

The logo for The Energy & Water Agency is displayed on a white rounded rectangular background. The text is arranged in four lines: 'THE' in a light blue font, 'ENERGY' in a bold dark blue font, '& WATER' in a bold dark blue font, and 'AGENCY' in a light blue font.

THE
ENERGY
& WATER
AGENCY

ALTERNATIVE MEASURES IN BUILDINGS AND TRANSPORT

An overview of implemented actions in Malta under the EED Article 7

16th November 2016

Alan Bezzina

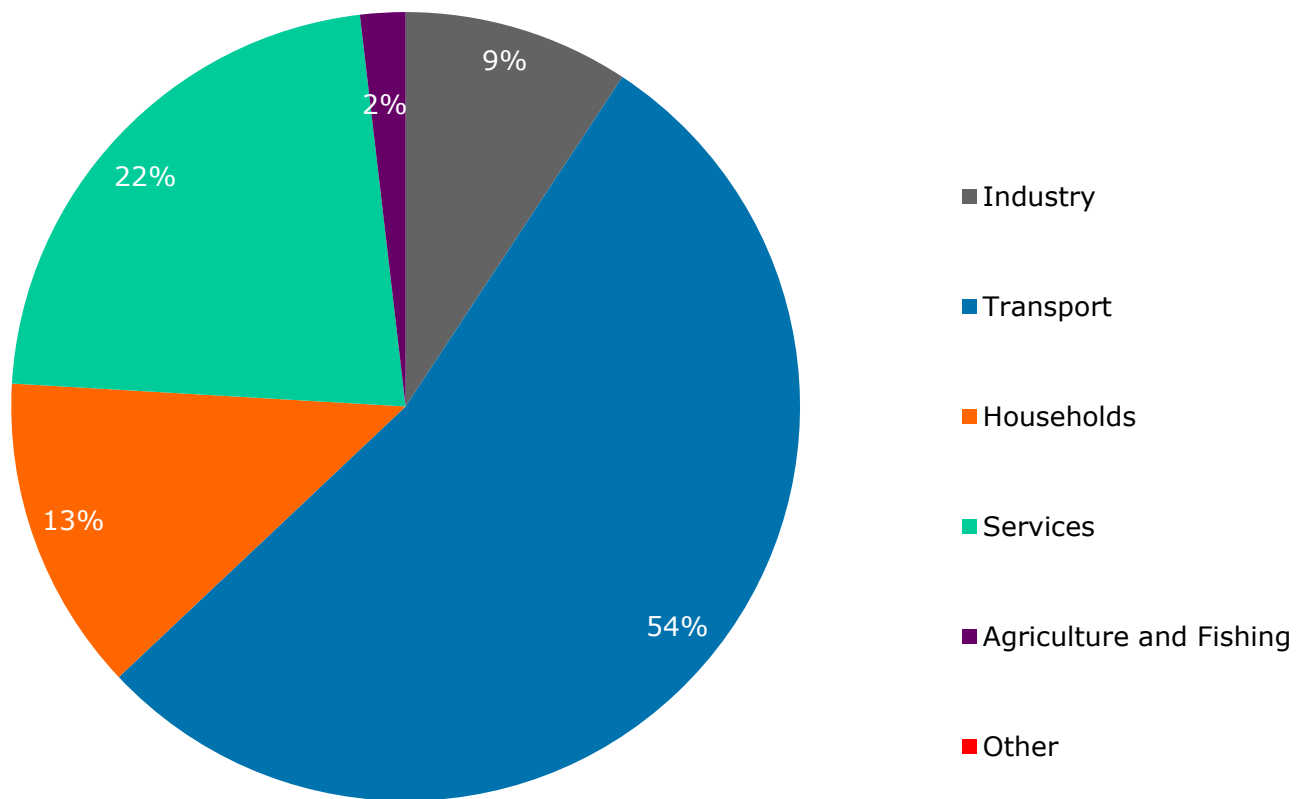
PRESENTATION

- Introduction
 - General information on Malta
- Article 7
 - Overview
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- Progress Report
 - Results
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INTRODUCTION

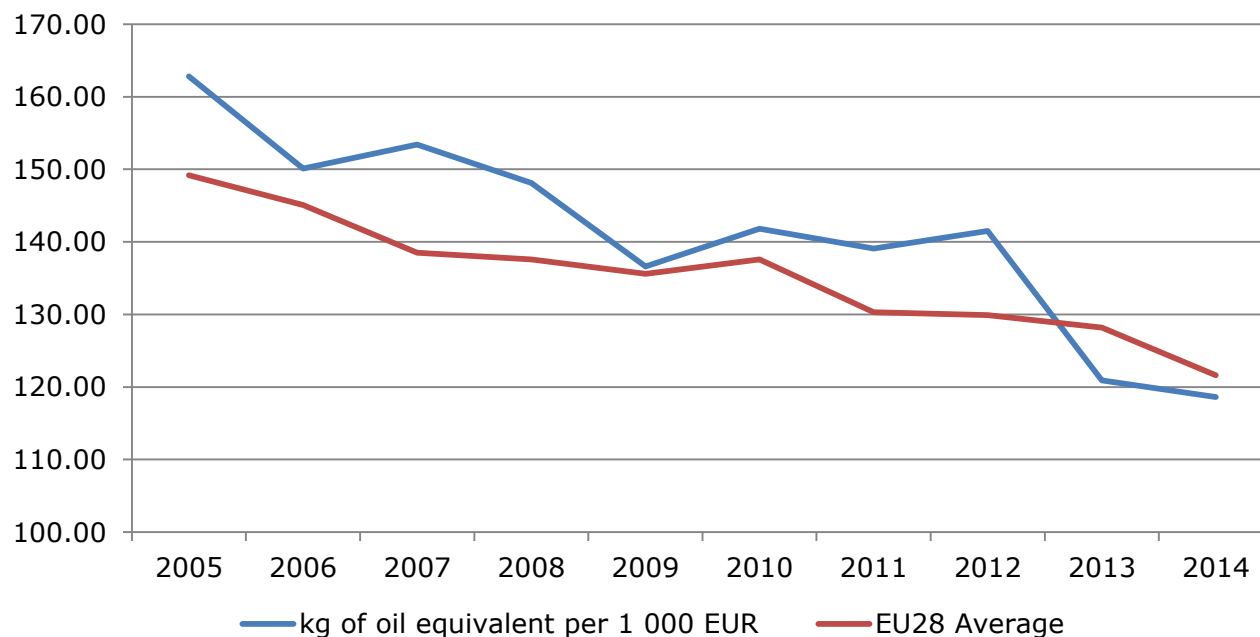
General Information	
Population	434,000
Occupied Dwellings	153,000
Passenger Vehicles	281,000

FINAL ENERGY CONSUMPTION



ENERGY INTENSITY

Energy Intensity of the Economy (kg of oil equivalent per €1,000)



INTRODUCTION

General Information

- Evolution in electricity generation sector have brought about major improvements in efficiency;
- Water production is given significant importance locally due to the energy intensive process of desalination;

GENERAL OVERVIEW OF ARTICLE 7 FROM NEEAP 2014

- Malta's target towards Article 7 amount to 656GWh contributing 0.05% to the EU28 FEC target
- Early Actions from paragraph 3.:
 - energy efficient lighting;
 - energy efficient appliances;
 - building envelope improvements;
 - vehicle registration and licensing reform;
 - vehicle replacements;

ARTICLE 7 TABLE OF SAVINGS – ALTERNATIVE MEASURES

Measures Sector	Estimated Savings KWh
Transport	220,836,012
Government-Owned Industry	182,730,166
Private	130,536,650
Public Services	59,558,598
Residential - Buildings	14,212,945
Public Buildings	5,631,477

TRANSPORT MEASURES

- to encourage the replacement of vehicles with new, smaller and more energy efficient ones;
- to encourage hybrid and electric vehicles;

GOVERNMENT-OWNED INDUSTRIES

Energy Saving Projects in the utilities sector including water services and waste treatment;

MEASURES IN THE PRIVATE SECTOR

- Energy efficiency measures implemented through the facilitation of State or EU funds;
- Type of measures reported in this section include:
 - Efficient lighting;
 - Efficient heating and cooling applications
 - Solar and heat pump technologies;
 - Co-generation equipment;
 - Energy efficient process improvements;

RESIDENTIAL BUILDINGS

- Building envelope improvements (insulation and double glazing);
- Solar and heat pump installations reducing energy demand within the building perimeter;

PUBLIC SERVICES AND PUBLIC BUILDINGS

- Projects for the conversion of Street lighting to energy efficient LEDs
- Retrofitting and upgrading of public bodies including public buildings, schools, hospitals, pools, etc.

ARTICLE 7 SAVINGS ACHIEVED IN 2014

Policy measure (notified)	Savings <u>achieved</u> [kWh] in 2014 (n-2)
EEO: Enemalta	4,088,000
Public Buildings	1,145
Residential Buildings	718,925
Transport	1,171,416
Private: Voluntary Agreements	11,117,716
Total savings	17,097,202

EEO: ENEMALTA

Savings in 2014 achieved by the progressiveness of tariffs and eco contribution mechanism;

Study was commissioned in November 2013 and revised in 2015;

Based on 2011 data, electricity reduction was calculated at -0.86% equivalent to 4,088,000KWh;

PUBLIC BUILDINGS

Opportunities for improvement identified from a walk-through energy audit;

Energy savings achieved from implementation of measures (in this case energy efficient lighting);

Annual savings calculated using deemed savings methodology;

RESIDENTIAL BUILDINGS

Financial instruments available for the installation of double glazing, roof insulation and solar thermal water heaters;

EU Project assisting vulnerable consumers implement energy efficiency measures in private households;

Calculation of savings was done using deemed methodology;

TRANSPORT

Grant on the purchase of environment friendly vehicles.

Financial instruments available when buying a new environmentally friendly vehicle and de-registering an existing one;

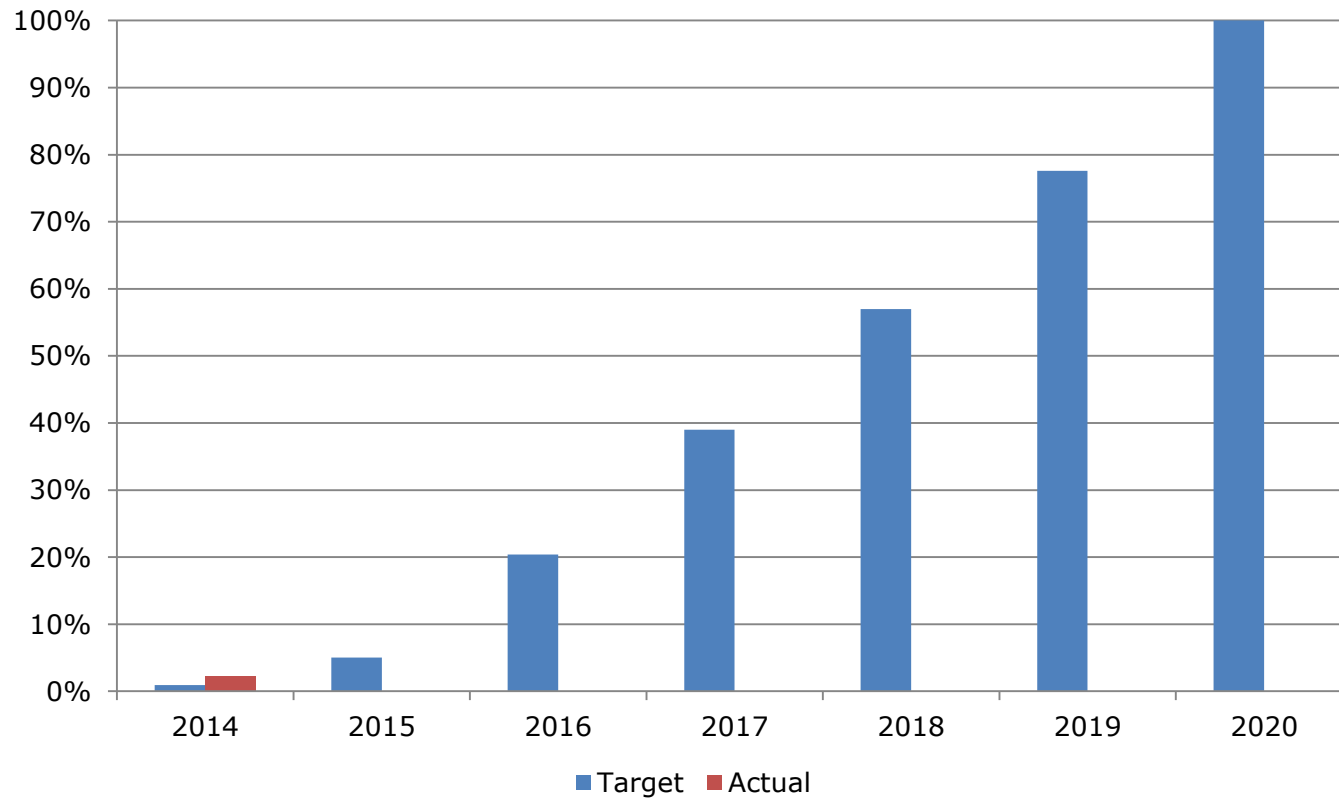
Savings are based on a deemed methodology;

VOLUNTARY AGREEMENTS

Energy Efficiency Partnership Initiative has been set up to foster relations between Government and Organizations representing large businesses with the aim of disseminating energy efficiency practices;

Verification of reported savings under voluntary agreements is carried out through internationally recognised auditing systems, namely ISO14001, ISO50001, and EMAS;

EARLY INDICATIONS



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energyefficiency@gov.mt