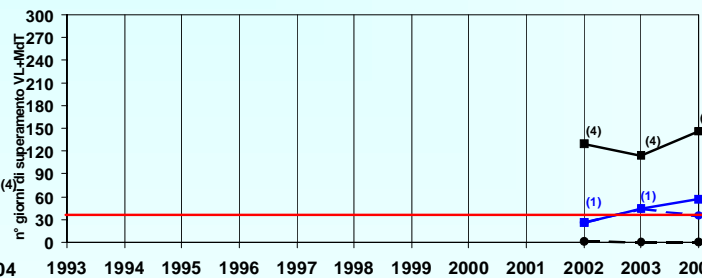
ROMA



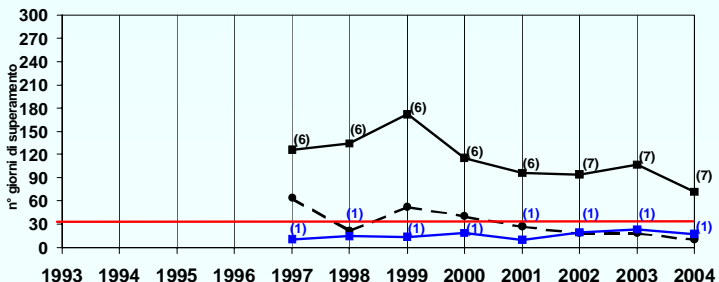
NAPOLI



BARI



PALERMO



LEGENDA

STAZIONI TRAFFICO - Valore MAX rilevato

STAZIONI TRAFFICO - Valore min rilevato

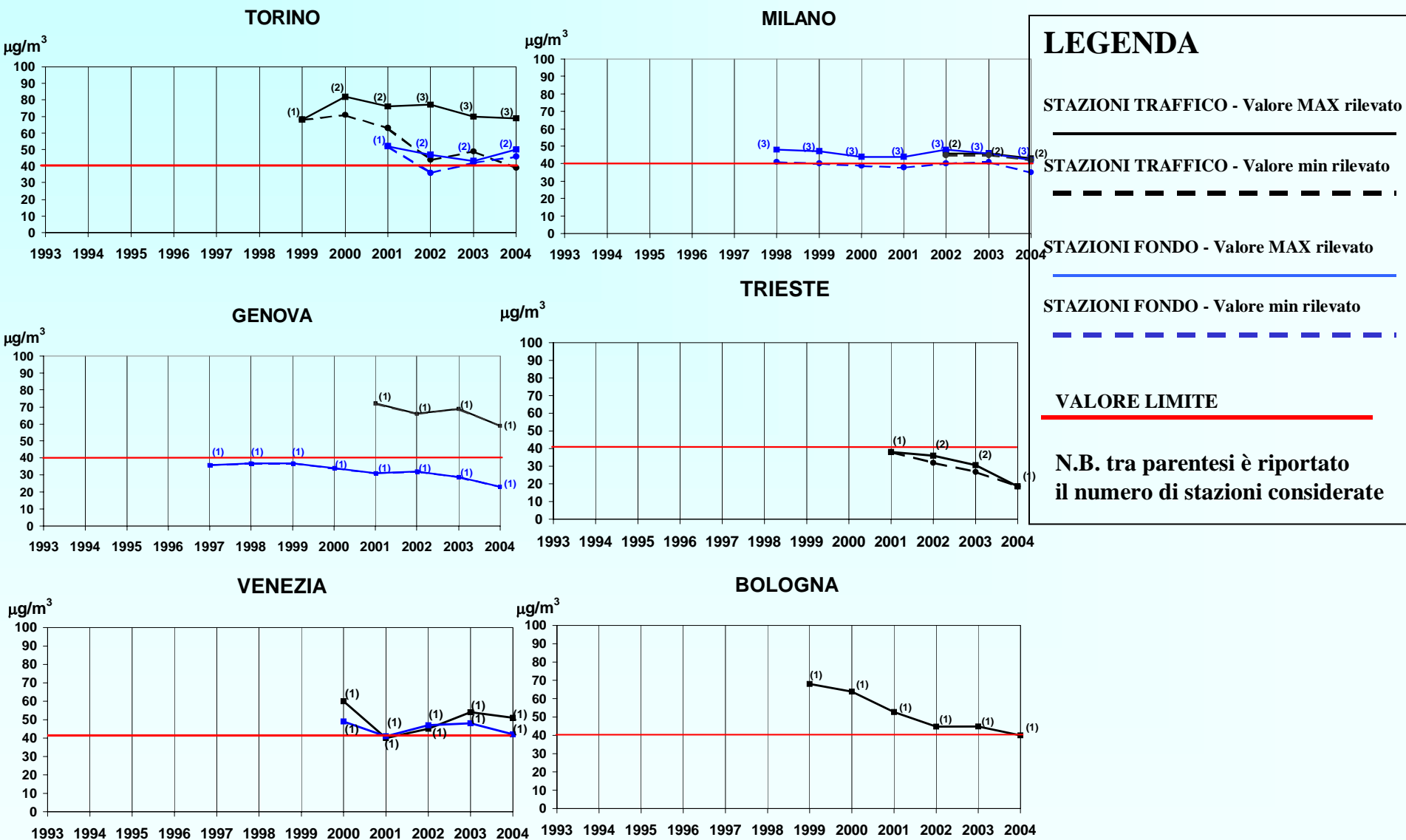
STAZIONI FONDO - Valore MAX rilevato

STAZIONI FONDO - Valore min rilevato

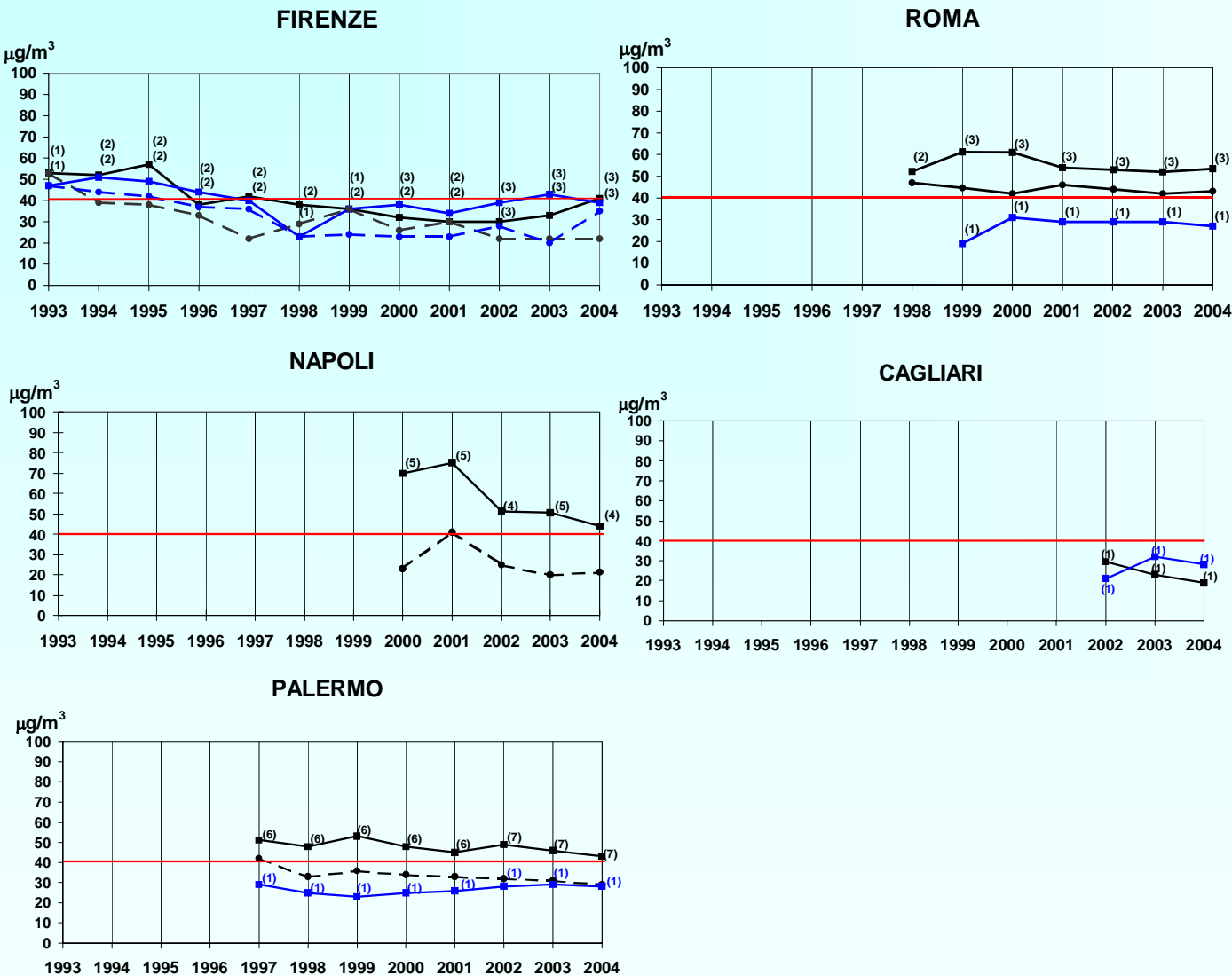
VALORE LIMITE

N.B. tra parentesi è riportato il numero di stazioni considerate

Valori massimi e minimi delle concentrazioni medie annue di PM₁₀



Valori massimi e minimi delle concentrazioni medie annue di PM₁₀



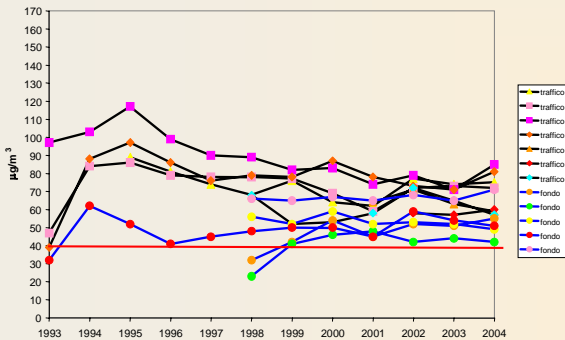
LEGENDA

- STAZIONI TRAFFICO - Valore MAX rilevato (solid black line)
- STAZIONI TRAFFICO - Valore min rilevato (dashed black line)
- STAZIONI FONDO - Valore MAX rilevato (solid blue line)
- STAZIONI FONDO - Valore min rilevato (dashed blue line)
- VALORE LIMITE (red horizontal line)

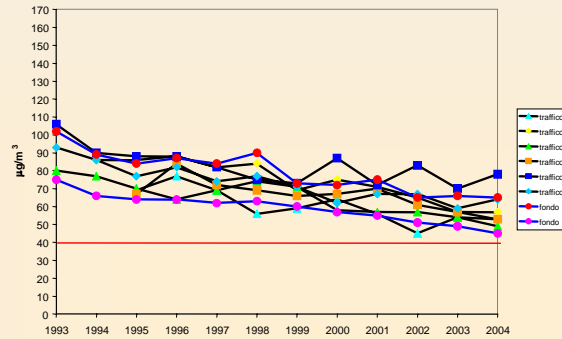
N.B. tra parentesi è riportato il numero di stazioni considerate

CONCENTRAZIONE MEDIA ANNUA DI NO₂

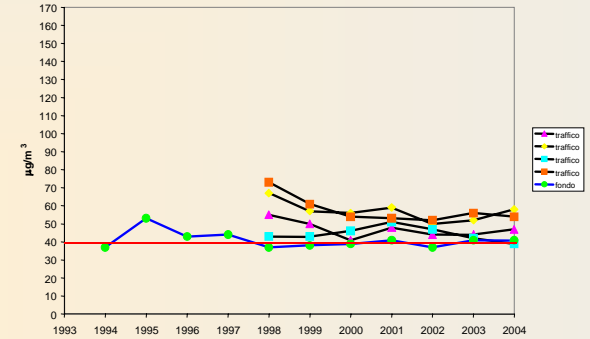
TORINO



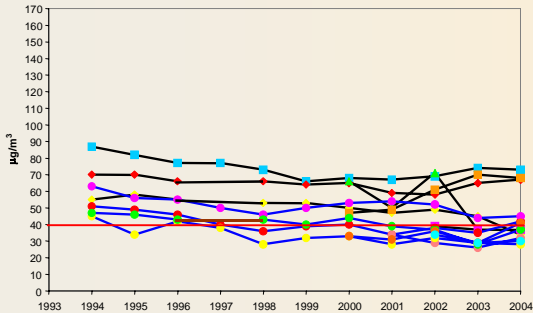
MILANO



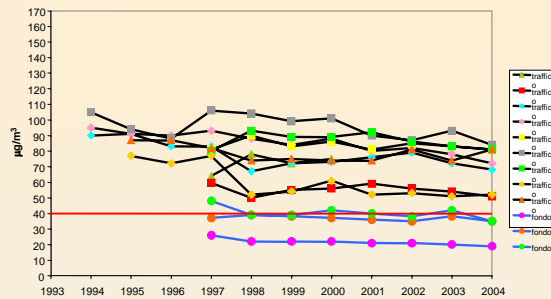
BOLOGNA



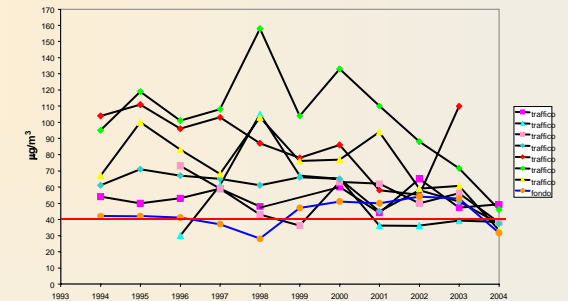
FIRENZE



ROMA



NAPOLI



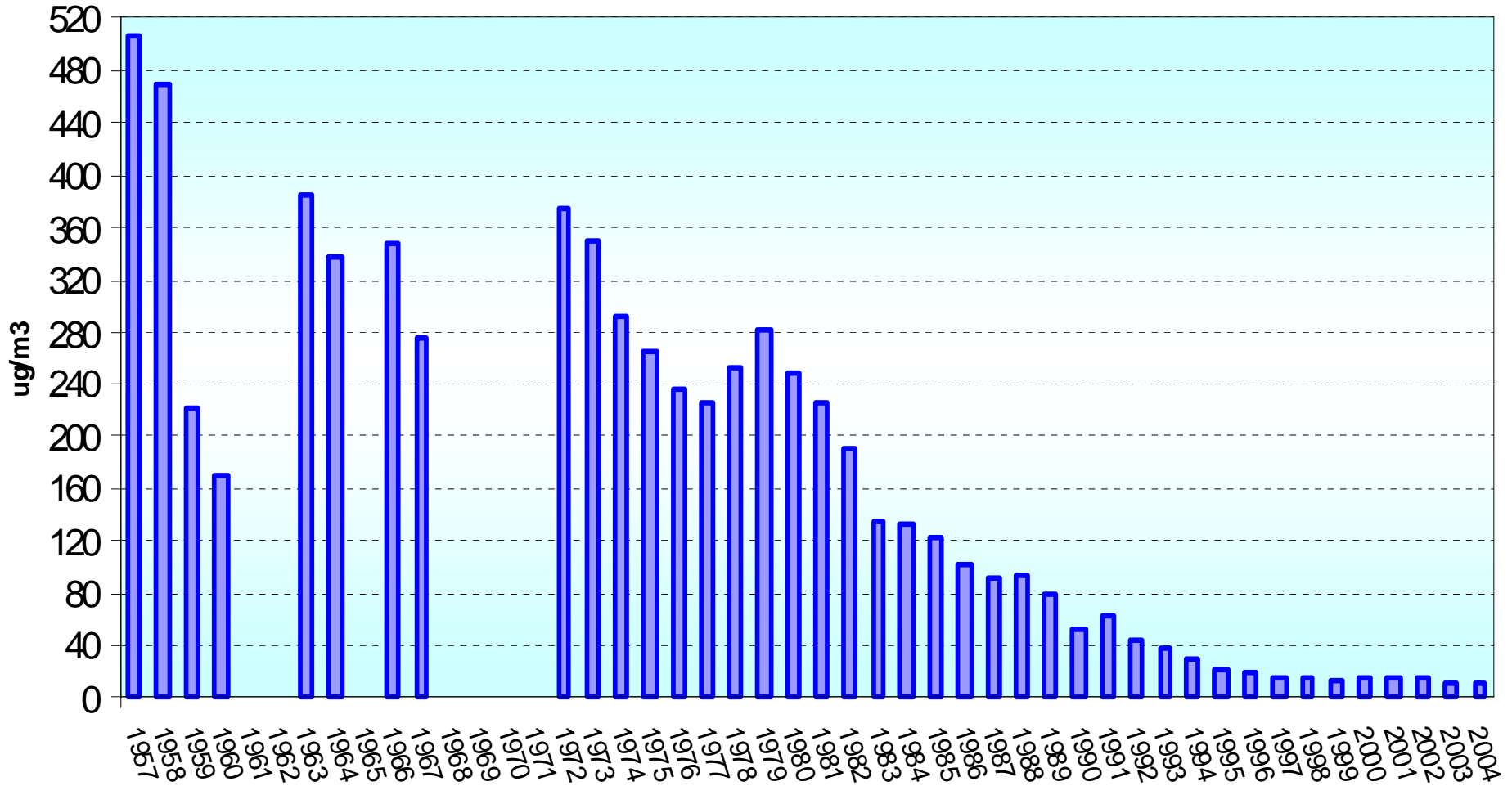
La qualità dell'aria a Parma

PM10 : media annua (valore limite: 40 $\mu\text{g}/\text{m}^3$)					
STAZIONE	TIPO di STAZIONE	DES_TP_STAZIONE	2002	2003	2004
PRCTDLA - parco cittadella	Fondo urbano	Background	39 *	44	
PRMNTBL - via montebello	Urban	Traffic	34 *		
PRSPLTO - via spalato	Urban	Traffic	61	41	
NO2 : media annua (valore limite al 2010: 40 $\mu\text{g}/\text{m}^3$)					
STAZIONE	DES_TP_ZONA	DES_TP_STAZIONE	2002	2003	2004
PRCTDLA - parco cittadella	Urban	Background		33	
PRMNTBL - via montebello	Urban	Traffic		50	
PRSPLTO - via spalato	Urban	Traffic	38	41	
PRMLZZO - viale milazzo	Urban	Traffic		62	
C6H6 : media annua (valore limite al 2010: 5 $\mu\text{g}/\text{m}^3$)					
STAZIONE	DES_TP_ZONA	DES_TP_STAZIONE	2002	2003	2004
PRSPLTO - via spalato	Urban	Traffic	3	2	
PRVTRIA - viale vittoria	Urban	Traffic			10
O3 : numero giorni di superamento della soglia di informazione di 180 $\mu\text{g}/\text{m}^3$ (valore orario)					
STAZIONE	DES_TP_ZONA	DES_TP_STAZIONE	2002	2003	2004
PRCTDLA - parco cittadella	Urban	Background		25	

* INDICA DATI CON NUMEROSITA' INFERIORE AL 75%

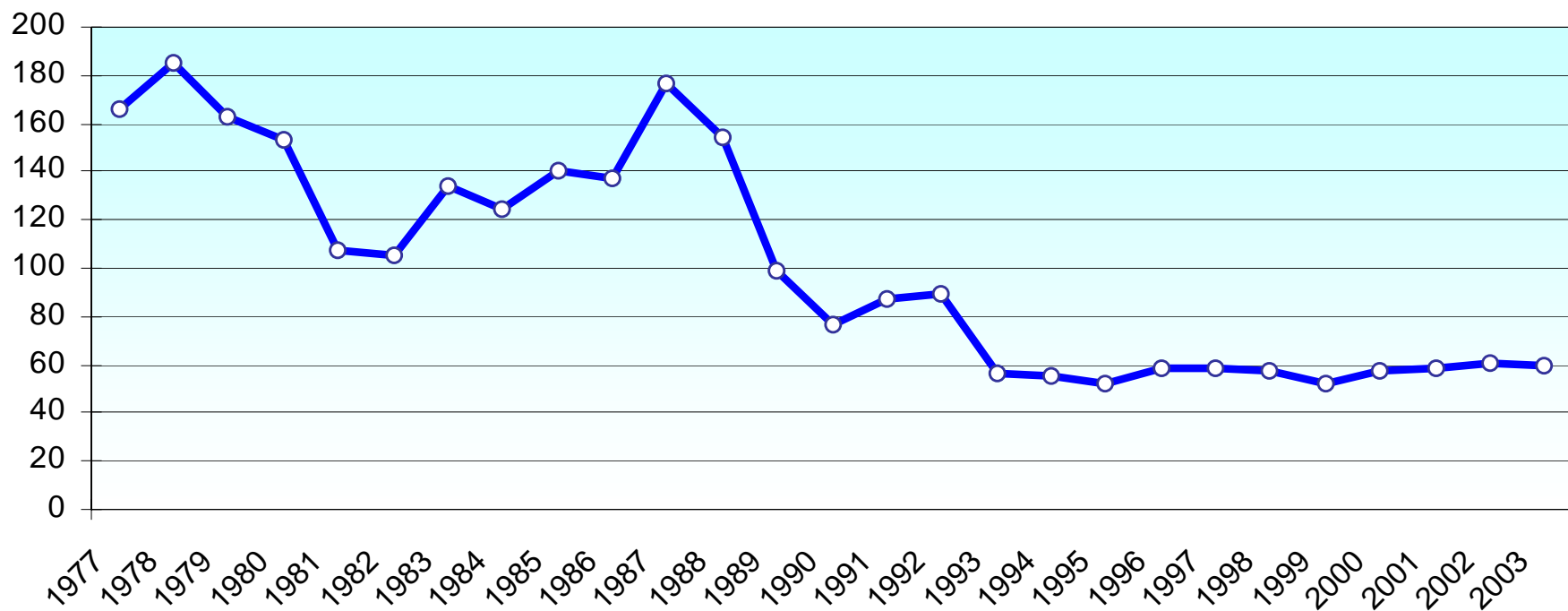
La qualità dell'aria: serie storiche di lungo periodo

Concentrazione media annua SO2 MILANO Juvara

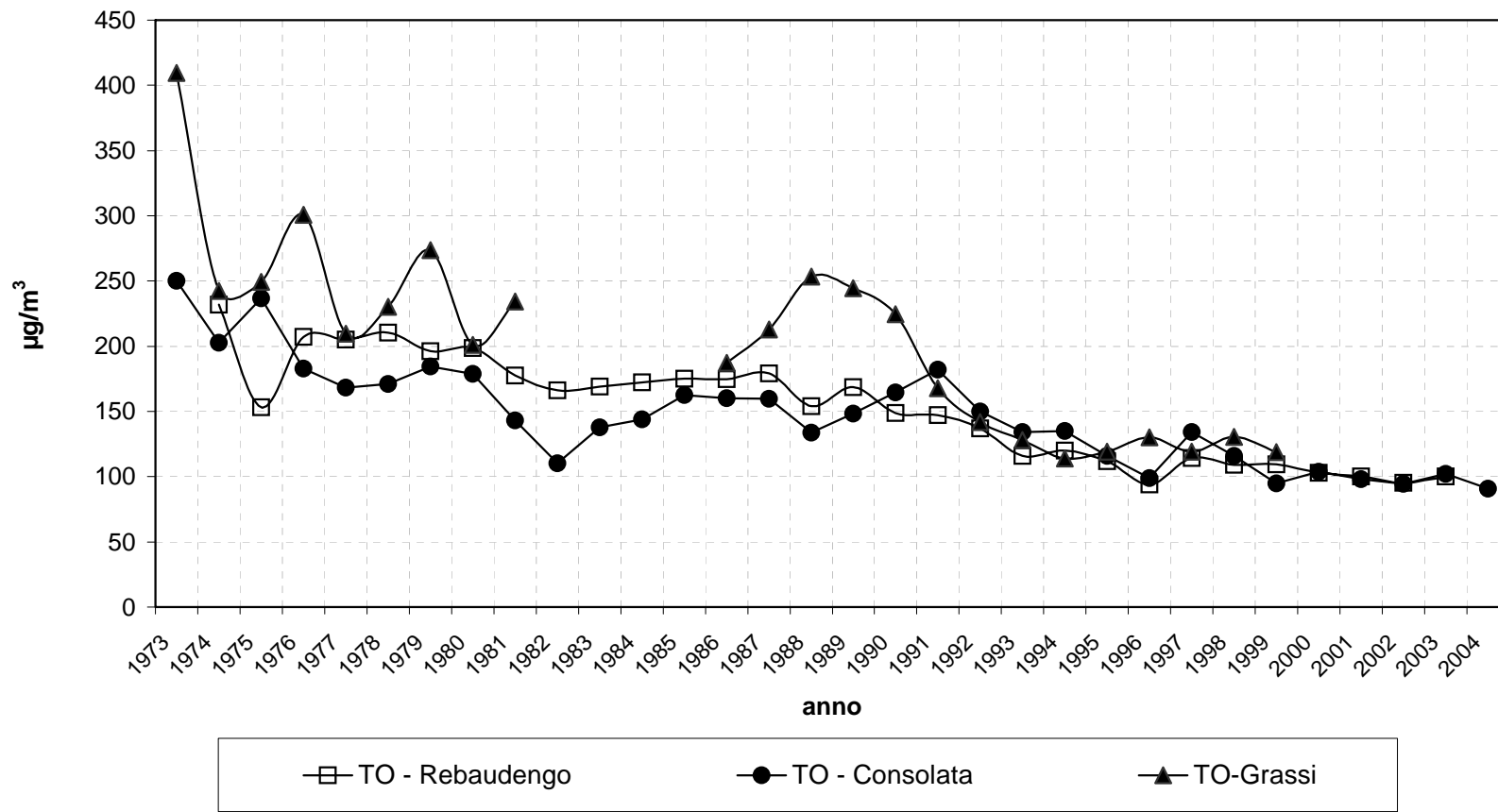


Milano

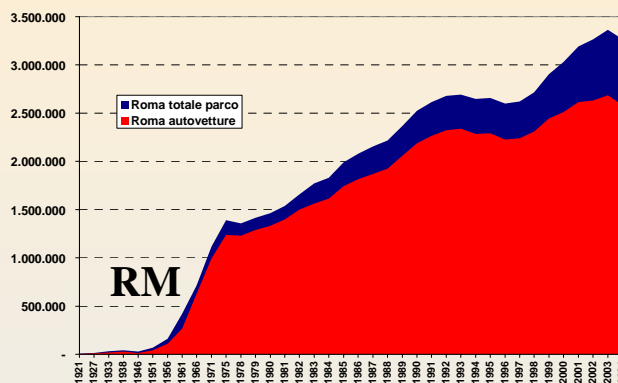
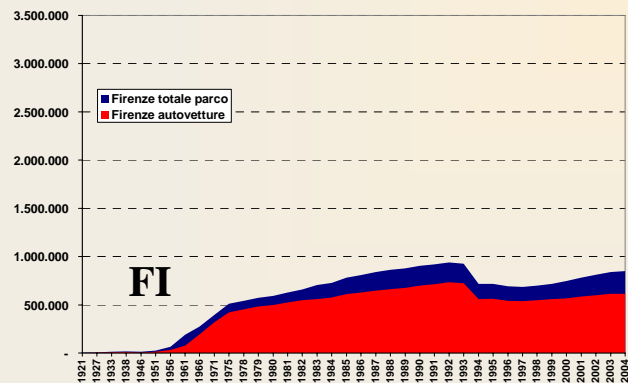
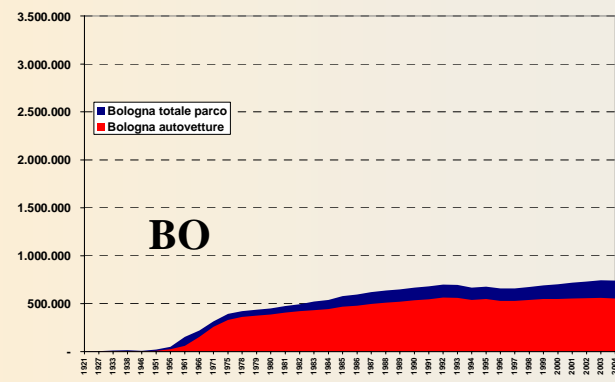
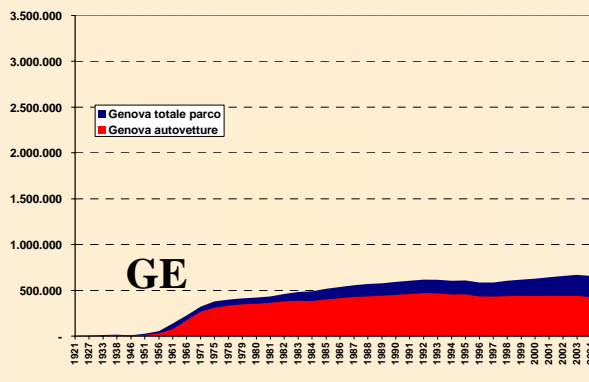
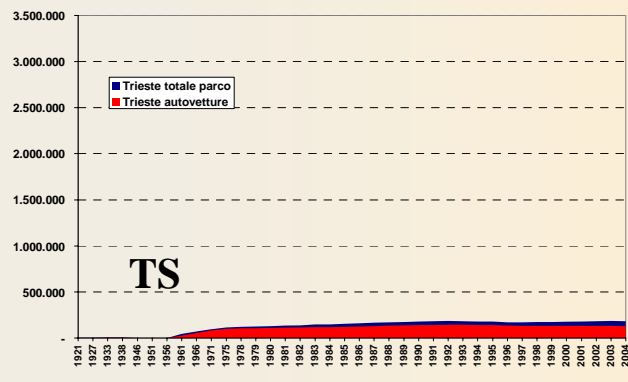
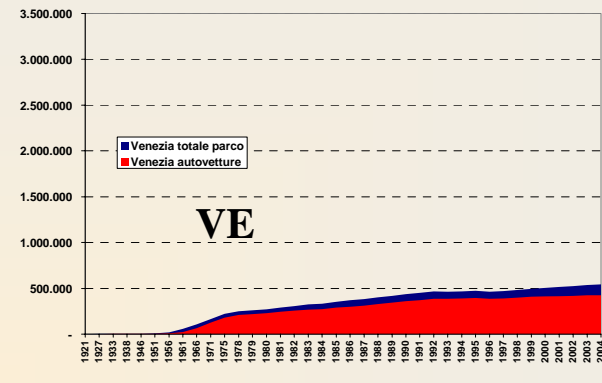
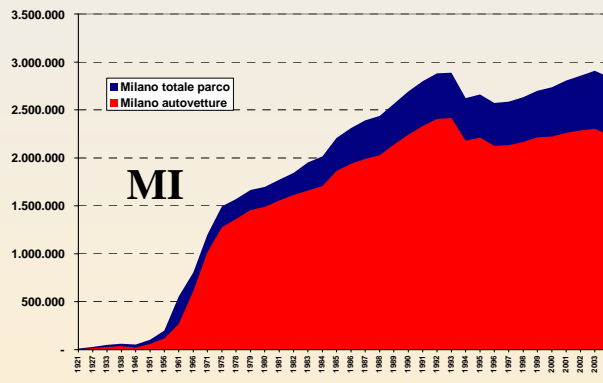
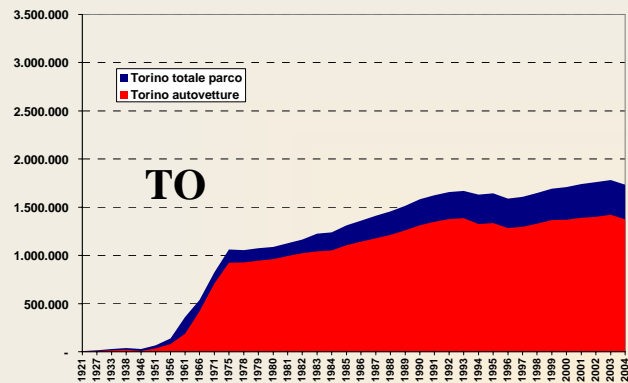
Concentrazione media annua PTS Juvara e Liguria



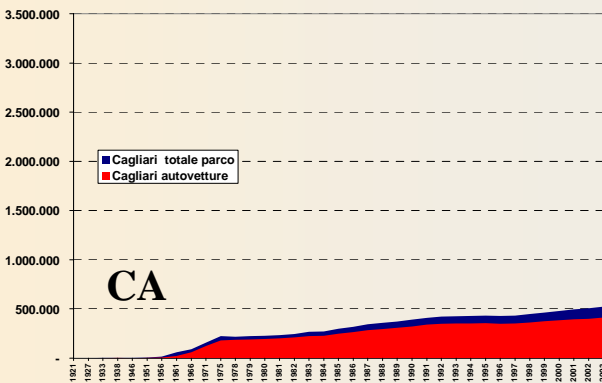
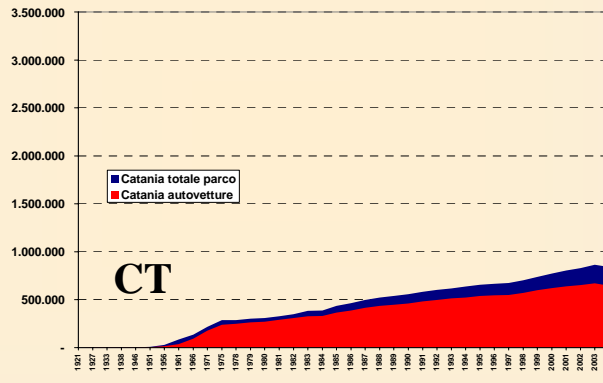
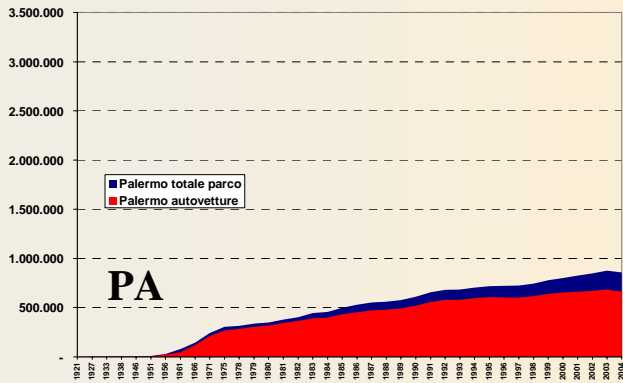
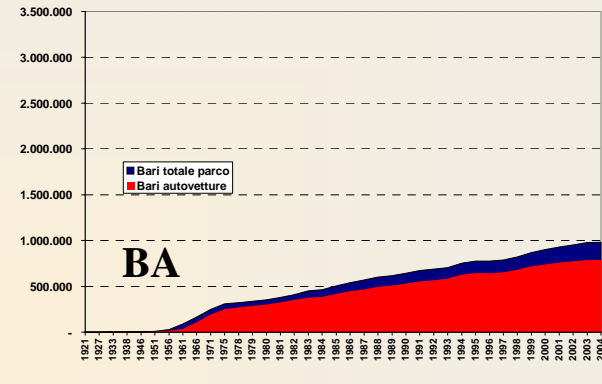
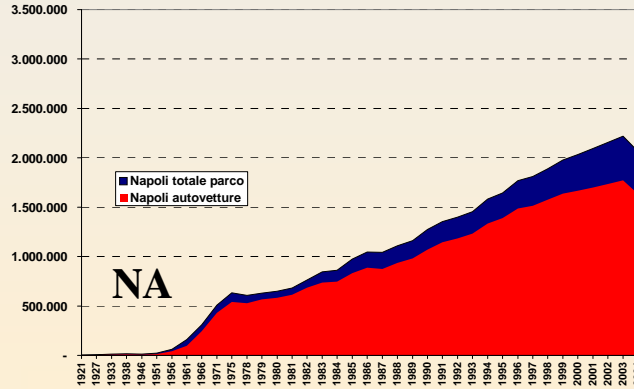
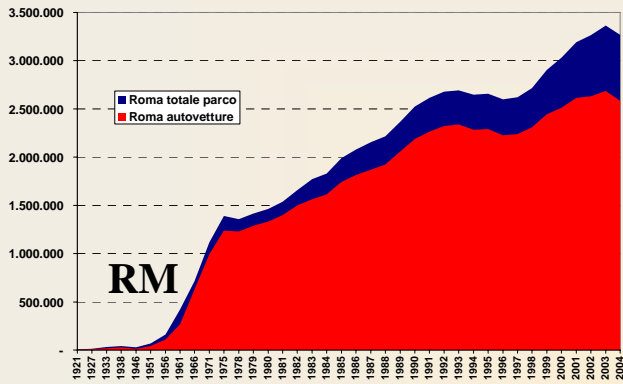
Particolato Totale Sospeso medie annue



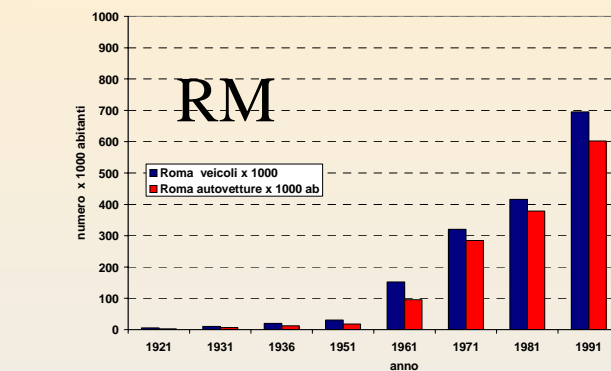
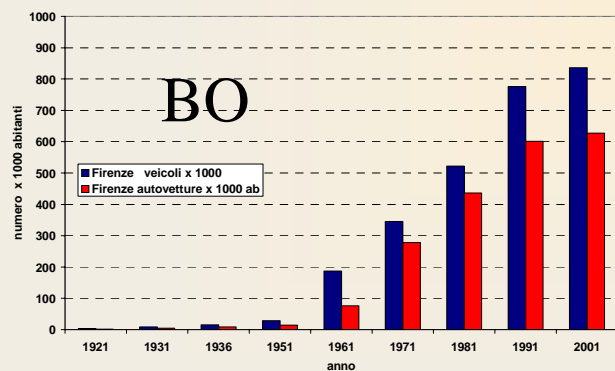
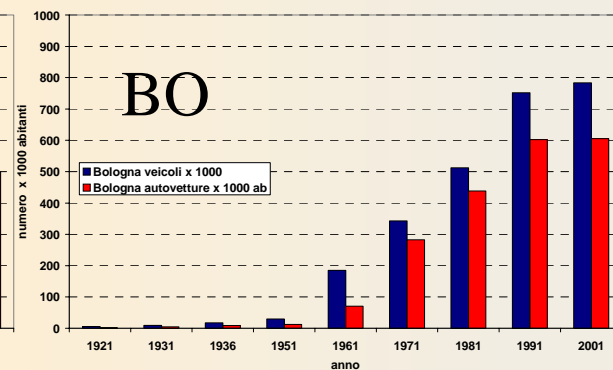
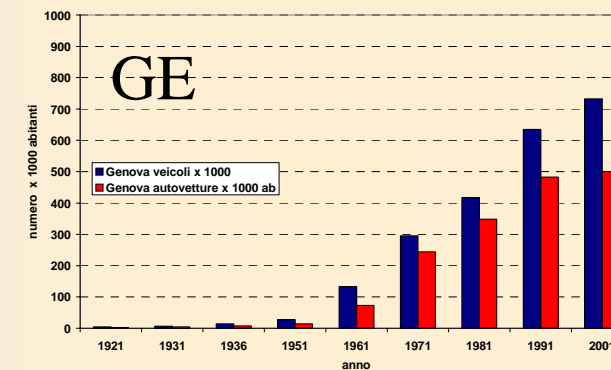
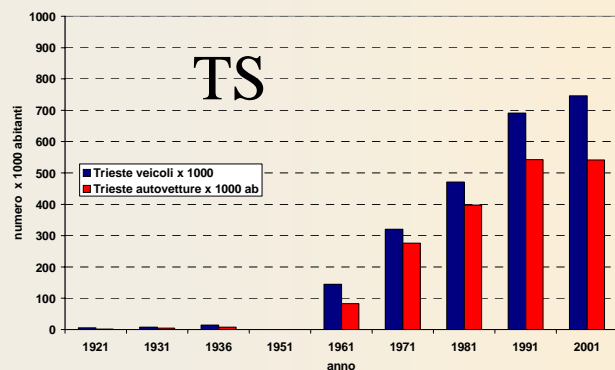
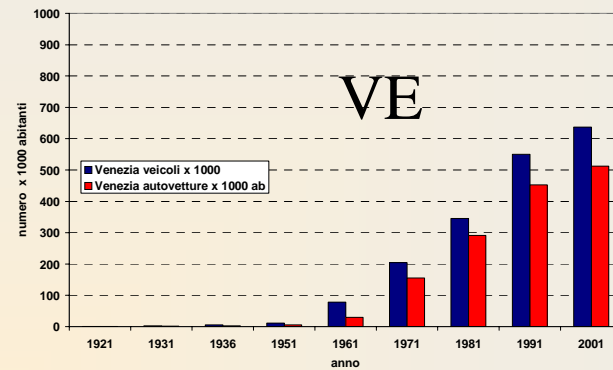
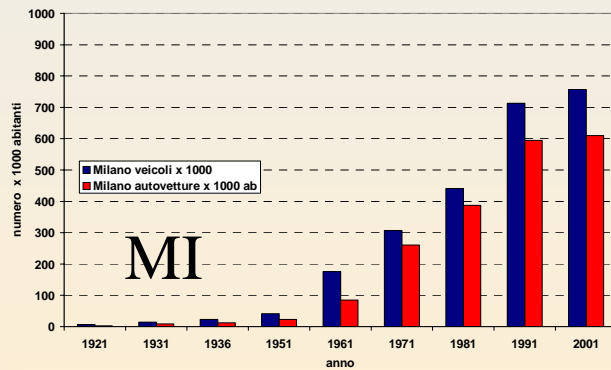
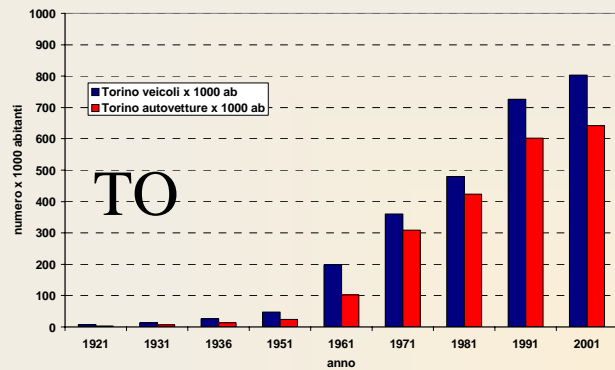
I dati del parco veicolare



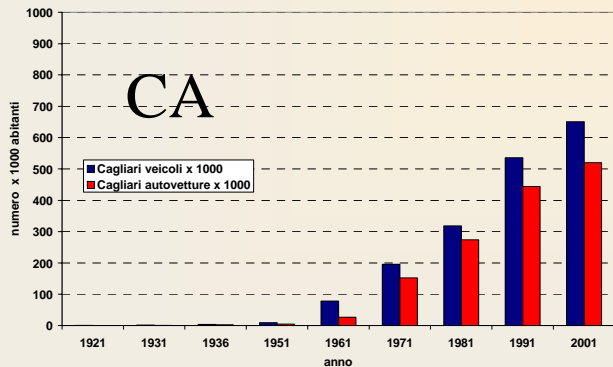
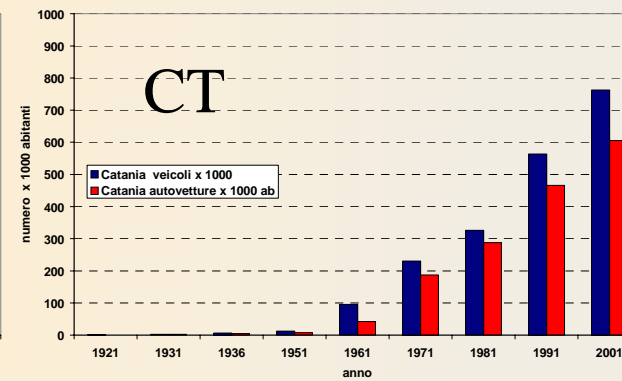
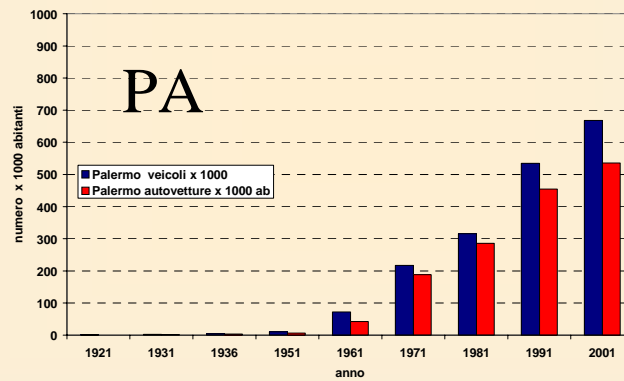
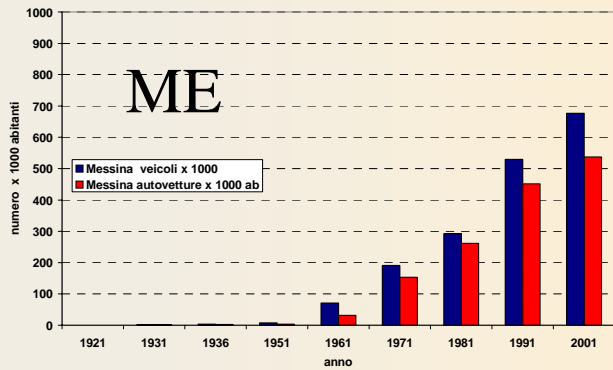
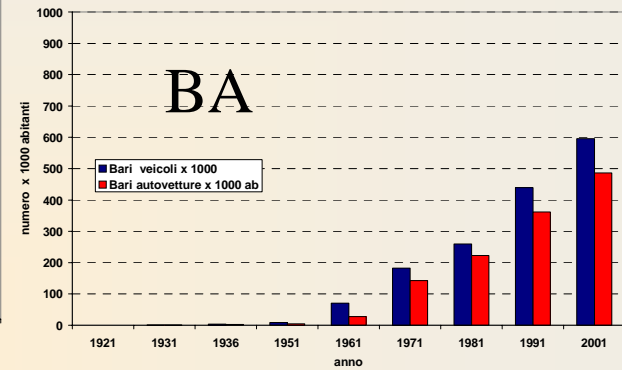
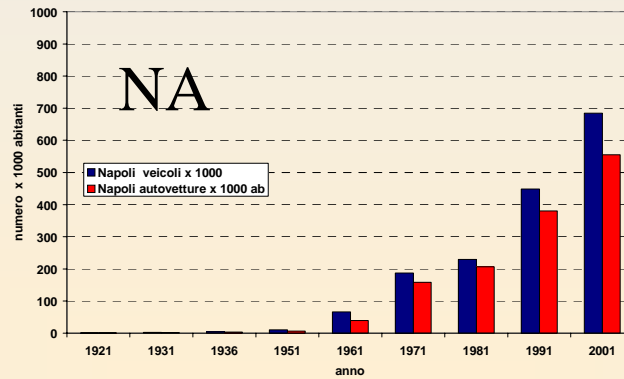
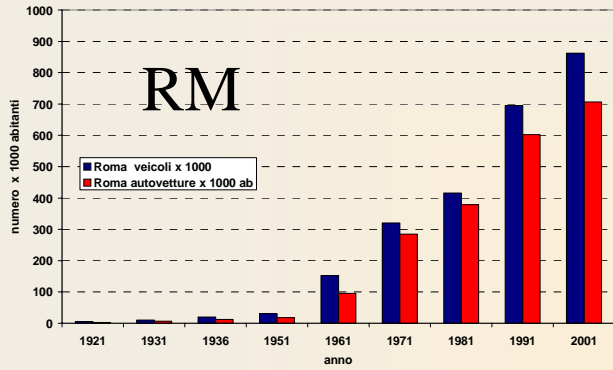
Evoluzione del parco veicolare provinciale (1921-2004)



Evoluzione del parco veicolare provinciale (1921-2004)



Evoluzione della densità del parco veicolare provinciale in veicoli per 1000 abitanti (1921-2004)



Evoluzione della densità del parco veicolare provinciale in veicoli per 1000 abitanti (1921-2004)