

### The Institute for Climate Change and Sustainable Development: an overview and future plans

**Dr Maria Attard** 

Director, Institute for Climate Change and Sustainable Development

Eco-sustainability aspects of the Country-Specific Recommendations for Malta

organised by the European Commission Representation in Malta 23 September 2013, Malta



# Why do we need research in Sustainability?



- Growing concerns over
  - the quality of the air that we breath
  - the need for more and efficient mobility
  - the energy bill (generation and transport)
  - the impacts of car dependence
  - the long term sustainability of political decisions
- Malta is special because....



#### Malta in the context of other islands

University of Malta L-Università ta' Malta

Country	Рор	Area	GDP	Vehicles/	Vehicles/
	(in mio)	(km2)	(\$/pers)	km of road	1000 pers
Haiti	8.4	27,750	431	39	19.3
Papua New Guinea	5.0	462,849	545	6.2	24.2
Maldives	0.3	298	1,806	33.4	5.4
Jamaica	2.6	10,990	2,990	11.9	84.7
Mauritius	1.2	2,040	3,779	67.2	111
Malta	0.4	316	9,245	119.7	677
Cyprus	0.8	9,251	11,504	28.1	494
Singapore	4.2	685	20,544	227.5	171

Source: Enoch. M.P. Warren, J.P. (2008) Automobile use within selected Island states. In Transportation Research Part A 42 (1208-1219)

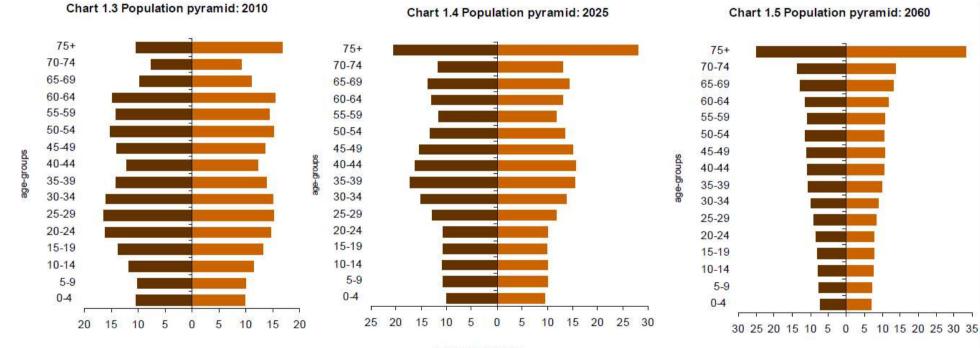


#### Relevant socio-economic and transport indicators for Malta. Source: National Statistics Office, 2011

Description of Indicator	2000	2010
Total land area (incl. Gozo and Comino)	316 km <sup>2</sup>	316 km <sup>2</sup>
Percentage of built-up land	23.6%	26.5%
Population	391,415	417,617
Population density per km <sup>2</sup> of built up area	5,275	4,983
Licensed vehicles on the road	246,825	304,705
Percentage private vehicles	75%	76%
Private passenger vehicles per 1000 inhabitants	473	555
Estimated annual vehicle km for private vehicles	9,000 km	9,840 km
Share of car as percentage of all trips	70%	71%
Length of road network	2,227 km	2,254 km
Estimated number of vehicles per km of road	111 🍉	135
Public transport modes	bus, ferry, taxi	bus, ferry, taxi
Public transport patronage in million passengers	31.2	32

### The demographic question?

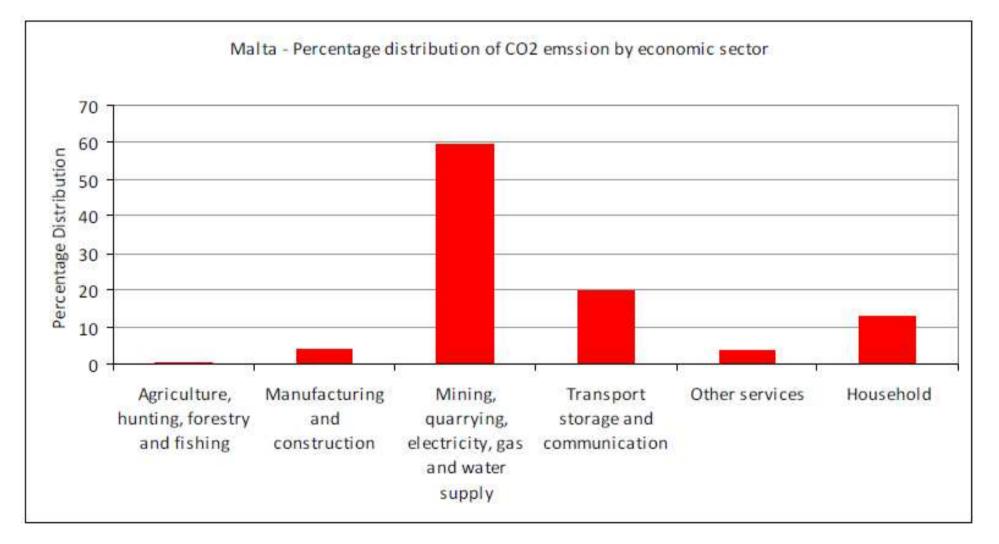




Males Females

### Just one impact on our environment





# What is the purpose of the research?



- Because of Malta's specific geographical, environmental and social characteristics, specific base line research is required.
- Need to establish more effectively the current impacts as well as potential impacts.
- Carry out a cost benefit analysis of different scenarios for the islands in 2020 or even 2050.
- Be innovative in ways how we implement sustainability

### What is the Institute's research agenda?



- The remit of the Institute has now been extended to cover Climate Change as well as Sustainable Development. Topics of research are broad.
- We are developing research areas to cover Climate Change, Cleaner Technologies and Sustainable Transport.
- Through its Cleaner Technology Centre the Institute supports the Environment Awards for Industry as well as the Waste Minimization Awards in Malta.
- In the area of Sustainable Transport, there is already a strong team of eight working in various areas of research.

## What is the Institute's research agenda?



- We currently participate in local projects, the Crossborder Cooperation Programme Italy-Malta, and have submitted applications under the IEE and FP7 Programmes. We aim to join more projects to increase our visibility in local and international research fora.
- We are aiming to develop the existing areas of research and extend the research areas to concerns coming directly from Industry, Government, NGOs.
- In 2015 the Institute will be hosting the WCTRS Special Interest Group of Urban Transport Conference on Climate Change in Transport.

The Institute for Sustainable Development National Conference

#### Sustainable Mobility in Malta Transport Research in Practice

SmartCity Malta, Ricasoli - 30<sup>th</sup> November 2012



University of Malta L-Università ta' Malta





KAMEA TAL-PER(T)





### **Thank You**

#### Visit us on www.um.edu.mt/iccsd

Email us on iccsd@um.edu.mt