
ENERGY EFFICIENCY TRENDS AND POLICIES IN MALTA

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Co-funded by the Intelligent Energy Europe
Programme of the European Union

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Energy efficiency is a key policy area outlined in the Government's energy policy for Malta. It can have a significant impact on the demand for energy, and so can reduce the country's energy consumption and the release of GHG emissions.

The target of 3% energy end use savings for 2010 (established in the first National Energy Efficiency Action Plan (NEEAP)) has been achieved, and marginally exceeded – the target was 126GWh and the achievement was 153GWh. So far, improvement in energy efficiency has been mainly achieved from the industrial sector (including early actions in the water sector), the domestic sector (due to schemes to replace appliances, change lighting systems and install solar water heaters), as well as in the transport sector (due to changes in the national car fleet composition brought about by changes in the vehicles registration system).

The uptake of Government grants for energy efficiency and renewable energy sources was very positive with more people realising the benefits of investing in such technologies. The energy sector of Malta is in continuous progress with the aim of achieving further development of the Maltese Islands in a sustainable manner. Where environmental responsibility is involved, there is a growing consensus on the need to ensure sustainable development, and that the measures proposed would not conflict with but rather complement this concept.

1. ECONOMIC AND ENERGY EFFICIENCY CONTEXT

1.1. ECONOMIC CONTEXT

The global economy remains characterised by an elevated level of uncertainty. The moderate recovery that started during 2013 failed to gain momentum as weaker-than-expected activity in the European Union (EU) and other major economies during the first half of 2014 damped growth prospects.

Indeed, in the first half of 2014, economic growth averaged 1.4 percent in the EU and 0.8 percent in the Euro Area with an uneven recovery among the various Member States. Over the course of the following years, growth in the EU and the Euro Area is expected to gradually rise. However, growth prospects remain susceptible to many downside risks, particularly the increasing geo-political tensions and the lingering risks of more protracted low growth and low inflation.

Labour market conditions in the Euro Area remain subdued with job creation remaining moderate and unemployment rates falling only slightly over recent months. In fact, the unemployment rate declined by 0.5 percentage points to 11.4 percent in the second quarter of 2014. Meanwhile, the Euro Area-wide inflation rate stood at 0.8 percent by the end of the second quarter, substantially below the European Central Bank's (ECB) price stability objective.

In contrast to developments in the EU, the Maltese economy continued to register encouraging results. During the first half of 2014, the Maltese economy expanded by 3.2 percent in real terms, outperforming growth in the EU. In nominal terms, this increase was reflected in a growth rate of 4.5 percent, with Gross Domestic Product (GDP) standing at €3,791.0 million up from the €3,626.4 million recorded in the same comparable period last year. This performance was underpinned by buoyant domestic demand. Net exports also contributed positively as imports dropped more than exports in the period under review.

Growth in Gross Value Added was attributed to a positive performance in the majority of the sectors of the economy particularly in the service sectors. Manufacturing activity was uneven with an overall decline being registered. Growth in gross value added declined in agriculture and fisheries whilst the construction industry registered a positive turnaround. Figures for the first half of 2014 indicate that the increases in the activity rate were reflected into higher employment and lower unemployment rates. The Labour Force Survey reports an increase of 1.2 percent in employment when the second quarter of 2014 is compared to the same quarter in 2013. The Eurostat Economic Survey November

2014 harmonised and seasonally adjusted unemployment rate stood at 5.8 percent, 0.8 percentage points lower than that recorded in the second quarter of 2013. Recent labour market developments indicate that employment increased across most segments of the Maltese labour market, with a significant increase registered in private sector employment, both the services and the direct production categories. The higher level of employment in direct production was mainly a reflection of developments in the construction and the manufacturing sector while employment increases in the services sector were largely attributable to professional, technical and administrative activities, wholesale and retail, and information and communication. It is also notable that the share of females in total employment continued to increase, meaning that the underlying trend of a rising female employment rate was sustained. This also reflects Government efforts to increase the participation rate in this segment of the labour market. The performance of industrial turnover weakened during the first seven months of 2014, mainly on account of deterioration in the export market which was not compensated by the rise in domestic sales. Employment in industry remained broadly at the level recorded during the same period last year, while the number of hours worked decreased. Nevertheless, in the same period, remuneration for industrial employees increased. The average weekly wage as derived from a study concerning collective agreements stood at €294.78 up by €4.50 or 1.6 percent over the same period last year, with the strongest increase registered in the Community & Business Sector and in the Transport Sector.

The performance of the tourism industry continued to register a positive outcome in the first eight months of 2014. Inbound tourists increased by 8.4 percent over the previous corresponding period, reaching the 1.16 million mark. The increase was broad-based with positive results recorded in almost all salient tourism indicators, including, in the nights spent by inbound tourists, which increased by 4.9 percent and expenditure from inbound tourism which increased by 6.5 percent. Moreover, average full-time employment in the accommodation and food service activities recorded a marginal increase of 0.7 percent during the year to May 2014. With regards to the cruise passenger industry, between January-September 2014, arrivals that exclude the embarkations and the Maltese cruise passenger arrivals, increased by 2.7 percent over the corresponding period in 2013.

In September 2014, the domestic annual inflation rate was recorded at 0.6 percent. During the last twelve months, inflation remained broadly constant, with an upward trend registered up to February 2014 followed by a generally lower rate of inflation thereafter. Malta's inflation rate in September 2014 was slightly higher than that recorded in the Euro Area, which stood at 0.3 percent.

The General Government deficit in Malta decreased to 2.7 percent of GDP in 2013. During the first

nine months of 2014, both revenue and expenditure components increased, with the latter registering a slightly higher increase. This resulted in a widening of the shortfall between Government recurrent revenue and expenditure in the Consolidated Fund of €12.5 million when compared to the same period in the previous year, mainly reflecting excise payments owed by Enemalta to Government. The current account surplus stood at 3.8 percent of GDP during the first half of 2014, in contrast to the deficit of 0.6 percent of GDP recorded during the same period in 2013. This development was mainly underpinned by the increase in the surplus on the services account together with a reduction in primary income net payments which more than offset the increase in the goods account deficit and reduction in secondary income net receipts. Meanwhile, net lending in the financial account amounted to €301.8 billion, as a result of the decrease in net assets of direct investment and other investment coupled with the increase in net assets within portfolio investments and financial derivatives. These movements were also complemented by the increase in reserve assets.

Short-term deposits, in particular overnight deposits, exhibited a significant increase during the Survey period reflecting depositors' preferences in a relatively low interest rate environment. In addition, deposits with agreed maturity of up to three months and up to two years also contributed positively, albeit very mildly. Moreover, interest rate spreads declined very marginally remaining broadly stable. The dynamics of such a stable spread level between local lending and deposits rates reflect an overall marginal decrease in deposit rates which on the whole was higher than the minimal general decline registered in lending rates.

1.2. TOTAL ENERGY CONSUMPTION AND INTENSITIES

During 2013 there was a 2% increase in final energy consumption in the transport sector when compared to 2012. This change is due to the increase in the aviation sector which showed a percentage increase of the aviation final energy consumption of 5%. The scheduled and non-scheduled aircraft movements at Malta International Airport in 2013 were 30,752 as compared to 28,197 in 2012. This was due to an increase in the tourism sector which in 2013 increased by 138,739 over 2012.

The primary energy consumption decreased by 11% from the previous year. One factor responsible for this decrease is due to the reduction of fuel consumption for thermal power generation. This reduction is attributed to the entry in commercial operation of new Diesel Engine plant at Delimara

Power Station in December 2012. The operational conversion efficiency of this plant is of 48% and it replaced older plant at Marsa Power Station which had a conversion efficiency of 24%. The overall effect was an increase of 5% on the conversion efficiency of all the power generation in Malta.

The Malta-Italy Interconnector contributes to the achievement of a diversified mix of energy sources by providing the country with access to electricity generated through sources located in Sicily and other regions in mainland Europe.

The Interconnector comprises a 120-kilometre high voltage alternating current (HVAC) system capable of bidirectional flow of electrical power, transferring 200MW of electricity. In Sicily, the Interconnector is linked to the Italian network at 230kV at the Terna substation in Ragusa. The submarine cable lands in Malta at Qalet Marku, Bahar ic-Caghaq and transmits electricity to the distribution network at 132kV through a nearby Enemalta terminal station at Maghtab.

Table 1 – Total Primary Consumption for Malta

Countries :	Malta (MT)				
	Unit	2010	2011	2012	2013
Total primary consumption	Mtoe	0.913	0.915	0.958	0.858

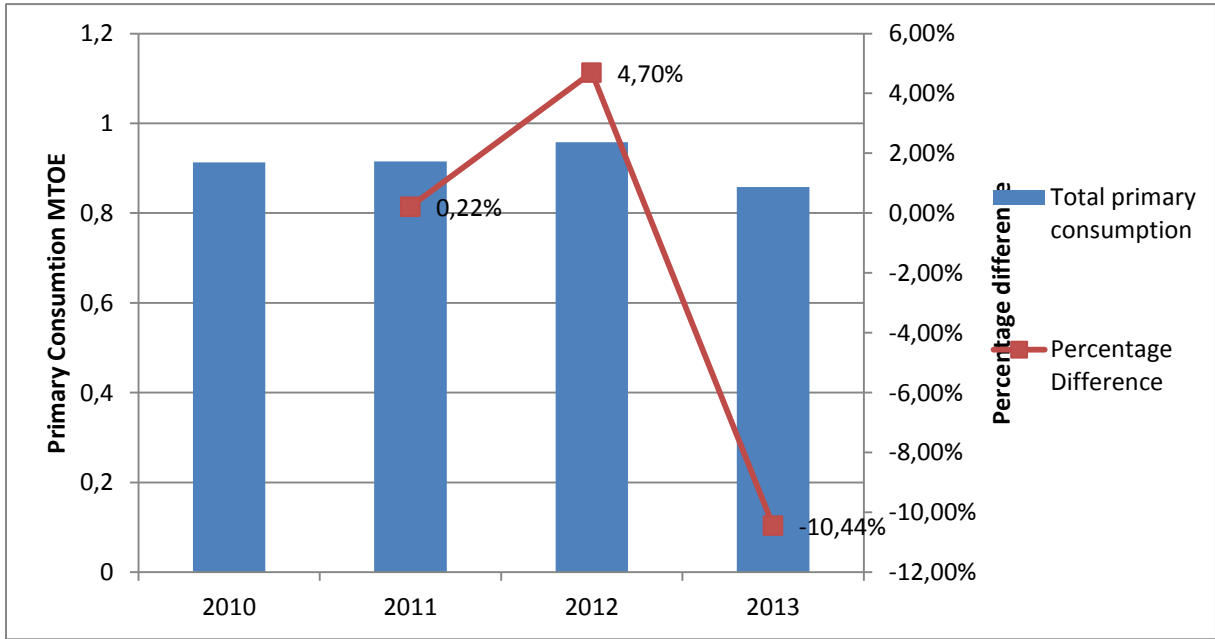


Figure 1-Total primary consumption and percentage difference along the years

1.3. ENERGY EFFICIENCY POLICY BACKGROUND

Malta, as a Member State within the European Union is not only a micro state but is also a micro island state. This is a characteristic that distinguishes Malta from most other MS of the EU. The fact that Malta, and its sister Island, Gozo, are at the southern border of Europe – approximately 90 km to the South of Sicily – and Europe’s nearest bridgehead to North Africa renders Malta subject to a number of inherent and permanent social as well as economic issues of vulnerability.

Malta’s insularity and its peculiar characteristics of land, sea distance and population density significantly increase the challenges that Malta faces. These include but are not limited to:

- Inability to reap the benefits of economies of scale due to its small size;
- A small domestic market which limits the ability of local firms to build economies of scale so important for them to venture overseas;
- An ‘open economy’ rendering it vulnerable to global economic conditions – such as, for example, the price of oil and gas;
- A dependence on a very narrow range of exports;
- A dependence on imports exacerbated by limited possibility of imports substitution which render locally manufactured products and goods more expensive than imports;
- High transport costs, consequent to its insularity, in its economic transactions with mainland Europe. This raises the cost of imports and the cost of production, and could lead to time delays, all of which impact negatively Malta’s competitiveness;
- Increased vulnerability as accessibility to mainland Europe and elsewhere is completely dependent on air and sea.
- Malta’s land territory and high population render the implementation of large Renewable Energy Sources (RES) infrastructure in order to replace conventional energy generation by clean RES energy difficult.
- Surrounding deep seas do not compensate Malta for its micro land mass given that to date there is no commercially viable RES sea / marine technologies that could be used in Malta’s marine conditions including the bathymetry of its transient and deep sea respectively.

Malta’s peculiar characteristics particularly its size, population density, and insularity resulting give rise to specific development issues. Malta’s energy isolation has changed once the 200MW electricity submarine interconnector with Sicily was commissioned in 2015.

Water is a strategic resource in Malta particularly given that the country is under stress in terms of water resources. Malta is heavily dependent on the desalination of water (consumes 3% of total electricity generated) for its national potable water supply – which accounts for over 50% of Malta’s potable water. Additionally, despite significant investment made in waste management infrastructure Malta’s peculiar characteristics will continue to constrain the country’s ability to manage waste.

1.3.1. ENERGY EFFICIENCY TARGETS

The indicative target for 2020 is based on primary energy consumption for Malta, capped for aviation as agreed with the Commission. Indicative National Energy Efficiency target 2020: **264,282** toe in primary energy (equivalent to 27% of the primary energy consumption in 2020 under a BAU scenario).

Baseline 2010 Energy Efficiency 4% or 29,647 toe in primary energy

The basis for this target is that aviation is capped at 4.12% in line with Directive 2009/28/EC on the promotion of the use of energy from renewable sources. The business as usual scenario assumes the power station conversion efficiency of **30.31%** as in 2009 remaining unchanged.

Table 2 – 2020 targets for primary and final consumption

MS	Indicative national energy efficiency target for 2020	Absolute level of energy consumption in 2020 [Mtoe]	
		Primary	Final
MT	27% or 264,282 toe savings target by 2020	0.726	0.547

2. ENERGY EFFICIENCY IN BUILDINGS

Given the mild climate of the Maltese islands, energy performance of buildings historically was never a major parameter in the design of buildings in Malta, with the first regulations directly addressing energy performance being promulgated in 2007.

The present compilation of the cost optimal studies for Energy Performance of Buildings in Malta has provided the theoretical baseline in order to set the level of energy performance of new buildings or renovated buildings. These are now being followed by an exercise to set the minimum energy performance requirements as per Legal Notice 376 of 2012 to cost-optimal levels. The cost-optimal studies have also been used to feed the Nearly Zero-Energy Buildings plan for Malta. The nearly zero energy buildings plan for Malta is currently in the consultation phase and certain directions have already been identified. Both the cost optimal report(s) and the NZEB plan shall be revised as appropriate in line with Directive 2010/31/EU.

Based on the 2011 Malta Census carried out by the National Statistics Office, terraced houses constitute the most common type of dwelling of all occupied units. This is evidenced by the table 3. Of the vacant properties, almost one-fifth are holiday dwellings with the remainder unoccupied. With these latter buildings, energy consumption is not an immediate issue of interest or indeed investment priority. Holiday dwellings are generally used for short lets mostly in Summer. The cost-benefit of investment in energy-efficiency is therefore less clear in their case.

Table 3- Types, stock and typical area of dwellings in Malta

Dwelling type	Area m ²	Quantity as per census 2011
Detached villa	176	1,030
Owner Developed Semi Detached Villa	235	2,575
Speculatively Developed Semi Detached Villa	235	1,545
Post war Terraced House	219	42,030
Pre-war Urban Terraced House	219	9,380
Pre-war Rural Terraced House	201	9,380
Post war top floor Maisonette	89	14,305
Post war ground floor Maisonette	89	14,305
Pre-war top floor Maisonette	129	3,810
Pre-war ground floor Maisonette	105	3,810
Post war top floor Flat	74	15,675
Post war mid floor Flat	74	15,675
Pre-war top floor Flat	105	1,790
Pre-war mid floor Flat	105	1,790

2.1. ENERGY EFFICIENCY TRENDS

At the EU level, around two thirds of the consumption of buildings is for residential buildings. However, in some countries such as Malta residential building consumption are dominant and represent more than half of the total consumption of buildings. This can be viewed in Figure 2.

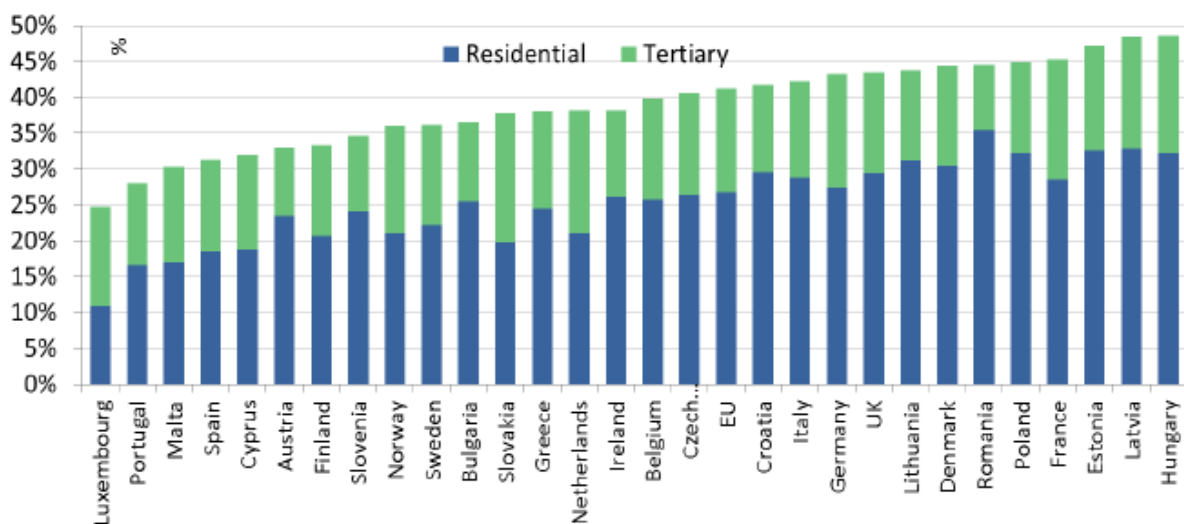


Figure 1- Share of buildings in final energy consumption (2012)

Table 4 shows the final energy consumption in Ktoe for residential buildings in Malta for the years 2007 to 2013. It should be noted that in 2007 the stock of buildings was of 137,000 while in 2013 the stock increased to around 167,000.

Table 4- Final consumption of residential sector

Countries :	Malta (MT)							
	Unit	2007	2008	2009	2010	2011	2012	2013
Final consumption of residential	Ktoe	75.01	76.19	74.20	78.16	79.05	79.93	78.82

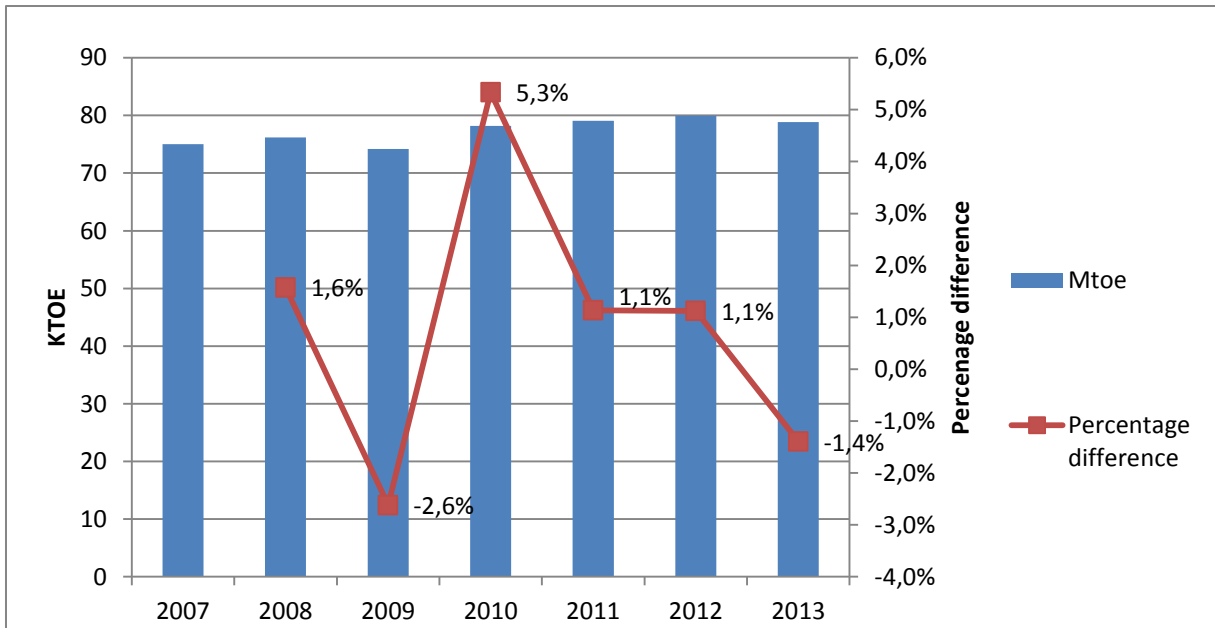


Figure 2- Consumption in residential sector and percentage difference

Figure 3 shows the trend in the consumption for residential buildings. It can be noticed that as from 2011, there has been a downward trend, with a 1.4% reduction in consumption from 2012 to 2013. The driver in such reduction is the national awareness towards energy efficiency in order to reach the 2020 EE targets. Figure 4 shows the reduction in consumption for the EU-28 Countries, including Malta. It is noted how the consumption in the Maltese households has been on the increase from 2000 to 2008. However, from 2008 till 2013, Malta has registered the maximum decrease in total household energy consumption per dwelling from all EU countries.

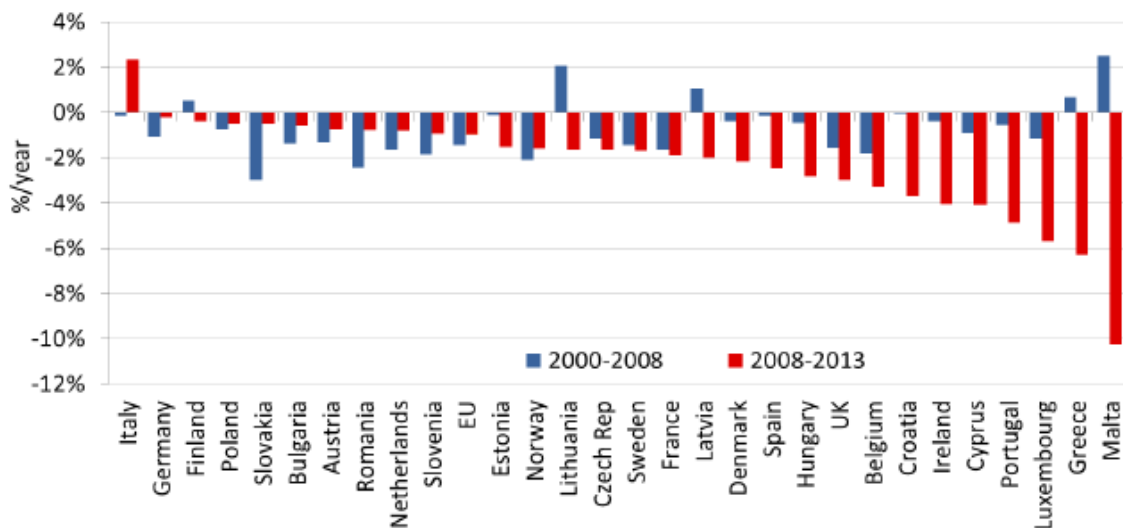


Figure 3- Trend in the household energy consumption per dwelling

Table 5 below shows the average electricity consumption per dwelling in Malta, as compared to the other EU countries. It is noticed how the average consumption per dwelling for Malta is of around 3800 kWh, which classifies as the lowest amongst the EU countries. However, a more recent survey is to be conducted in order to further refine the total energy household distribution between different appliances/activities within the Maltese households.

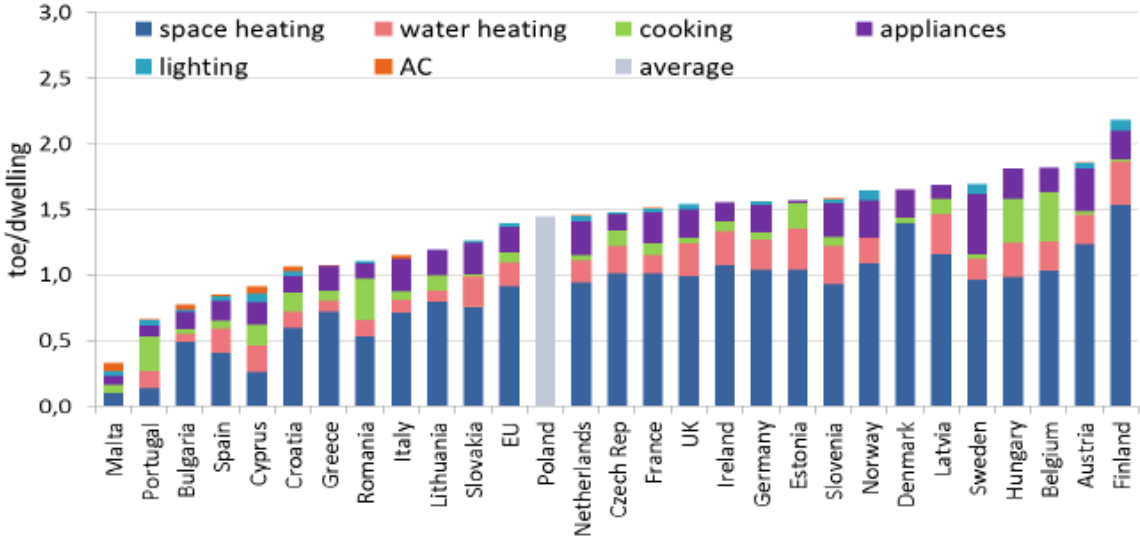


Figure 4 - Breakdown of household energy use by end-use (2012)

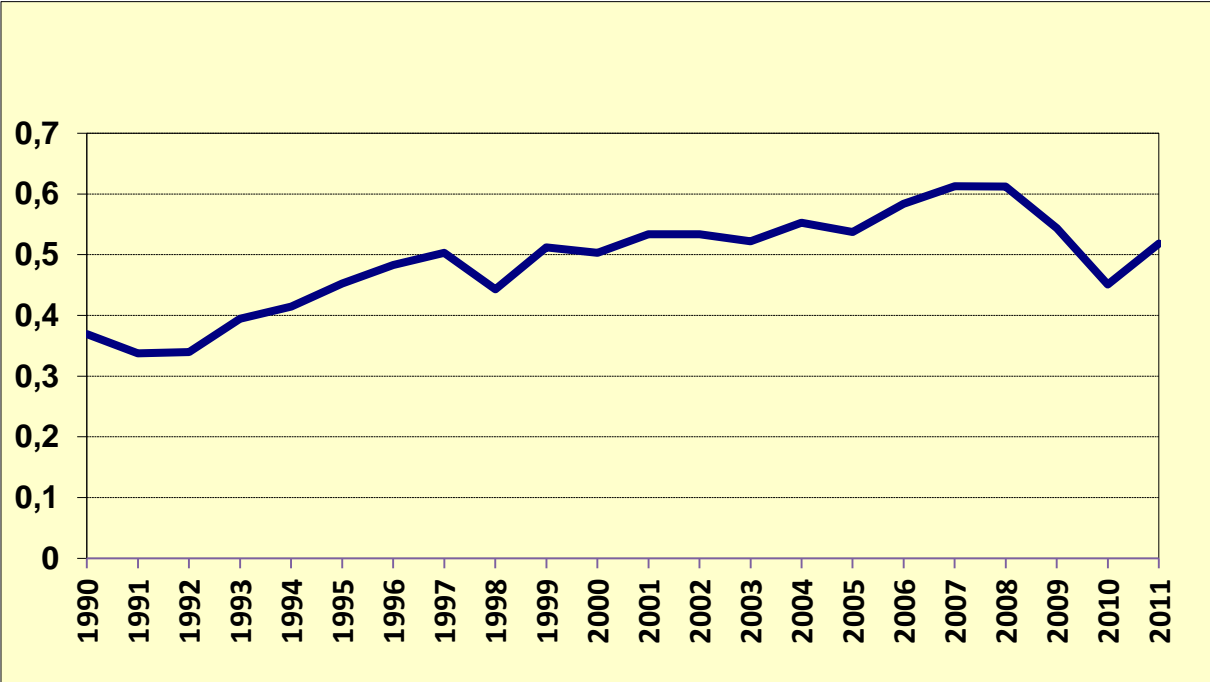


Figure 5 – Unit consumption of electricity of households per dwelling (kwh/dw)

Figure 6 indicates the consumption per dwelling for Maltese households. The trend goes back to 1990 up till 2010. Such graphic gives a clearer idea on the consumption trends for each dwelling. Even though from 2010 to 2011 the total residential consumption increased, the consumption per dwelling was on a decrease. As indicated in the Figure 6, the average consumption per household started to decrease as from 2006. Increased awareness together with a number of government initiatives; such as promotion of solar water heaters, distribution of CFLs, promotion of energy efficient appliances initiating in 2005 were the main reasons for such improvements along the years.

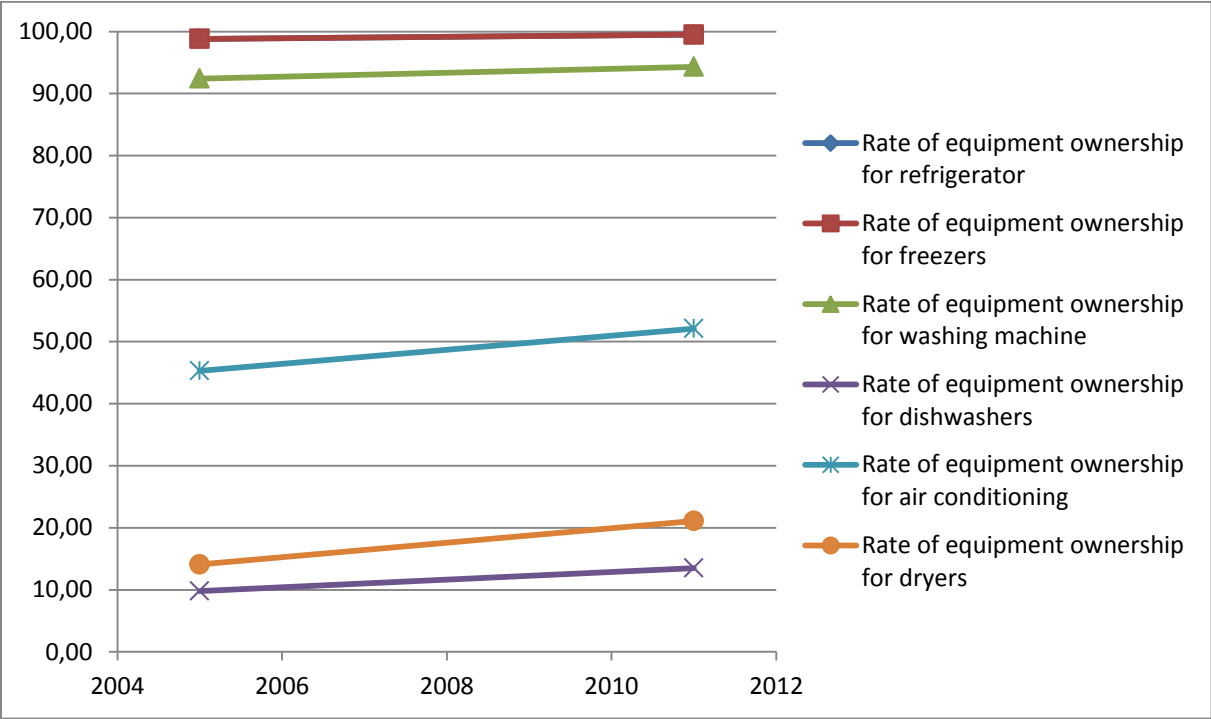


Figure 6 – Rate of ownership of appliances in Malta

As from Figure 7 above, it can be noticed how the ownership of the most basic appliances found within a household are on the increase in the Maltese households. Even though there are some drastic increase in quantities such as in air-conditioning, tumble dryers and dishwashers, the consumption figures for households are to be interpreted accordingly. It is indicated how the household consumption figures are on the decrease as from 2010. Even though appliances are increasing, the decrease could be explained as more efficient appliances. Such assumption is backed up by the fact that as from 2010, eco-design requirements for most appliances started to be implemented, driving the consumers to start buying more efficient appliances.

2.2. ENERGY EFFICIENCY POLICIES

Table 5 – Ongoing energy efficiency policies in residential sector

Title	Status	Type	Starting Year
Information Campaigns	Ongoing	Information/Education	2008
Definition of Energy Prices	Ongoing	Legislative/Normative	2009
Energy saving measures in social housing	Ongoing	Financial, Information/Education	2010
MRA Solar Water Heaters	Ongoing	Financial	2011
MRA Roof Insulation and Double Glazing	Ongoing	Financial	2012
Energy Audits for households	Proposed (medium/long-term)	Financial, Information/Education	2013
MRA PV scheme for Domestic Sector	Ongoing	Financial	2013
EU-related: Energy Performance of Buildings (Directive 2002/91/EC) - Energy Efficiency in Low Income Housing in the Mediterranean	Ongoing	Financial	2013
Domestic wells / cisterns restoration scheme	Ongoing	Financial	2013
Feed in Tariff Scheme	Ongoing	Financial	2013
Catch the Drop Campaign	Ongoing	Information/Education	2014
MIP PV Panels Scheme	Ongoing	Fiscal/Tariffs	2014
GRTU PV Panel for Domestic Sector by Soft Loans	Ongoing	Financial	2014

Table 5 indicates a list of measures/ policies that aid to reach the energy efficiency targets. The listed measures are still active even though some of them have started years ago. Most of the measures are financial and would help the resident to invest in either energy efficient or renewable sources. Some educative/ information campaigns are also carried out which will eventually help in changing the user trends in energy usage.

Table 6 – Completed energy efficiency policies in residential sector

Title	Status	Type	Starting Year
Rebates on investments in energy efficiency by domestic consumers	Completed	Financial	2006
Provision of advisory services for domestic customers	Completed	Information/Education	2007
Promotion of Compact fluorescent Lamps	Completed	Financial	2009
Support Scheme to Promote the Domestic Use of Compact Fluorescent Lamps	Completed	Financial	2009
Soft Loans from Banks	Completed	Financial	2012

Table 6 above shows some previous incentives supporting energy efficiency measures in households. Some of them have been revamped in new current measures due to their previous success.

A new measure launched during 2015 involves door to door energy audits for households, whereby government officials conduct free onsite walk through energy audits by appointment, and provide tips to the residents on how to become more efficient.

The new domestic PV panel scheme launched in July 2015 continues to encourage residents to install renewable energy systems in their homes. The current scheme gives a maximum of 50% grant on the capital cost capped to 2300 Euros, or 757 Euros per kWp, and a feed-in tariff of 16c5 for 6 years and marginal cost for the remaining lifetime of the system.

3. ENERGY EFFICIENCY IN TRANSPORT

It is noted that the transport sector accounts for 74% of the fuel used in the inland market, excluding that used for international aviation and electricity generation.

It is further noted that

- The vehicle fleet in Malta has been steadily increasing in recent years.
- Vehicles older than 10 years account for 66.4% of the national vehicle stock
- A trend in recent years is the high percentage of imported 'used cars' which in 2010 amounted to 65% of the newly licensed cars for that year.
- People in general prefer to travel by private cars (75% of all trips)

3.1. ENERGY EFFICIENCY TRENDS

Table 7 – Stock of vehicles in Malta

		2008	2009	2010	2011	2012	2013	2014
Petrol - Passenger Vehicles M1	engine cc <1.4 litres	132151	134919	138128	139950	139842	142548	147744
	engine cc 1.4- 2.0	29615	31409	32550	32408	32541	32522	32442
	engine cc >2.0 litres	2455	2507	2694	2812	2863	2973	3137
	Total petrol	164221	168835	173372	175170	175246	178043	183323
Diesel - Passenger Vehicles M1	<2.0 litres	58513	58557	59934	62861	64788	67333	70678
	"=>2.0litres	6547	6734	7401	8900	9793	10648	11588
	Total Diesel	65060	65291	67335	71761	74581.83	77981	82266
Commercial	all	52033.9	51543.7	51817	50432	50487	51269	52209
Motorbikes	all	15474	15474	15474	15474	15735	16766	18242

Table 7 shows the change in stock of cars over the years from 2008 to 2014. Analysing the passenger cars, the stock has increased over the years, with both petrol and diesel vehicles increasing at almost the same rate. Commercial vehicles, which include, N1,SP1,N2,N3,M2,AG1 and M3, both petrol and diesel seems to have a stable stock over the years, with a slight increase in the later years. For motorbikes, the stock from 2008 to 2014 has increased considerably, indicating that some users are opting to use bikes. The trends can be indicated on the graph in figure 8.

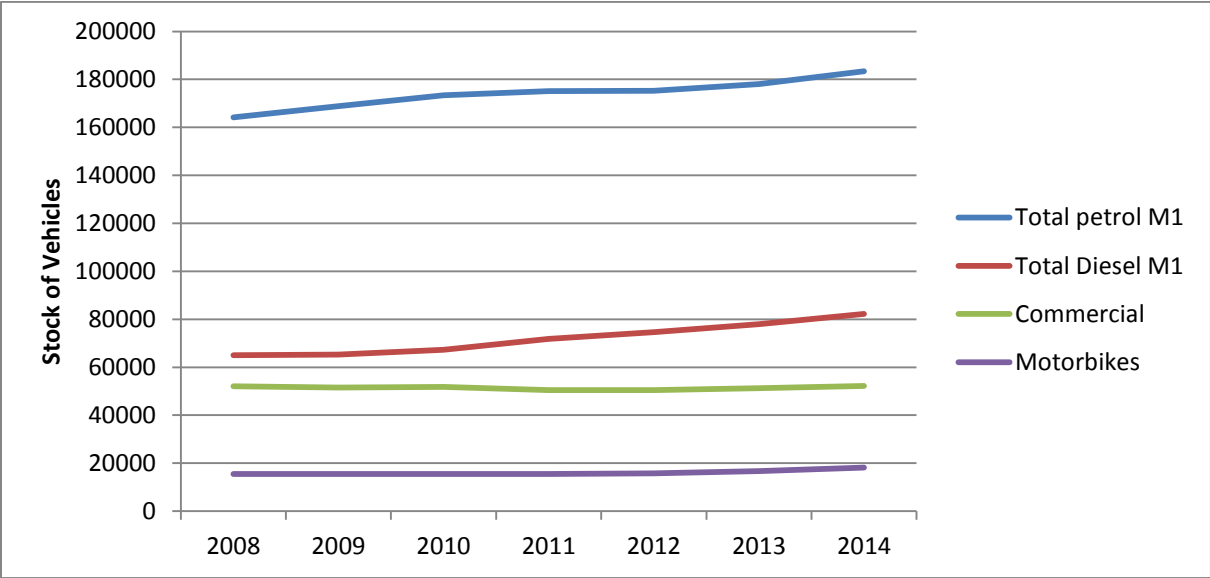


Figure 7 – Stock of vehicles

Table 8 – Tons of fuel consumed in M1 vehicles

Tons of fuel							
	2008	2009	2010	2011	2012	2013	2014
Petrol M1	69804.18	72310.52	72866.54	72552.87	71652.32	72044.77	72519.04
Diesel M1	91440.24	79723.10	86504.02	84486.26	86812.09	87343.39	91515.62

Table 8 above shows the consumption figure in Tons of fuel (petrol and diesel) used in M1 vehicles only. From the graph in Figure 9 it can be noticed that for petrol vehicles, even though the stock is increasing over the years, the consumption figures are almost constant. This indicates that the current petrol M1 fleet has increased in efficiency. However, the consumption of diesel M1 vehicles has increased along the years. Looking at the figure in Table indicates that large sized diesel engine

vehicles has increased at a faster rate than that of petrol, hence resulting in an increase in Diesel consumption for M1 vehicles.

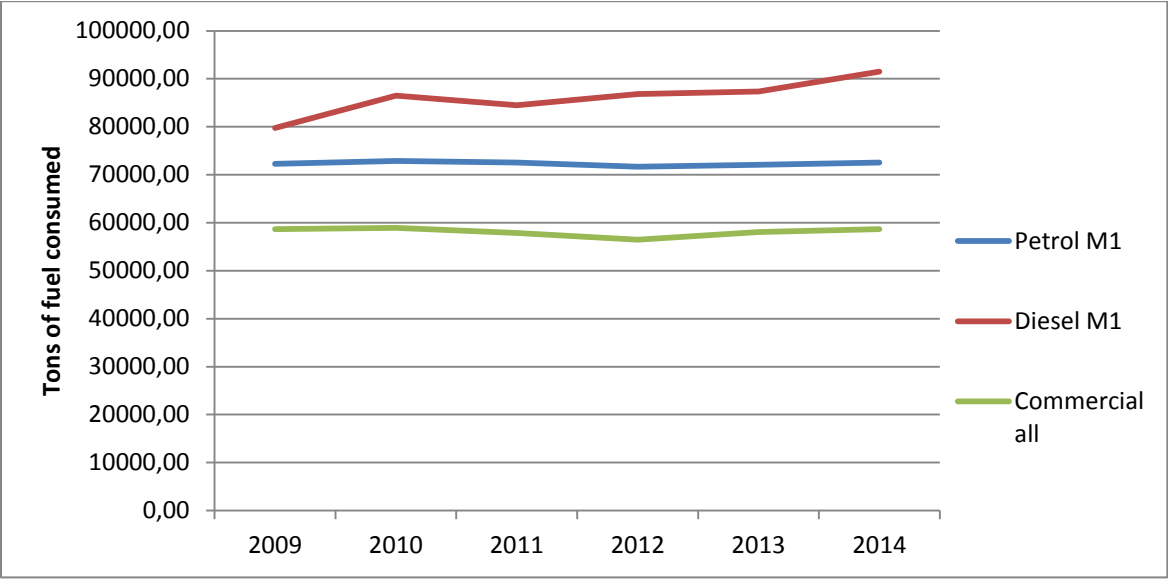


Figure 8- Tons of fuel consumed (sectoral)

Figure 9 indicate that in order for Malta to reach the efficiency and renewable targets, more intensive and direct measures are to be implemented in the transport sector. More action is needed to encourage users to buy more efficient vehicles while also investing in renewable technologies such as electric vehicles and alternative fuels.

Figure 10 shows the percentage change in modes of transport used in Malta over the years. It is evident that the use of private vehicles is increasing along the years, while the use of public busses is decreasing. Such illustration explains the statement made earlier that people in general prefer to travel by private car for around 75% of the trips. The snap shot is as of 2010, and a more recent survey is needed to get a clearer picture of the current situation in Malta. With the introduction of the new public bus service, the use of public transport is expected to increase.

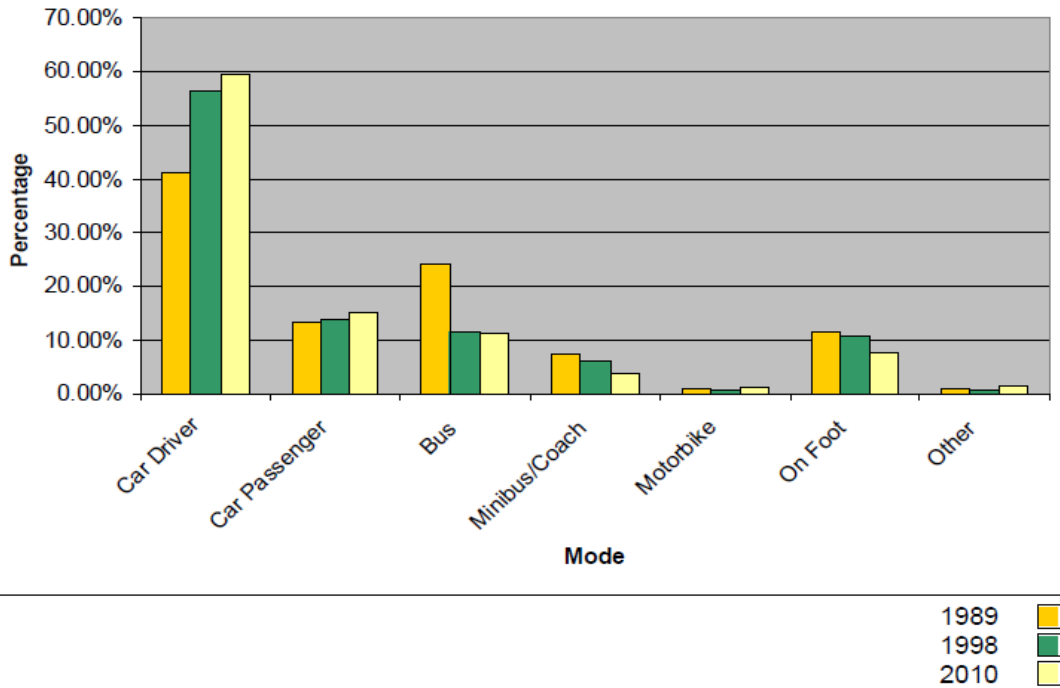


Figure 9 – Comparison of modes of transport

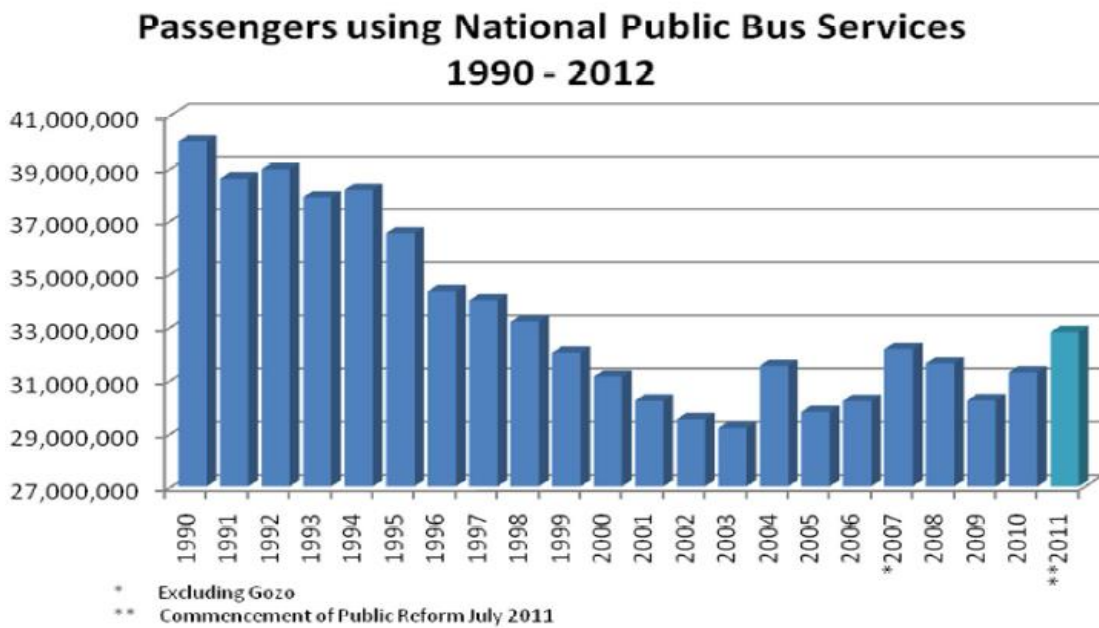


Figure 10 – Passenger using national public bus service

The figure above shows the number of passengers using the public bus service along the years. It is noted how through the years, the public bus service usage was decreasing drastically reaching a minimum in 2003.

3.2. ENERGY EFFICIENCY POLICIES

Despite having a fiscal regime that imposes comparatively high taxation levels for car registration, above EU average fuel costs levies and an annual circulation tax that is aimed to discourage the purchase of high polluting cars, the traffic and environmental impacts of the private motor car ownership and usage have been growing in proportion to the desire for increased mobility. Today, Malta has one of the highest per capita car ownership in the EU with the number of households possessing 3 or more cars.

The annual increase in the motor vehicle particularly in recent years has, in turn, been exerting great pressure on national transport infrastructure both in terms of the high demand for parking space and motorist demand for increased road capacity. Capacity problems and bottlenecks now exist at a number of critical locations on the 2,350 km of road network, particularly at major traffic intersections located on the 260km main strategic road network. The traffic bottleneck problems are starting to spread from the traditional peak hours associated with morning and evening commuting into other hours of the day and night. Whilst many of the bottlenecks have been alleviated where feasible through recent investment into the upgrade of parts of the strategic road network, the high level of urbanisation and environmental constraints at certain critical sections prove to be an insurmountable barrier to the provision of new road links or widening of existing infrastructure.

Table 9 – Energy efficiency policies and measures in transport sector

Title	Type	Starting Year
EU-related: CO2 Standards for Light Duty Vehicles	Legislative/Normative	
Mineral Oil Tax	Fiscal	
Speed limiter for Lorries	Infrastructure, Legislative/Normative	
Promotion of electric and hybrid vehicles	Financial, Fiscal	2003
Mandatory Introduction of Biofuels	Co-operative Measures , Financial	2004
Promotion of e-working or tele-working	Infrastructure, SocialPlanning/Organisational	2009
Euro V Public Transport Vehicles	Co-operative Measures , Infrastructure	2011
Promotion of Modal Shifts	Information/Education/Training, Infrastructure	2011

EU-related: Energy labelling of tyres (Regulation 1222/2009/EC) - European Regulation on the labelling of tyres	Legislative/Normative	2012
Car Scrappage Scheme	Financial	2014
Malta Public Transport	Information/Education/Training	2015
Grant Scheme on the Purchase of Electric Vehicles	Financial	2015
EU-related: Promotion of clean and energy-efficient road transport vehicles (Directive 2009/33/EC) - Government scheme to incentivise the conversion of vehicles to autogas	Co-operative Measures	2015

Table 9 lists incentives/measures currently active in Malta with regards to the transport sector. The need to become more efficient and also use renewable energy in transport led to the introduction of several measures. The most popular/ strong measure/incentive is the car scrappage scheme, which is reviewed from year to year to fine tune its applicability and increase its effectiveness.. Under this scheme, buyers of new vehicles will benefit from a refund upon disposing of a car older than 10 years, provided that the new vehicle satisfies specific efficiency and emission levels.

The promotion and use of bio fuels in Malta is also an important measure. A substitution obligation is in force and this is met by local importers and distributors of road transport fuels by blending biodiesel with diesel. All vehicles operating on diesel in Malta would therefore be using up to 7% biodiesel.

With the recent change in the public transport operator, a radical change has occurred with regards to the Euro Class (emission standard) of the public busses. Up till 2011, old buses (some even 30yrs+) were still in circulation. As part of the new public bus operator agreement, it was made mandatory that all buses should meet Euro 5 standard or higher. Such measure Led to more efficient and less emitting buses on the roads.

4. ENERGY EFFICIENCY IN INDUSTRY

4.1. ENERGY EFFICIENCY TRENDS

Figure 12 shows the trend of final, electrical and oil product consumption in industry in Malta. An expected dip is noticed for the years 2008 to 2010, due to the economic crisis, with a recovery period in the following years. Such trend is also noticeable in Figure 13 showing the energy consumption trends in industry for the EU countries. As of 2008, the consumption in industry fell due to a reduction in productivity. However, the recovery period for EU countries took longer than that in Malta. This can be interpreted by the gradient in the increase of the total consumption.

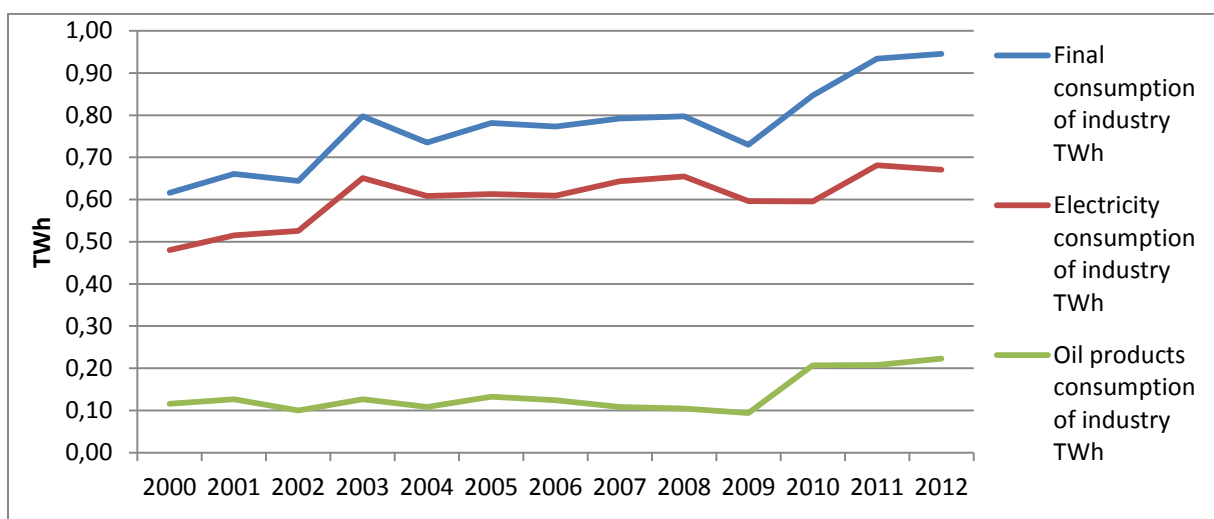


Figure 11 – Energy consumption trends in industry in Malta

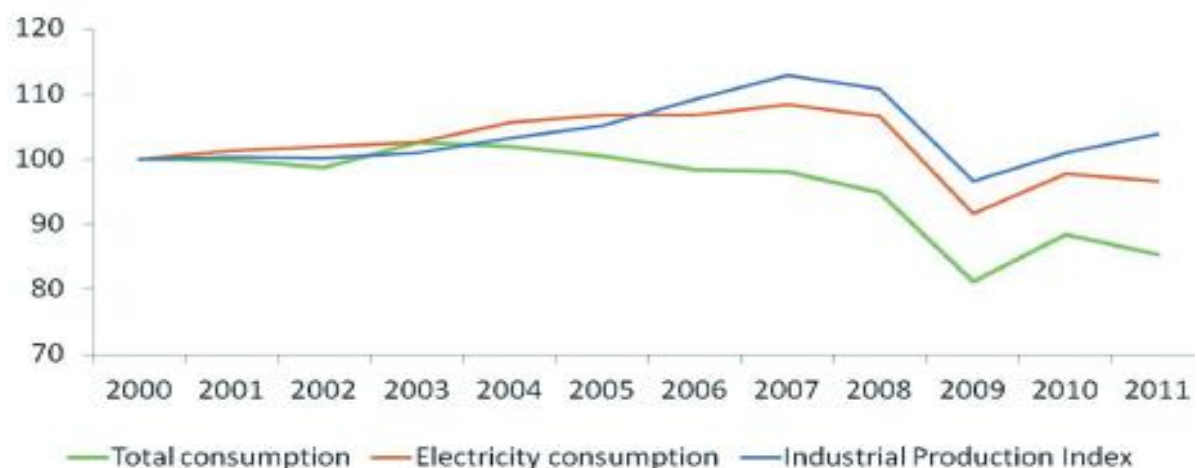


Figure 12 – Energy consumption trends in industry in EU

It should be noted that in Malta the industry sector is not vast and not many heavy industrial firms

operate from Malta. The most active industry in Malta is the manufacturing industry followed by that in the machinery and fabricated metal products, construction and the chemical industry as can be seen in Figures 14 and 15. It can be noticed that from 2008 to 2012, the Value Added of the manufacturing industry increased by 1%, while that of machinery and fabricated metal products decreased by 3%. The construction industry increased over the years by 4%, confirming its importance in Malta’s economic profile.

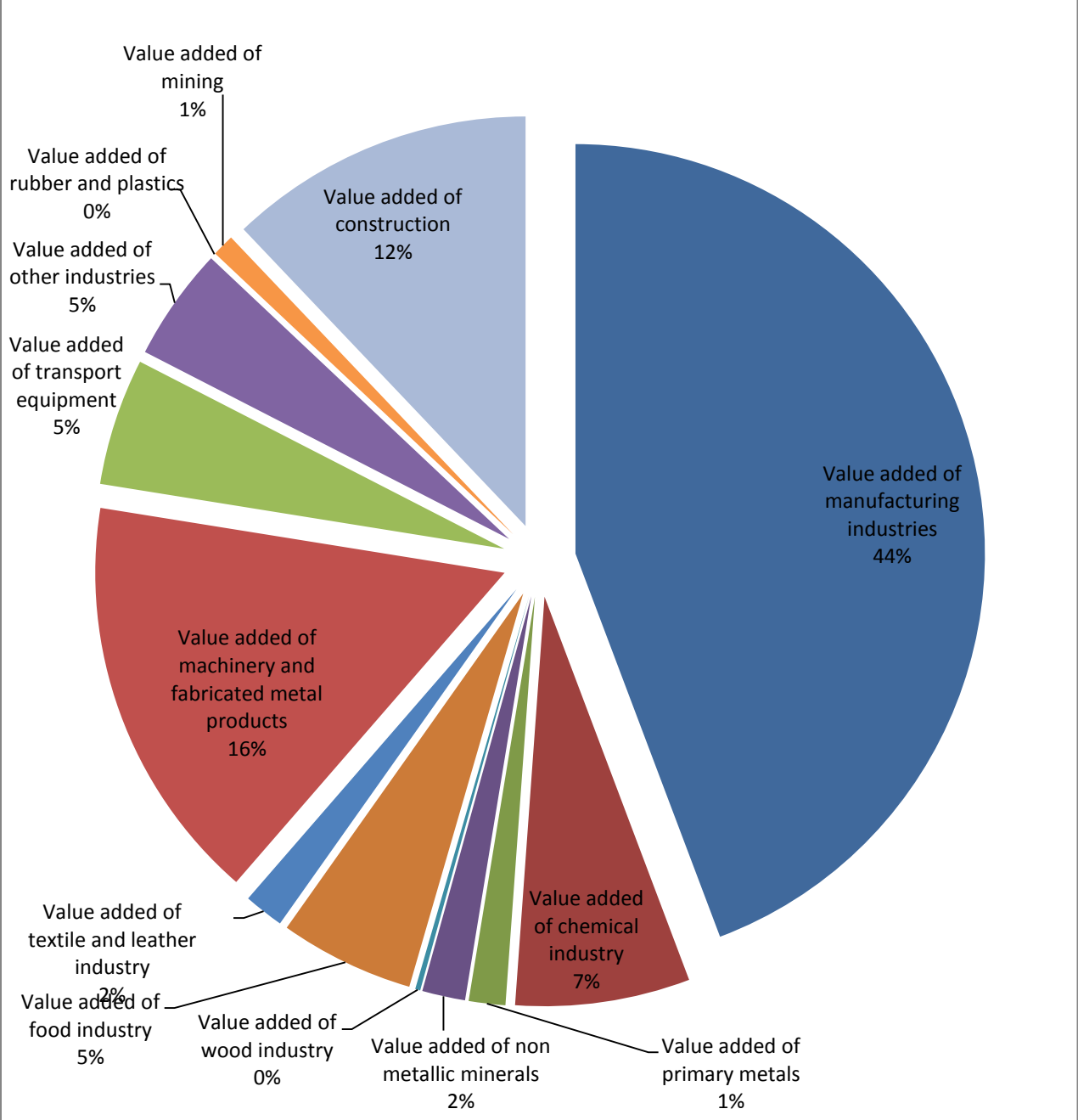


Figure 13 – Value added sub divided by industry for year 2008

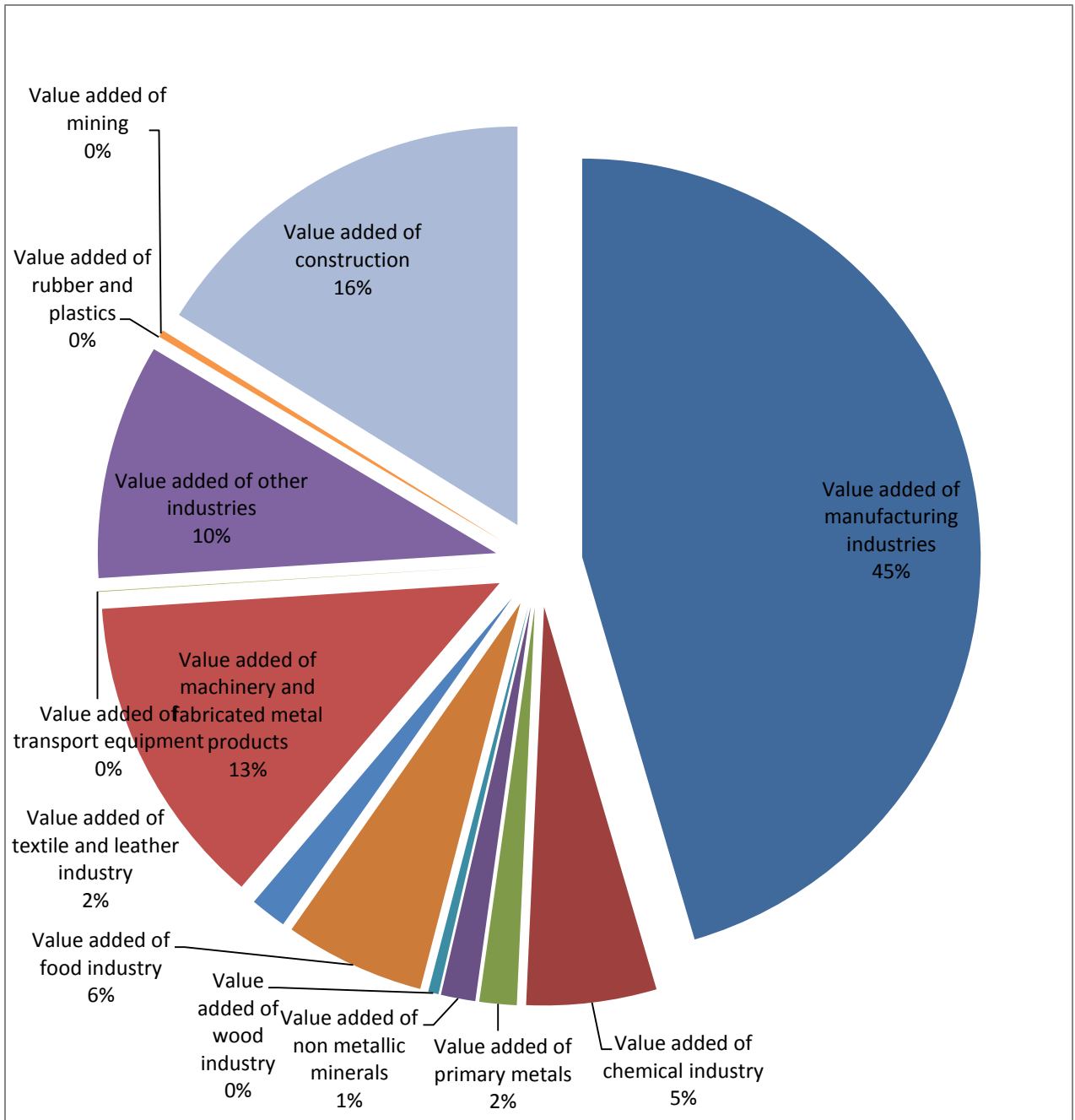


Figure 14 - Value added sub divided by industry for year 2012

4.2. ENERGY EFFICIENCY POLICIES

Table 10 – Energy efficiency policies in industry

Title	Type	Starting Year
Energy audits for industry	Financial	2006
Support schemes for industry and SME's	Financial	2009
Modernisation of Agricultural holdings	Financial	2009
Malta Enterprise Energy grant scheme	Financial	2009
Fisheries Fund	Financial	2010
Feed in Tariffs for the Industry	Financial	2014

Table 10 shows the energy efficiency measures implemented in the industrial sector. Most of them has started long ago and some are still active due to their success rate.

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