
1. Introduction

Malta is underlining the importance of energy in its social and economic policies by developing a series of plans, confirming actions taken in recent years exploiting renewable energy national sources and developing and implementing actions making energy supply more sustainable.

The Energy Policy for Malta has been published in December 2012. The policy is based on three overriding and horizontal objectives; security of supply, competitively priced energy services and environmental responsibility. The policy addresses these objectives in six policy areas:

1. Energy efficiency
2. Reducing reliance on imported fuels
3. Stability in energy supply
4. Reducing the emissions from the energy sector
5. Delivering energy efficiently and effectively
6. Ensuring that the energy sector can deliver

To emphasize the importance of the energy sector to the Maltese Islands, since March 2013, Malta has set up a Ministry for Energy and the Conservation of Water implementing the Government policies in the sector both in the supply side and the demand side of energy. In addressing the country’s energy challenges, Malta’s energy policy is influenced by a number of EU energy and environmental policies and thus plans out its strategies in line with these obligations and Regulations.

There have been recent important developments with regard to the supply side of electricity generation. The investments being done in this sector are expected to reduce Malta’s carbon dioxide (CO₂) emissions with over 300Gg per annum. The major investments are three:

a) *The Malta–Italy electricity interconnector:* This 200MW 220kVHVAC submarine power cable will connect the electricity power grid of Malta with the European grid. Physically the project will start at Magħtab, Qalet Marku in Malta and will run for 125 km, of which approximately 104 km sub sea landing in Marina di Ragusa in Sicily, Italy. The cable will have capacity of 200 MW and it will use 220 kV high voltage alternate current.

b) *The 2012 extension of the Delimara Power Station:* The plant has a nominal capacity of 149MW and consists of eight medium speed diesel engines plus a steam turbine in combined cycle mode. The plant is equipped with exhaust gas abatement equipment to reduce the emissions of NOx, SO₂ and dust. The total net efficiency is 47.6% at maximum continuous rating and CO₂ emissions at 0.59kg/kWhe. This is significantly better than the conversion efficiency of the plant it will be replacing (typically around 26%).

c) *Gas Interconnection:* The new Government is committed to a plan to switch from heavy fuel to natural gas for the generation of electricity at the Delimara Power Station in the shortest possible term. This plan will involve investment by the private sector in a new 195 MW Combined Cycle Gas Turbine unit which will be gas-fired. The new diesel engines at Delimara (mentioned in above (b)) will also be converted to gas and part of the Delimara plant will be retained as reserve capacity fired by Gas Oil. It is envisaged that the older generating units at Delimara will be phased out.

Moreover Malta is planning for further connection to European energy grid, by connecting to the European Gas network. The Annex in the delegated amendment to the Regulation 347/2013 includes also as ‘project of common interest’ the “Connection of Malta to the European Gas network (G103)”. A comprehensive study that includes a cost-benefit analysis to determine the commercial viability of such a project, as well as its effect on the Maltese economy, is currently being prepared. The study
will also look into (i) the use of gas in other sectors than power generation, and (ii) other externalities of the project such as security of supply, competitiveness, sustainability.

On the demand side of energy, Malta has been focusing on the increased (i) penetration of renewable energy sources (RES) technologies, especially solar, and (ii) the importance of energy efficiency measures. Malta enjoys a Mediterranean climate with mild winters and warm to hot summers, with a large number of hours of sunshine during the year thus solar energy has to be the preferred option in various sectors, albeit limited and scarce land availability. The number of solar Photovoltaic (PV) and Solar Thermal (ST) installations has been increasing over the years. In 2012 it is estimated that 13.6 GWhrs were generated from PV installations and approximately 35.14 GWhrs of heat was supplied from solar water heating.

The number of enterprises with a large heat to power requirements on the Islands is limited and thus cogeneration at times proved not economically feasible however successful installations were installed at waste treatment plants, generating electricity and heat from gas generated in the Mechanical Biological Treatment Plants. The official reporting of the Malta Resources Authority indicated that in 2012 the electricity generated whilst in operation, when heat was utilised, was 2.455 GWh and from these engines 2.277 GWh of heat was generated.

2. Requirements of the Directive

The main obligation of Article 14 of the above-mentioned Energy Efficiency Directive lies in paragraph (1) which obliges Member States to carry out a comprehensive assessment of the potential for the application of high efficiency cogeneration and efficient district heating and cooling by 31 December 2015. Article 14(3) states that the assessment must contain a cost-benefit analysis capable of facilitating the identification of the most resource and cost efficient solutions to meeting heating and cooling demands.

Article 14(5) then goes specifically into obligations when new thermal electricity generation plants are being planned and states:

Member States shall ensure that a cost benefit analysis in accordance with Part 2 of Annex IX is carried out when after 5 June 2014:

(a) a new thermal electricity generation installation with a total thermal input exceeding 20MW is planned, in order to assess the cost and benefits of providing for the operation of the installation as a high efficiency cogeneration installation;

(b) an existing thermal electricity generation installation with a thermal input exceeding 20MW is substantially refurbished, in order to assess to cost and benefits of converting it to high converting it to high efficiency cogeneration;

(c) an industrial installation with a total thermal input exceeding 20 MW generating waste heat at a useful temperature level is planned or substantially refurbished, in order to assess the cost and benefits of utilising the waste heat to satisfy economically justified demand, including through cogeneration, and of the connection of that installation to a district heating and cooling network;

(d) a new district heating and cooling network is planned or in an existing district heating or cooling network a new energy production installation with a total thermal input exceeding 20 MW is planned or an existing such installation is to be substantially refurbished, in order to assess the cost and benefits of utilising the waste heat from nearby industrial installations.

Article 14(6) states that Member States may exempt from Article 14(5):

(a) those peak load and back-up electricity generating installations which are planned to operate under 1 500 operating hours per year as a rolling average over a period of five years, based on a
verification procedure established by the Member States ensuring that this exemption criterion is met;

(b) nuclear power installations;

(c) installations that need to be located close to a geological storage site approved under Directive 2009/31/EC.

Member States may also lay down thresholds, expressed in terms of the amount of available useful waste heat, the demand for heat or the distances between industrial installations and district heating networks, for exempting individual installations from the provisions of points (c) and (d) of paragraph 5.

Member States are to notify exemptions adopted under this Article to the Commission by 31 December 2013 and any subsequent changes to them thereafter.

3. Exemption

As already indicated in the introduction, the energy sector of the Maltese Islands is in a state of continuous progress with the aim of achieving further development of Malta and Gozo in a sustainable manner. In the comprehensive assessment to be forwarded by 31 December 2015, Malta will have more information on the viability of certain embedded installations and the most feasible heating and cooling technologies for the Maltese context identified. Thus Malta reserves the right (as per Article 14(4)) in that where the national comprehensive assessment proves that the application of high-efficiency cogeneration and/or efficient heating and cooling benefits do not exceed the costs, installations concerned are exempted from Article 14(5).

As regards the equipment mentioned in Article 14(6) it is not currently envisaged that in the near future new peak load and back-up electricity generating installations, nuclear power installations, geological storages of carbon dioxide, industrial installations with a total thermal input exceeding 20 MW generating waste heat, and new district heating and cooling network with a total thermal input exceeding 20 MW are installed in Malta. Thus, an exemption is not required.

However energy polices develop and thus Malta reserves the right that in the foreseen National Energy Efficiency Action Plan to be submitted by 30 April of 2014, and every three years thereafter, if required reference is made to the exemption listed in Article 14(6) and changes in the Malta position taken within this document are notified to the Commission as indicated in the final subparagraph of Article 14(6).