

**Malta's annual monitoring report for 2016 under Article 24(1) of
'Directive 2012/27/EU of the European Parliament and of the Council of 25
October 2012 on energy efficiency, amending Directives 2009/125/EC and
2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC'**

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Introduction

Article 24(1) of Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (the EED) requires monitoring reports to be submitted by 30th April each year (first EED monitoring report submitted in 2015; progress report for 2013). In accordance with Part 1 of Annex XIV to the EED, the reports are to contain the following information:

1. a list of key energy monitoring indicators in the year n-2, n being the current year (2014 for this report);
2. in sectors where energy consumption remains stable or is growing, Member States analyse the reasons for such stability or growth and attach their appraisal to the estimates (relevant for subsequent reports);
3. henceforth the second and subsequent reports shall also include points (b) to (e) of Annex XIV Part 1 of the Directive 2012/27/EU.

(a) List of key energy monitoring indicators in the year n-2 (2014), n being the current year:

The list of monitoring indicators in the year n-2 is found in annex 1. The Guiding Template_Annual Report 24_1 EED_2016 format was used for this report and data provided in the report is for the most part available from EUROSTAT database as indicated in guiding table. A note was inserted wherever the data provided originated from some other local entity. It should be noted that the NSO (National Statistics Office) as the entity responsible compiling the data in line with the EUROSTAT codes indicated in the guiding template has coordinated with the various entities to validate and harmonise the data being reported to EUROSTAT.

The Co-Generation Annual Report 2014 included as Annex 2 with this report, forms the basis for the calculations of “electricity generated from CHP” and “heat generation from thermal power generation”. The Co-Generation Annual Report is prepared by REWS (Regulator for Energy and Water Services) as a requirement of Regulation 24(3) of Subsidiary Legislation 545.16.

In accordance with the requirement expressed in Annex XIV Part1 sectors where energy consumption remains stable or is growing, Member States analyse the reasons for such stability or growth and attach their appraisal to the estimates (relevant for subsequent reports);

This comment focuses on the growth of total demand for energy in Malta in 2014 in relation to the overall growth in the scale of activities which influences total energy demand. No comment is deemed appropriate at the level of sectors, because the sectoral allocation of total inland energy use in 2014 was not based on a specific survey for that year, but relies on ratios for a survey which captured data for 2010 to 2013.

Total demand for energy in Malta increased by 3.4% in 2014, as compared to an economic growth rate measured in constant prices standing at 3.7%. This in itself indicates an element of decoupling of energy demand from economic activity, which during the year was not even more pronounced due to the following circumstances:

- a significant increase in tourist arrivals, entailing a 5% growth in terms of bed-nights stayed, which is associated with relatively energy intensive activities associated with aviation, automotive transport and HVAC particularly during the summer month;
- extreme hot weather conditions in the summer (Jul - Sep) of the year, whereby the average temperature stood at 26.32 degC in 2014 as compared to 24.96 degC in 2013.

(b) Updates on major legislative and non-legislative measures implemented in the previous year (2015) which contribute towards the overall national efficiency targets for 2020:

REWS Act XXV of 31st July 2015 -CAP 545¹: Establishment of Regulator for Energy and Water Services to perform the regulatory functions previously undertaken by the Malta Resources Authority as defined in **Article 14** and the list of responsibilities as defined in **Schedule 1** of this act. Among other assignments REWS acts as the Managing Authority and monitors Renewable Energy and Energy Efficiency schemes, regulates and audits energy product imports, regulates the electricity supply market and issues authorisation to qualified professionals in various energy related skills.

LN170 of 26th May 2015 (S.L. 545.29)²: Sale of Electricity Generated from Co-generation Units Regulation. The purpose of these regulations is to regulate the sale of electricity generated from cogeneration units and supplied to the distribution system operator. Defines conditions and terms for remuneration for electrical power sold to the DSO.

LN 434 of 2015 Building Regulation Act (CAP513) and Government Notification 1053³: The Conservation of Fuel, Energy and Natural Resources (Minimum Requirements on the Energy Performance of Buildings), published by the Building Regulation Office in August 2015, as Documents F - Part 1: Minimum Energy Performance Requirements for buildings in Malta and Part 2 Minimum Energy Performance Requirements for Building Services in Malta, shall for all intents and purposes be deemed applicable for new and renovated buildings, as the case may be, from 1st January 2016.

Guidance Notes to Regulation 10 of Legal Notice 196/2014⁴: Guidance Note on the carrying out of mandatory energy audits by non-SME's pursuant to Regulation 10 of LN 196/2014 transposing the Energy Efficiency Directive 2012/27/EU. In order to assist non-SMEs comply with the 'audit' requirements of L.N. 196 of 2014 the Sustainable Energy and Water Conservation Unit and the Regulator for Energy and Water Services published the document defining the conditions under which enterprises qualify for mandatory audits, which are the competent authorities managing and monitoring the process, setting deadlines for response and the expected quality of audits.

¹ <http://justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12346&l=1>

² <http://justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=26873&l=1>

³ <http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=27243&l=1>

⁴ <https://energy.gov.mt/en/Documents/Non%20SMEs%20Guidance%20Note%20Amended%20version1.4.pdf>

Government Notice 409 of 2012: Roof Thermal Insulation and Double Glazing grant scheme for the residential and commercial sectors managed by REWS (2012-2016): re-issued and extended each year since the first scheme in 2012, the latest issues through Government Notice 1298 of 2014 and G.N. 1273 of 2015 extending the time window up to 31st December 2016. Support for the ongoing scheme varies according to market pricing and propensity for up-take. The energy savings achieved through the latter schemes are reported under the national energy efficiency obligation schemes (alternative measures) as applied in terms of Article 7(9) which notably covers those savings arising from residential buildings.

National Solar Water Heater grant scheme for domestic use: first issued in 2011 and repeated each year since, the latest issues being GN 1299 of 2014 extending the scheme up to 31st December 2015 and this year's re-issue through GN 1272 of 2015 extending the scheme up to 31st December 2016. Support for the ongoing scheme varies according to market pricing and propensity for up-take. The energy savings achieved through the schemes are reported under national energy efficiency obligation schemes referred to in the alternative measures adopted in application of Article 7(9) for savings from residential buildings.

Government Notice 1069 of 15/10/2015: Notice for the purposes of Regulation 10(1) of LN 376 of 2012 on the Energy Performance of Building Regulations under the Building Regulation act (Cap. 513). The Draft nZEB document was published for public consultation on (3/8/2015) "nearly-zero energy buildings plan for Malta".

Government Notice 1053 of 15/10/2015: Notice for the purposes of Regulation 12(1) of LN 376 of 2012 on the Energy Performance of Building Regulations under the Building Regulation act (Cap. 513). This is a notification that the methodology for calculating the EPC for **non-dwellings** shall be the "Simplified Building Energy Model for Malta (iSBEM)". Technical Manual and User's Guide both dated 6/10/2011.

Government Notice 1025 of 23/10/2015: Notice for the purposes of Regulation 12(1) of LN 376 of 2012 on the Energy Performance of Building Regulations under the Building Regulation act (Cap. 513). This is a notification that the methodology for calculating the EPC for dwellings shall be the "Energy Performance Ratings of Dwellings in Malta (EPRDM)". User Manual EPRDM version DM01 dated 30/4/2009.

Budget Measures 2016: Re-issue of the Vehicle Scrappage scheme for the scrapping of M1 and N1 category vehicles which are over 10 years old. The budget measures also include grants for the promotion of Electric Vehicles and other energy efficiency measures for transport updating GN 150 of 14/2/2014 grant scheme for promotion of EV for individuals and GN351 of 4/4/2014 extension of grant scheme to include the business community and NGO's. The detailed description of the measure can be found at: <http://www.transport.gov.mt/land-transport/budget-2016>

- (c) **the total building floor area of the buildings with a total useful floor area over 500 m² and as of 9 July 2015 over 250 m² owned and occupied by the Member States' central government that, on 1 January of the year in which the report is due, did not meet the energy performance requirements referred to in Article 5(1); and**
- (d) **the total building floor area of heated and/or cooled buildings owned and occupied by the Member States' central government that was renovated in the previous year referred to in Article 5(1) or the amount of energy savings in eligible buildings owned and occupied by their central government as referred to in Article 5(6);**

The estimated floor area of buildings owned and occupied by the central government that exceed 250m² and have an energy consumption higher than 107.5 kWh/m² amount to 31509m² from a total of 158701m² representing about 20% of the total floor area.

Malta has opted for the ‘alternative’ approach which allows the possibility to count the excess savings achieved in the previous or following years towards the target of a given year⁵. In view of this possibility, Malta commenced to adopt the latter approach in order to address Article 5 during the current year. Works are expected to be completed by 2020. The minimum total energy savings achieved in 2020 will be equivalent to that which would have been achieved in 2020 by using the ‘default’ approach.

(e) Energy savings achieved through the national energy efficiency obligation schemes referred to in Article 7(1) or the alternative measures adopted in application of Article 7(9). Savings for year (n-2), measures taken in year (n-1).

i. Measures under the obligated party, Enemalta plc:

Enemalta plc, as part of its obligations and overall strategy in increasing energy efficiency within its operation, has been introducing additional measures to reduce the CO₂ emissions within the electricity sector.

The two major measures which were brought in to effect from the introduction of a new tariff structure in 2014 were the progressive domestic and residential household tariffs for electricity consumption is designed to promote energy efficiency amongst its consumers and the ‘Eco-reduction’ mechanism. The system adopted a rising block tariff while the energy efficiency incentive rewards households with consumption levels below a stipulated level.

For the year 2014, the total amount of savings, estimated through a top down approach and calculated by the effect of price elasticity on household demand, reached the expected level of 4,088,000kWh.

ii. Public Services - Street lighting retrofitting (Gozo):

The Project consisting of substitution of the street lighting lamps to LED lamps started in 2014, however actual replacement of bulbs only took effect in 2015. The Street lighting retrofitting project in Malta and Gozo involved the substitution of traditional SON and HPMV lamps to energy efficient LED lamps with dimming features. The Actual savings for 2015, arising from this project, could not be estimated yet due to the fact that the project took a staggered approach during its implementation phase. By the end of 2015 all 4897 lamps involved in the Gozo project and all the 491 lamps of the Malta project were replaced.

⁵ Interpretative note on Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EC, and repealing Directives 2004/8/EC and 2006/32/EC Article 5: Exemplary Role of Public Bodies' Buildings – paragraph 14

iii. Public Buildings –

Retrofitting of Energy Efficient Measures at Malta Police Force Buildings:

The Malta Police Force finalised the renovation of the Head Quarters following the recommendations of the energy audits carried by the Energy Agency.

This renovation has resulted in 1,145kWh annual savings.

Retrofitting of Energy Efficient Measures at St. Vincent De Paul Rehabilitation Centre and Old Peoples' Home (SVDP):

By the end of 2015, all retrofitting measures in the project have been fully implemented. Among these measures, there was the installation of high efficiency gas boilers, energy efficient laundry and kitchen equipment. The savings associated with this project have achieved the reduction of energy demanded over the whole operation of the rehabilitation centre. The implementation of this project is ongoing; however the savings have not been quantified as yet.

iv. Government Owned Industries:

The Water Services Corporation (WSC) embarked on several projects in 2014 and 2015 addressing various aspects of energy efficiency in its operation. One such project was to study the current usage of energy to help identify cost saving opportunities through increased efficiency. From detailed energy audits, a significant degree of insight was gained highlighting areas which were most energy-intensive. The energy monitoring exercise spanned over one whole year between October 2014 and September 2015. A report detailing findings and recommendations was published later in December 2015. From the report, the WSC are in the process of drafting a strategy to implement measures which are the most cost-effective.

Savings from the WSC measure will be reported upon and verified in next year's report.

v. Residential Buildings:

Incentive schemes for the installation of double glazing, roof insulation and solar water heating devices were reissued by Government in 2014. Uptake of incentives in residential buildings has increased slightly over the results of the previous 2013 period. From a European project addressing low income households (ELIH-MED), several measures to reduce the energy consumption were implemented across 35 vulnerable households.

The energy savings achieved from both the schemes and the ELIH-MED project was better than projected, due to a higher uptake, while the total amount for 2014 reached 718,925kWh.

vi. Grant Scheme to Improve Vehicle Fleet:

The car scrappage scheme was quite successful and the number of vehicles scrapped under this scheme in 2014 was of 656 cars. The scheme was reissued in 2015 with a further uptake of 892 energy efficient private passenger vehicles.

The resulting savings from the increased efficiency of the newer fleet reached approximately 1,171,415kWh.

vii. Retrofitting of Energy Efficient Measures in Public Schools:

The Siggiewi Public School pilot project, finalised by the end of 2015, involved the implementation of several measures addressing energy efficiency. Among these one finds a building management system, solar thermal heating systems, motorised shading of windows, energy efficient lighting and efficient water-use technologies.

viii. Voluntary Agreements:

With the local transposition of the Energy Efficiency Directive in 2014, the industry sectors were informed of their legal obligations towards Article 8 and the Government relayed its commitments to support all economic sectors to boost competitiveness. The Sustainable Energy and Water Conservation Unit in summer of 2014 approached the Malta Business Bureau, to facilitate the implementation of the obligation of Article 8 and also proceeded to negotiate voluntary agreements with non-SMEs to promote the implementation of energy efficiency measures as a tool to support this aim. A number of voluntary agreements were signed in 2015 covering energy saving measures implemented from 2014 onwards.

Companies have committed savings of 11,117,716kWh through energy conserving measures during the year 2014.