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## ENVIRONMENT STATISTICS

### AIR POLLUTION AND ROAD TRANSPORT

Road transport is one of the major air pollutants in the Maltese islands. Recent air pollution and transport statistics clearly demonstrate this. Table 1 shows the gas emissions which were calculated for Malta in the past decade. The gas emissions are mainly composed of the following gases;-

Carbon Dioxide CO<sub>2</sub>  
Methane CH<sub>4</sub>  
Carbon Monoxide CO  
Volatile Organic Compounds NMVOC  
Nitrous Oxides N<sub>2</sub>O  
Nitrogen Oxides NO<sub>x</sub>  
Sulphur Oxides SO<sub>2</sub>

From 1990 to 2000, there was a general increase in all gas emissions due to industrial and socio economic development in the Maltese Islands. The most significant emissions increase was due to the increase in the vehicle ownership. Table 2 show that there was a constant increase in motor vehicles, especially in the private vehicle sector. At present the vehicle density in Malta is of 1.52 persons for each private vehicle which is travelling on our roads. Chart 1 gives an overview of the car population together with the resident population in the Maltese Islands.

NO<sub>x</sub>, CO and NMVOC are the specific emissions which are directly related to the transport activities. For this ten year period, there are constant increases in these particular gases. Variations in such gas emission levels are also registered in the inventory. This is due to the importation of new vehicle with in built catalytic converters. Such devices reduce the emissions from the mobile transport and a larger scale application could modify our traffic gas emissions profile.

**Table 1. Greenhouse gas emissions inventory 1990-2000 Gas (Gg)**

	CO <sub>2</sub>	CH <sub>4</sub>	CO	NMVOC	N <sub>2</sub> O	NO <sub>x</sub>	SO <sub>2</sub>	CO <sub>2</sub> /cap
<b>1990</b>	1,656	16.38	23.77	4.52	0.018	9.62	18.73	4.7
<b>1991</b>	1,836	16.21	25.41	4.84	0.019	10.23	19.39	5.1
<b>1992</b>	1,947	18.75	27.11	5.16	0.019	10.54	21.33	5.4
<b>1993</b>	1,996	19.15	28.42	5.41	0.019	10.89	18.99	5.5
<b>1994</b>	2,070	17.73	29.41	5.61	0.019	10.85	24.31	5.6
<b>1995</b>	2,095	18.77	30.12	5.74	0.014	9.69	29.65	5.6
<b>1996</b>	2,099	19.03	30.83	10.87	0.013	9.42	31.14	5.6
<b>1997</b>	2,106	14.22	31.22	7.94	0.013	9.51	32.39	5.6
<b>1998</b>	2,144	15.59	31.01	8.91	0.013	9.66	33.88	5.7
<b>1999</b>	2,210	20.44	31.01	7.91	0.014	10.08	30.43	5.8
<b>2000</b>	2,202	20.21	29.98	6.71	0.014	10.22	26.48	5.8

Source: National Greenhouse gas emissions inventory for Malta

**Table 2. Stock of Licensed Motor Vehicles**

Year	Total population	Total No. of vehicles	Private cars only	Passenger vehicles	Comm. & other vehicles	No. of Persons per unit of Privately owned Transport vehicle
<b>1990</b>	361,908	139,316	104,863	12,583	21,870	0.00
<b>1998</b>	386,397	229,977	169,542	16,722	43,194	2.60
<b>1999</b>	388,296	238,878	176,264	18,012	45,009	1.68
<b>2000</b>	391,415	246,825	182,105	19,512	45,208	1.63
<b>2001</b>	394,641	254,052	188,495	19,723	45,834	1.55
<b>2002</b>	397,296	261,329	195,055	20,158	46,116	1.52

