

# Malta

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## Key issues

Given the current physical isolation of Malta's electricity sector, the high voltage connection with Italy should be seen as a high priority project to secure electricity supply and reduce the vulnerability of the sector.

Malta should step up its efforts to diversify the energy mix and energy sources, notably by developing renewable energy and by creating access to natural gas.

Currently progress towards European targets for renewables has been slow but has improved recently thanks to the increased use of solar energy. Development of renewable energy post 2020 may be challenging due to geophysical restrictions.

## General overview

Malta is almost 100% dependent on oil and petroleum products. The gross inland energy consumption in 2012 was 0.91 Mtoe, a decrease of 2.5% compared to 2011. Renewable energy accounted for only 1.1% of gross inland energy consumption. There is no supply of natural gas.

The gross electricity generation in 2012 was 2.290 TWh, an increase of 4.4% compared to 2011. Electricity generation in Malta is dominated by crude oil and petroleum products. In 2011, a small amount of electricity (8 GWh) was generated by photovoltaic systems, increasing to 13 GWh in 2012.

Malta has an obligation to reach 10% of renewable energy in the gross energy consumption by 2020<sup>361</sup>. According to the present reporting data available in Eurostat, the RES share in gross final energy consumption for 2012 is below Malta's 2011-2012 indicative trajectory and the country therefore appears to lag behind its 2020 obligation. Cogeneration<sup>362</sup> of heat and power remained negligible during 2012 (only 0.4%)<sup>363</sup>.

## Regulatory framework

### General

The Third Energy Package has been transposed in 2011, it however provides for ample derogations.

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<sup>361</sup> MRA, Malta's Report to the European Commission on the Implementation of Directive 2009/72/EC, Directive 2009/73/EC and Directive 2005/89/EC, July 2013.

<sup>362</sup> The share of electricity produced in combined heat and power plants (CHP).

<sup>363</sup> Eurostat.

## National Energy Regulator

The Malta Resources Authority (MRA) was established in 2002 and is responsible for the regulation of energy, mineral and water resources. MRA is composed of seven Board members and 39 employees within the organisation. The 2012 budget for MRA was approximately EUR 2 million<sup>364</sup>.

## Unbundling

There is no electricity transmission system in Malta. A single distribution system serves all electricity consumers. The function of the distribution system operator (DSO) is carried out by the Enemalta PLC, a vertically integrated power utility. The requirements regarding the unbundling of transmission system operators and distribution system operators do not apply to Malta, which has derogations from Article 9 on the unbundling of TSOs, Article 26 on the unbundling of DSOs, Article 32 on third party access and Article 33 on market opening.

## Wholesale Markets

Enemalta PLC enjoys legal monopoly in electricity supply and is currently the main producer of electricity in Malta. The existing independent electricity producers are small and generate electricity from renewable energy sources either for their own consumption or to sell to Enemalta PLC. In the absence of large independent electricity producers a wholesale market is not in place and the balancing between generation and demand is carried out by Enemalta PLC.

## Retail Markets

Enemalta PLC has a 100% share of the electricity retail market, which is not open to competition and therefore customer switching is not possible in Malta. There were no changes in the methodologies used to determine the tariffs during 2012. All consumers of electricity are on regulated retail tariffs.

Malta's electricity prices, for industrial consumers, have been at the same level for the last four years, after an increase in 2010 due to the increase of energy and supply cost component. The electricity prices for domestic consumers have been revised downwards in 2014, whereas those for the industry are expected to be reduced during 2015. The prices for Malta's industry were above the EU average while the retail prices for households were below EU average<sup>365</sup>. Electricity generation remained dependent on heavy fuel oil and gasoil, thus making the cost of electricity in Malta highly susceptible to changes in the international market price of these two fuels. A new 215MW gas-fired Combined Cycle Gas Turbine (CCGT) plant together with a floating LNG storage and regasification unit, which would shift Malta's electricity generation away from fuel oil and significantly increase the overall generation efficiency, is planned for 2015.

The energy component accounted for 82% of the household electricity price while for industrial consumers the energy component was 88%. The network component represented 13% and 12% of the total bill for households and industry, respectively<sup>366</sup>. In Malta, a charge for the support of

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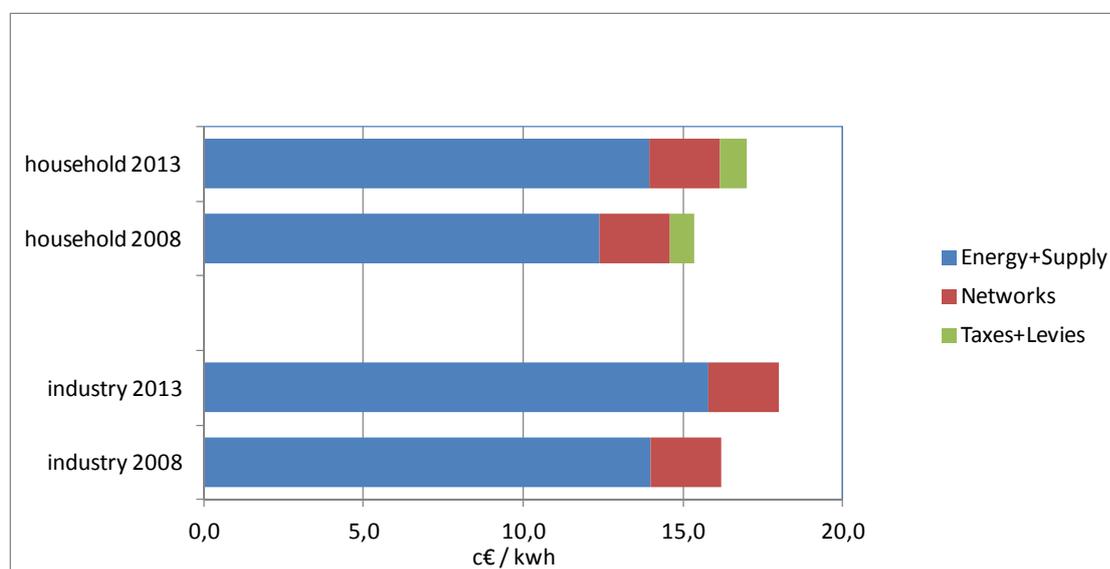
<sup>364</sup> MRA, Annual Report 2012.

<sup>365</sup> Eurostat.

<sup>366</sup> Eurostat.

renewables is not included in the electricity tariff, as this support is financed through taxes in the national budget<sup>367</sup>.

Figure 3: Electricity price change by component 2008 – 2013 (source: Eurostat, energy statistics)



Electricity demand in 2012 increased by 5% compared to 2011, which was the 4<sup>th</sup> largest percentage among all EU Member States. However, Malta was the only one of these four Member States which did not witness a respective GDP increase. In Malta, the increase in consumption was due to the weather conditions, since electricity is the main source for heating and air conditioning<sup>368</sup>.

## Consumers

The assessment of the retail electricity expressed by Maltese consumers is well above the EU average (76.1 points vs. 72.0<sup>369</sup>) with the country occupying the 10th position in the EU ranking. The incidence of both problems and complaints is the 4<sup>th</sup> lowest among EU countries, and trust in providers is the 5<sup>th</sup> highest. (The questions on switching, ease of switching and choice have not been asked given that the market is a monopoly).<sup>370</sup>

Vulnerable consumers, including families with low income, persons with a disability and other humanitarian cases and families on social assistance or special unemployment benefit, persons with an age pension or a career's pension, may benefit from energy bill discounts. During 2012, 24,142

<sup>367</sup> ACER/CEER, Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

<sup>368</sup> ACER/CEER, Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

<sup>369</sup> However the difference is not statistically significant.

<sup>370</sup> 10th Consumer Markets Scoreboard,

[http://ec.europa.eu/consumers/consumer\\_evidence/consumer\\_scoreboards/10\\_edition/index\\_en.htm](http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/10_edition/index_en.htm)

consumers received energy benefits<sup>371</sup>. 12% of household consumers were defined as consumers with special needs<sup>372</sup>.

The replacement of electricity meters with smart meters is underway. By the end of 2012 the number of smart meters installed was 170,346 (62%). The full replacement of the electricity meters with smart meters is expected to be completed by the end of 2014<sup>373</sup>.

## Infrastructure

The Maltese authorities have ensured the adoption of the measures stemming from the TEN-E Regulation, including the establishment of the one-stop-shop for Projects of Common Interest (PCIs), and other measures foreseen for 2014 and 2015, including the publication of the manual on the permit granting process for project promoters, and the adoption of legislative and non-legislative measures streamlining the environmental assessment procedures.

## Electricity

In December 2012, a new generation plant came into operation and thus the nominal generation capacity of the two power stations of Malta increased to 620 MW. A 225<sup>374</sup> MW high voltage interconnection between Malta and Sicily, which is currently under construction, is expected to be completed by the end of 2014. In 2013, the government of Malta agreed to the construction, by private investors, of a new 215 MW CCGT power plant using gas supplied by an LNG Floating Storage Unit permanently berthed at Delimara. An existing 149 MW Combined Diesel Engine currently operated on heavy fuel oil will be converted to natural gas.

## Gas

Natural gas is not available in Malta. For an interim period, natural gas for electricity generation will be provided by an LNG Floating Storage Unit (FSU) permanently berthed at Delimara Power Station with an onshore re-gasification unit once the infrastructure is available.

A project consisting of the FSU and a pipeline connecting it to both Delimara (Malta) (12km approximately) and Gela (Sicily) (150km approximately) for transmission of Natural Gas, entitled: *Floating LNG Terminal in Malta and new interconnection Malta to Italy*, was selected as a Project of Common Interest (PCI).<sup>375</sup> The final design of the project will depend on the outcome of the cost-benefit and feasibility study which is currently being carried out.

## Security of supply

### Electricity

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<sup>371</sup> MRA, Malta's Report to the European Commission on the Implementation of Directive 2009/72/EC, Directive 2009/73/EC and Directive 2005/89/EC, July 2013.

<sup>372</sup> ACER/CEER, Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

<sup>373</sup> MRA, Malta's Report to the European Commission on the Implementation of Directive 2009/72/EC, Directive 2009/73/EC and Directive 2005/89/EC, July 2013.

<sup>374</sup> <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6347769>.

<sup>375</sup> [http://ec.europa.eu/energy/infrastructure/pci/doc/2013\\_pci\\_projects\\_country.pdf](http://ec.europa.eu/energy/infrastructure/pci/doc/2013_pci_projects_country.pdf).

The installed electricity generation capacity by thermal power plants was 571 MW, in 2011<sup>376</sup>. In 2012, the nominal generation capacity was increased to 620 MW. The maximum peak demand was 429 MW and was recorded on 9 August 2012. The total fossil fuel electricity generation capacity available when the peak demand occurred was 505 MW<sup>377</sup>. Additional electricity generation capacity is required to ensure security of supply.

## Gas

To increase the diversification of primary energy sources, Malta has submitted a project to connect Malta to the European gas grid as a project of Common European Interest (PCI).

### Key indicators

Electricity		Gas	
Number of companies representing at least 95% of net power generation	1	Number of entities bringing natural gas into country	N/A
Number of main power-generation companies	1	Number of main gas entities	N/A
Market share of the largest power-generation company	100%	Market share of the largest entity bringing natural gas	N/A
Number of electricity retailers	1	Number of retailers selling natural gas to final customers	N/A
Number of main electricity retailers	1	Number of main natural gas retailers	n/a
Switching rates (entire electricity retail market)	N/A	Switching rates for gas (entire retail market)	N/A
Regulated prices for households – electricity	Yes	Regulated prices for households – gas	N/A
Regulated prices for non-households – electricity	Yes	Regulated prices for non-households – gas	N/A
HHI in power-generation market	10,000	HHI in gas supply market	N/A

<sup>376</sup> Eurostat.

<sup>377</sup> MRA, Malta's Report to the European Commission on the Implementation of Directive 2009/72/EC, Directive 2009/73/EC and Directive 2005/89/EC, July 2013.

HHI in electricity retail market	10,000	HHI in gas retail market	N/A
Electricity market value <sup>378</sup> (bn€)	0.350	Gas market value <sup>22</sup> (bn€)	N/A
Installed generation capacity (2012, MW)	620		
Peak load (MW)	429		
Number of smart meters installed	244,000		

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<sup>378</sup>Market value is an estimation of the size of the retail electricity and gas markets. It is calculated using data on electricity and gas consumption in the household and non-household sectors (average bands) and annual average retail prices.