

2020 Annual Report of the Regulator for Energy and Water Services to the European Commission on the electricity and natural gas sector in Malta

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1 Foreword

This report was prepared by the Regulator for Energy and Water Services (REWS) pursuant to the annual reporting obligations under Articles 37(1)(e) and 41(1)(e) of Directive 2009/72/EC and Directive 2009/73/EC, respectively.

The report, as far as applicable, follows the reporting structure recommended by the Council of European Energy Regulators (CEER).

The report describes the recent developments in the electricity and natural gas market, energy infrastructure, security of supply, relevant legislation and tasks carried out by the Regulator with respect to renewable energy and consumer protection.

The analysis and statistical data presented in this report relate essentially to the year 2019.

2 Developments in the Gas and Electricity Markets

This section provides a summary of the key developments in the Electricity and Natural Gas Markets in Malta during the year 2019.

Electricity demand level

The consumption of electricity and natural gas in Malta increased in 2019: the electricity demand increased by 5.2% over the previous year (reaching a total amount of 2.656 TWh). The evolution in the electricity demand is in line with the increase in the Gross Domestic Product which growth was equal to 7%¹ when compared to the year 2018.

The most recent forecasts for 2020, foresee a drop of 6% in electricity demand with respect 2019 as an effect of the COVID-19 crisis.

Stabilization of Fuel Mix composition of electricity dispatched

No new major infrastructure was commissioned after the major changes in the electricity supply infrastructure that occurred in the recent years such as the coming into operation of interconnection with Sicily in 2015 and the replacement of heavy fuel oil with natural gas for electricity generation together with the commissioning of new generation capacity in 2017. This is evident from the energy mix of the electricity sent out to the grid, which has remained fairly stable since 2018. Natural gas is by far the main energy source for local electricity generation contributing to 66.7% of the electricity demand, followed by the share of 25% of imports through the interconnector Italy-Malta. The share of electricity produced from gas oil remained below 1%, this is due to the fact that this fuel is mainly used for back-up generation capacity. The share of electricity sent out to the grid from renewable sources reached the level of 7.5%. By the end of 2019, the electricity generation capacity from renewable sources, (mainly solar photovoltaic installations), in terms of total peak capacity installed, increased by 16.9% over 2018. The total renewable energy capacity installed by the end of 2019 was 157.7 MWp.

Continuity of the electricity supply

The continuity of electricity supply performance indicators for 2019 are at same levels reported for the years 2013 and 2017. The electricity supply minutes lost per customer rose in average by more than four times when compared with the figure for 2018, reaching the level of 501.91 minutes per year. The average number of interruptions per customer also increased, almost doubled. The increase in the customer minutes lost and number of interruptions per customer is primarily due to two major incidents effecting the interconnector Italy-Malta which led to a total shut down of the electricity system in Malta. One of these incidents refer to the failure of the interconnector Italy-Malta when this was damaged by an anchor on the 23rd December 2019.

¹ Data published by the National Statistics Office in the first quarter of 2020.

Smart meter rollout

By the end of 2019, the number of smart meters installed increased by 37,804 units, representing a growth of 14.6% over the previous year. The total number of electricity smart meters, complete with Automatic Metering Management (AMM) function capability, supplying households and non-households reached 297,626 units by the end of 2019. This means that smart meters account for 88.51% of the total active meters installed with the share of households provided with a smart meter exceeding 90.85%.

• Developments in customers protection

During the year under review, the number of disconnections of electricity customers due to non-payment of bills was 528, a decrease of 75% over the previous year.

The share of vulnerable customers that required and received assistance to pay their energy bill decreased by 1% over the previous year. This change occurred after five consecutive years in which the share of households that received assistance was between 8% and 9% of the total number of household customers.

Natural Gas infrastructure project development

Presently, there is no distribution or transmission of natural gas in Malta, and electricity production accounts for all the natural gas consumption. Natural gas is provided by the LNG terminal in Delimara, in operation since 2017.

On the 17th April 2019, the REWS and ARERA² received an investment request from Melita TransGas Co. Ltd with respect to the Melita TransGas Pipeline (MTGP), a project that aims to connect Malta to the European natural gas network by the establishment of a new interconnection point at Gela, Italy. The commissioning of the MTGP is expected take place by 2025.

The MTGP was identified as a Project of Common interest (PCI 5.19) under the priority corridor "North-South gas interconnection in Western Europe" is a candidate for inclusion in the fifth PCI list to be published in 2020 after being included in all the previously published PCI lists.

On the 4th June 2019, the REWS and the ARERA issued a joint decision regarding the Cross-Border Cost Allocation (CBCA) for the MTGP project.

The year under review has also seen the launch of the incremental capacity procedure to assess the market demand for natural gas and the need for the gas pipeline capacity between Malta and Italy.

The REWS has also delegated Melita TransGas Co. Ltd with the preparation of the reference gas transmission tariff methodology that will be subjected to public consultation and will require regulatory approval.

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² Italian Regulatory Authority for Energy, Networks and Environment.

3 The Electricity Market

3.1 NETWORK REGULATION

3.1.1 Unbundling

- o Articles 10,11 2009/72/EC and Article 3 Regulation (EC) 714/2009
- o Article 26

Unbundling is the separation of the electricity supply and generation activities from the operation of distribution and/or transmission networks. According to the Directive 2009/72/EC, unbundling of transmission system operators, in general, may take the form of any of the following basic models: Ownership Unbundling, Independent System Operator and Independent Transmission Operator.

In Malta, there are no Transmission System Operators (TSOs) since there are no electricity transmission systems. Article 26 of Directive 2009/72/EC requires that "where the distribution system operator is part of a vertically integrated undertaking, it shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to distribution".

However, in terms of Article 44 of Directive2009/72/EC, Article 9 (Unbundling of transmission systems and transmission system operators) and Article 26 (Unbundling of distribution system operators) of this directive do not apply to Malta. This derogation has been taken into consideration in the Electricity Market Regulations (S.L. 545.13) that transpose into national legislation the Electricity Directive (2009/72/EC) and the Security of Electricity Supply and Infrastructure Investment Directive (2005/89/EC).

It has to be noted that the Electricity Market Regulations will have to be reviewed in view of the Clean Energy Package, in particular in view of Directive (EU) 2019/944 on common rules for the internal market for electricity and Regulation (EU) 2019/941 on risk-preparedness in the electricity sector. However, even under the recast Directive, Malta is still exempted from the unbundling of transmission system operators and distribution system operators.

The electricity distribution system covering the whole country remains under the responsibility of one Distribution System Operator (DSO), which forms part of a vertically integrated company, Enemalta plc. Enemalta plc is the designated DSO and is also licensed to generate and supply electricity to final customers.

The electricity distribution system consists of a network of 5,231.237 kilometres, composed of 2,958.092 km of underground cables, 2,159.910 km of overhead cables and 113.235 km of submarine cables. The voltage levels of the distribution system are 220kV, 132kV, 33kV, 11kV and 400/230V. The low voltage network at 400/230V is mostly overhead whereas the network at higher voltages is mostly underground.

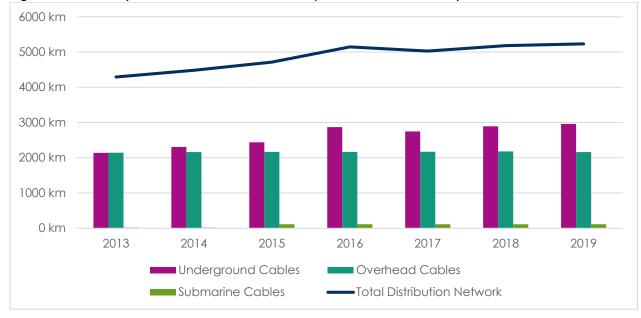


Figure 1: Electricity distribution network development over the last 7 years.

Enemalta plc (the DSO) is required to keep unbundled accounts at internal management accounts level only. The annual monitoring reports that the DSO must submit to the Regulator under the Licence include the requirement for the submission of a separate profit and loss account and balance sheet for each of the three activities of generation, distribution and supply.

3.1.2 Technical functioning

The Maltese electricity system is synchronised with the Italian electricity grid since April 2015 through the 200MW HVAC 220kV electricity interconnector. The interconnector is operated by Enemalta plc in coordination with the transmission system operator in Italy, Terna S.p.A. According to this arrangement the Maltese electricity system is being treated as a virtual consumption and production point connected to the Italian transmission grid.

o Balancing services (Article 37(6)(b), Article 37(8)

The electricity system balancing is carried out by Enemalta plc in coordination with the Italian transmission system operator, Terna S.p.A. Any imbalances on the interconnector are settled in accordance with AEEGSI (Decision 549/2015/R/EEL) issued on the 20th November 2015³.

Independent power producers connected to the distribution system do not have balancing responsibilities.

Security and reliability standards, quality of service and supply (Article 37(1)(h))

³ Deliberazione 20 Novembre 2015 549/2015/R/EEL-Disciplina degli sbilanciamenti effettivi applicabile all'interconnessione Italia-Malta.

According to the Electricity Market Regulation S.L. 545.13, "security" means both security of supply and provision of electricity, and technical safety.

During the year 2019, there were 13 major events of interruption of electricity supply, as reported in *Table 1* which is based on the information provided by Enemalta plc. It is to be noted than 5 events were related to a major incident that occurred on the 23rd of December, when an anchor damaged the interconnector (Italy-Malta) 16 nautical miles off Ragusa causing a complete shutdown of the electricity system in Malta. The operations of localization, repair, burial of the damaged section lasted several weeks with the interconnector being re-energised and back into operation by the 14th of March 2020, while the burial was completed by the 1st of May 2020.

Table 1: Major interruptions of electricity supply during 2019.

Date	Type of Interruption	Brief Description of Interruption
8-Feb-19	Fault	Trip of Marsa South Distribution Centre transformer
3-Jul-19	Fault	Trip of Mosta Distribution Centre transformer
4-Jul-19	Fault	Trip of Mosta Distribution Centre transformer
8-Jul-19	Fault	Trip of Marsa North Distribution Centre transformer
9-Jul-19	Fault	Trip of Marsa North Distribution Centre transformer
9-Sep-19	Fault	33 kV switchgear fault at Paceville Distribution Centre
2-Nov-19	Fault	Fault at Tigne that caused damage to numerous 11 kV cables
26-Nov-19	Total Shutdown	Fault at the Italian substation in Sicily
23-Dec-19	Total Shutdown	Damage to the Malta - Sicily interconnector
23-Dec-19	Load shedding	Generator trip at Delimara Power Station
27-Dec-19	Load shedding	Generator trip at Delimara Power Station
29-Dec-19	Load shedding	Generator trip at Delimara Power Station
30-Dec-19	Load shedding	Generator trip at Delimara Power Station

Source: Enemalta plc.

Enemalta plc is also required by the REWS, as part of the licence obligations, to prepare security and planning standards defining quality of supply objectives, together with minimum security objectives to be met.

Enemalta plc provides the REWS with information related to the quality of service. This information includes the System Average Interruption Duration Index (SAIDI). This parameter is

determined using the data for the duration of supply interruptions (planned and unplanned) occurring at 11kV level or higher voltages and dividing this by the number of customers served in the year of reference. Therefore, the SAIDI is an indication of the average minutes lost per customer per annum.

Table 2 shows the estimates provided by Enemalta plc for the SAIDI for the years 2014 to 2019 due to planned and unplanned interruptions at 11kV or higher voltages. The overall figure for the average minutes lost per customer for the year 2019 was 501.91 minutes. The increase in customer minutes lost is mainly due to the increase in unplanned interruptions. More than half (240.04 minutes) of the unplanned interruption were due to faults related to the interconnector.

Table 2: Average minutes lost per customer per annum (minutes per year) 2014-2019.

Year	2014	2015	2016	2017	2018	2019
Planned interruptions (customer minutes lost)	207	54.6	62.8	64.8	44.06	44.71
Unplanned interruptions (customer minutes lost)	570.6	172.8	101.02	417.60	69.32	457.2
Overall (customer minutes lost)	777.6	227.4	163.83	482.40	113.38	501.91

Source: Enemalta plc

The REWS receives from Enemalta plc the information related to number of interruptions, average duration of an interruption and supply restoration time.

In 2019, the average duration of a planned interruption was 1.27 hours while the average duration of an unplanned interruption was 1.69 hours. Based also on the information provided by Enemalta plc, 77.81% of customers affected by an unplanned interruption had their supply restored within 3hrs while 87.02% of customers affected by a planned interruption had their supply restored within 3hrs.

Enemalta is bound to report also the System Average Interruption Frequency Index (SAIFI) that is defined as the total number of interruptions occurred divided per the number of customers served. The average number of planned and unplanned interruptions per customer is shown in *Table 3*.

Table 3: Average number of interruptions per customer (2014-2019).

Year	2014	2015	2016	2017	2018	2019
Planned interruptions (number)	0.76	0.63	0.61	4.69	0.54	0.59
Unplanned interruptions (number)	4.59	2.49	1.99	0.59	1.87	4.55
Overall interruptions (number)	5.35	3.12	2.60	5.28	2.41	5.14

Source: Enemalta plc.

For the year 2019, the number of planned interruptions per customer due to interruptions affecting the 11kV level was in average 0.59 and the number of unplanned interruptions per customer was in average 4.55, of which 1.16 were attributable to faults effecting the interconnector.

As shown in *Figure 2*, the continuity of electricity supply indicators for 2019 were at similar levels to those reported for 2017. This is mainly attributed to a number of major interruptions and in particular to the two total shutdowns of the electricity system that occurred in 2019, as shown in *Table 1*. The fluctuation in the continuity of supply performance over the years reflects the low fault ride through capability of small electricity systems which expose them to higher risks for total shutdowns in the case of a fault.

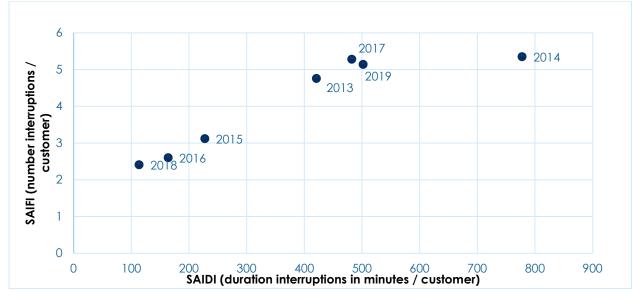


Figure 2: SAIDI and SAIFI correlation from 2013 to 2019.

Monitoring of time taken to connect and repair (Article 37(1)(m))

The Regulator monitors the time taken by the distribution system operator to provide new electricity service connections and the time taken to connect RES generators to the distribution system.

There is no definition established by law for the 'time to connect' customers and producers to the network. However, in general, in case of non-complex services, the time to connect customers and producers is taken to be the time that elapses between the submission of an application to the distribution system operator for connecting to the network and the date of the provision of the service connection and electricity meter. Normally, the activation of the service occurs on the same day on which the electricity meter is installed. Activation of the service is understood to be either the possibility to import and/or export through the metering equipment provided by the distribution system operator.

During the year 2019, based on the information provided by the distribution system operator, the average time for the provision of a new non-complex service connection not requiring any type of extension of the network or new substation was of 9.2 days. This result represents an

improvement over the previous year, when the average for the time taken to provide the same type of service was 9.6. *Table 3* shows the developments in the average time taken by the distribution system operator to provide a new service between the year 2014 and 2019.

Table 3: Average time for the provision of a new service connection (2014-2019).

Year	2014	2015	2016	2017	2018	2019
Number of days	21.3	20.3	14.9	12	9.6	9.2

Source: Enemalta plc.

Based on the data provided by the distribution system operator, the average time taken for connecting RES generators (average for capacities less than 41kWp) to the distribution system, which includes the provision of the necessary metering equipment, was of 10.9 days for the year 2019 as shown in *Table 4*. The RES generators with a capacity of less than 41kWp are normally connected to existing services or involve a non-complex new service. As a norm the metering configuration used for RES generators includes a generation meter and an import/export meter. To note that more than 98% of the PV systems newly connected to the distribution system during the year 2019 have a capacity of 41kWp or less.

Table 4: Average time for the connection of RES generators up to 41kWp (2014-2019).

Year	2014	2015	2016	2017	2018	2019
Number of days	29.1	14	16	8.6	8.7	10.9

Source: Enemalta plc and REWS.

In general, the re-activation of supply by the distribution system operator after disconnection due to non-payment of electricity bills takes place within 24 hours of the settlement of debts.

Monitoring safeguard measures (Article 37(1)(t))

No sudden crises in the energy market threatening the physical safety or security of persons, apparatus or installations or system integrity occurred in Malta in 2019 which would have required the implementation of safeguard measures as described in Article 37(1)(t) and Article 42 of Directive 2009/72/EC, leading to disturbances in the functioning of the internal market.

Enemalta plc is also required through the licence conditions to prepare and submit to the REWS Emergency Response and Security Plans for the distribution system and the power stations.

 RES regulatory framework: Report on connection, access and dispatching regimes for RES-E, in particular on priority issues. Report also on the balancing responsibility for RES-E. (Article 11 Regulation (EC) 713/2009)

The Electricity Market Regulations (S.L. 545.13) subject to fulfilment of the requirements related to the maintenance of the reliability, safety and stability of the distribution system and based on

transparent and non-discriminatory criteria as defined by the REWS, state that the Distribution System Operator (DSO) is obliged to:

- (a) guarantee the distribution of electricity produced from renewable energy sources wherever technically feasible and with due regard to system stability;
- (b) provide for priority access to the distribution system of electricity produced from renewable energy sources;
- (c) give priority to generating installations using renewable energy sources in so far as the secure operation of the national electricity system permits and based on transparent and non-discriminatory criteria;
- (d) ensure that appropriate distribution system and market-related operational measures are taken in order to minimise the curtailment of electricity produced from renewable energy sources;
- (e) report to the Regulator if any significant measures are taken to curtail the renewable energy sources in order to guarantee the security of the national electricity system and security of energy supply and indicate corrective measures that will be taken to avoid inappropriate curtailment.

Moreover, generators producing electricity from renewable energy sources do not have balancing responsibilities.

The Distribution System Operator did not report any curtailment of renewable energy sources during the year under review.

The electricity produced by all generators, including generators from renewable energy sources and combined heat and power plants, may either be consumed on site or sold to the distribution system operator at the applicable tariff.

The export of electricity from combined heat and power plants, irrespective of the type of fuel used, is regulated through the Sale of Electricity generated from Cogeneration Units Regulations and is paid by the distribution system operator at the proxy of the market price. The proxy of the market is also the rate paid for exports from small wind turbines.

During the year 2019, administratively determined support for solar photovoltaic installations included a grant of up to 50% of the eligible initial capital cost capped at €2,300 coupled with a feed-in tariff payable for 6 years for households and a feed-in tariff payable for 20 years for any PV system not benefitting from any investment support and with a capacity of less than 1MWp. The amount of capacity that may be allocated and paid a feed-in tariff is capped. The feed-in tariffs, terms and conditions for their allocation and payment, are established by the Feed-in Tariffs Scheme (Electricity Generated from Solar Photovoltaic Installations) Regulations (S.L. 545.27).

By the end of 2019, a total peak capacity of 78 MWp of RES was installed by households (solar photovoltaic systems located in buildings intended for domestic use). Of this capacity, 83.9% is

connected with the option to sell all the electricity generated to the DSO at the feed-in tariff rate, while the remaining 16.1% is connected with the option to self-consume the electricity generated and sell only the electricity not consumed on site at applicable rates⁴.

The second competitive bidding process to support solar photovoltaic installations with a capacity of 1 MWp or more and for a maximum capacity of 35MWp was launched by the Ministry for Energy and Water Management on the 21st of August 2018. Seven bids were received for a total amount of 17.918 MWp. On the 18th February 2019 it was announced that six bids had been recommended for award, however, at the end of the process only four of the selected bidders signed the contract for the support to continue with their project. The total capacity allocated in this competitive bidding process was 9.56 MWp for a weighted average bid price of 0.1372 €/kWh. The support through the bidding process is awarded on a pay-as-bid criteria. *Table 5* shows some relevant figures related to the two competitive bidding processes concluded by the end of 2019.

Table 5: Competitive bidding processes to support PV installations data.

Date of Award	Maximum Capacity [MWp]	Contracted Capacity [MWp]	Weighted average price [€/kWh]
16/05/2018	15.00	12.89	0.1304
18/02/2019	35.00	9.56	0.1372

3.1.3 Network tariffs for connection and access

Article 37(1)(a), Article 37(6)(a), Article 37(8), Article 37(10), Article 37(12),
 Article 37(3)(c) and (d)

The REWS is responsible for the fixing or approval of the connection charges and access tariffs to the distribution system, including distribution tariffs or their methodologies. The Regulator may require the distribution system operator, if necessary, to modify the terms and conditions, including tariffs or methodologies referred to in this regulation, to ensure that they are proportionate and applied in a non-discriminatory manner. The charges for connecting to the network and/or methodologies for the determination of such charges are established by the Electricity Supply Regulations. These provisions apply for all users wishing to connect to the network. There were no changes in the year under review.

In view of the derogation granted to Malta from Article 32 (Third Party Access) of Directive (2009/72/EC), any independent power producer connected to the distribution network is obliged to sell all the electricity produced and not consumed on site, to the sole supplier of electricity, Enemalta plc.

The retail tariff paid by consumers for electricity covers part of the costs and revenues pertaining to the operation of the distribution network apart from those related to the imported electricity,

⁴ This represents the situation as at end of year 2019

generation and supply activities. The remaining part of the distribution costs is covered by the connection charges. There are no separate tariffs for the use of the network.

Prevention of cross-subsidies (Article 37(1)(f))

As already explained earlier on in this report, part of the network costs is covered by the retail tariff and there are no separate tariffs specific for the use of the network. The method used for tariff regulation is based on the full cost recovery.

The Electricity Market Regulations (S.L. 545.13) require electricity undertakings to keep within their internal accounting, separate accounts for each of their generation, distribution and supply activities as if these activities were being carried out separately in view to avoid discrimination, cross subsidization and distortion of competition. In addition, the auditing of the published company accounts of such electricity undertakings must verify compliance with the requirement to avoid cross subsidisation and non-discrimination.

Enemalta plc is the only undertaking licensed to carry out all the three activities of generation, distribution and supply together. The licence monitoring reports include the requirement for the submission by Enemalta plc of separate profit and loss accounts and balance sheets for each of the three activities.

3.1.4 Cross-border issues

Access to cross-border infrastructure, including the procedures for the allocation of capacity and congestion management (Article 37(6)(c), Article 37(8), Article 37(9)), use of revenues for interconnectors (article 37(3)(f))

The Regulator was not involved in specific cooperation activities with other regulators in relation to capacity allocation and congestion management.

 Monitoring technical co-operation between Community and third country TSOs (Article 37(1)(s))

Not applicable since no TSO is present in Malta.

 Monitor TSO investment plans in view of TYNDP art 37(1)(g), PCIs, also national development plans

As previously stated in section 3.1.1, there are no TSOs in Malta. The development of the distribution network and interconnections with other countries is currently under the responsibility of the distribution system operator.

The distribution system operator is required to provide information regarding the development of the network assets and new connections to the network of users.

The Regulator continues to monitor the development of the distribution network through specific reports required by the licence.

There are no PCI (European Projects of common interest) related to electricity infrastructure involving Malta neither electric infrastructures that have applied to be part of the Ten-Year National Development Plan (TYNDP) list.

Cooperation (Article 37(1)(c))

Nothing to report.

3.1.5 Compliance

 Compliance of regulatory authorities with binding decisions of the Agency and the Commission (Article 37(1)(d)) and with the Guidelines (Article 39))

Under the Third Energy package, NRAs are required to ensure compliance with binding decisions of ACER and the European Commission and implement them.

During 2019 there were no binding decisions of the Agency or the Commission that required specific actions to be taken by the Regulator.

Compliance of transmission and distribution companies, system owners and electricity undertakings with relevant Community legislation, including cross-border issues (Article 37(1)(b), Article 37(1)(q), Article 37(3)(a), (b), (e) and Article 37(5) all but (a) and (c) + imposing penalties (Article 37(4)(d))

Under the Electricity market Regulation, the REWS has the power to investigate compliance of distribution electricity undertakings with the relevant Community legislation. If a breach is found, REWS has the power to impose penalties. No non-compliance issues were identified in 2019.

3.2 PROMOTING COMPETITION

3.2.1 Wholesale markets

There are no power exchanges in Malta. The electricity generation sector was liberalised in 2005 however significant Independent Power Producers (IPPs) entered the sector in 2017 otherwise independent power production was limited to small producers generating electricity from renewable sources. The fossil fuel IPPs, namely D3 Power Generation Ltd and ElectroGas Malta Ltd, account for 67.12% of the electricity sent out to the grid from all sources during the year 2019. The involvement of Enemalta plc in the electricity generation sector is mainly limited to the provision of backup generation service. This transpires from the fact that while Enemalta plc owns 23.36% of the production capacity, only 0.64% of the electricity sent out to the grid during 2019 was produced by its own plants.

Enemalta plc remains the sole supplier of electricity which is sourced from the IPP's generating mainly from natural gas, RES generators (mainly solar photovoltaic systems) and from imports through the interconnector Italy (Sicily)-Malta.

Enemalta plc is obliged to dispatch the available sources on economic merit order basis with electricity from renewable energy benefitting from priority of dispatch.

Since the retail market is not open to competition all independent power producers may either consume on site the electricity generation and/or sell to Enemalta plc.

The trading arrangement between Enemalta plc and the fossil fuel independent power producers for the supply of electricity is based on long term bilateral contracts.

The sale of electricity from PV installations connected to the grid is governed mainly by Feed-in Tariffs Scheme (Electricity Generated from Solar Photovoltaic Installations) Regulations S.L.545.27. The Sale of Electricity generated from Cogeneration Units Regulations regulate the sale of electricity from co-generation plants irrespective of primary energy source. The electricity exported to the grid from approved cogeneration plants is paid by Enemalta plc at the proxy of the market price.

Electricity imported through the interconnector is mainly traded in the Italian day-ahead market.

Table 6 and Figure 3 shows the development in the contribution of local generation sources and imports to electricity send to the Maltese grid.

Table 6: Electricity Sent Out to the Maltese grid by contributors (GWh) between 2014 and 2019.

[GWh]	2014	2015	2016	2017	2018	2019
Enemalta plc (own generation)	2061.79	502.37	357.47	127.67	6.58	16.62
Local Fossil fuel IPP's	-	636.97	312.83	1313.70	1706.69	1782.57
RES	74.89	101.69	114.94	129.72	179.88	199.76 ⁵
Interconnector (import)	-	1053.98	1526.69	897.07	631.29	656.76
Total Electricity System Demand	2136.68	2295.01	2311.93	2468.16	2524.45	2655.70

Source: Enemalta plc and REWS.

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⁵ This figure is provisional

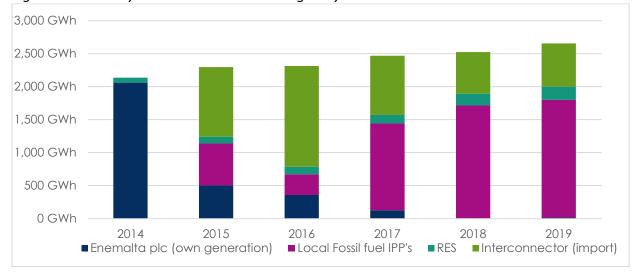


Figure 3: Electricity Sent Out to the Maltese grid by contributors between 2014 and 2019.

During the year under review 20.45 GWh were exported from Malta to the Italian grid.

3.2.1.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

o Article 37(1) (i), (j), (k), (l), (u) and Article 40 (3)

In the absence of a liquid wholesale market the REWS determines the proxy of the wholesale market price on an annual basis. This price is the reference used to determine the amount of operational aid paid to PV installation benefitting from a feed-in tariff and is also the rate paid to generators exporting electricity to the grid and not eligible for any operational support. The REWS determines the proxy of the market price by estimating the variable cost of meeting the demand forecast for a given year from local fossil fuel generation and imported electricity and then uses the average of this estimate as a proxy for the market price. The demand assumption excludes that portion of the forecasted demand which is not expected to be met by conventional and/or imported electricity. The methodology was included in the State Aid decision of CION⁶ issued in relation to the notified competitive bidding process for the granting of operational aid to generators producing from renewable energy sources with capacity of 1MWp or more. The proxy of the market determined by the REWS, normally every year, is published in Feed-in Tariffs Scheme (Electricity Generated from Solar Photovoltaic Installations) Regulations S.L.545.27. Figure 4 shows the developments in the proxy of the wholesale market price between 2013 and 2019.

⁶ State Aid SA. 43995 (2015/N) – Malta Competitive Bidding Process for Renewables Sources of Energy Installations, Brussels, 26.8.2016 C(2016) 5423 final

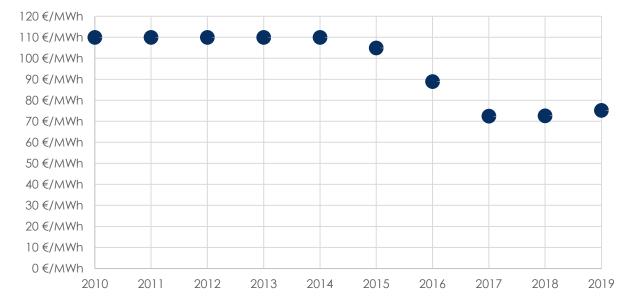


Figure 4: Developments in the proxy of the market price for 2010-2019.

3.2.2 Retail market

The situation in the electricity retail market remains unchanged. The activity of supply of electricity must be performed under a licence issued by the REWS which in terms of the Electricity Market Regulations. In terms of the aforementioned regulations, in view of the derogations from the application of Articles 32 (Third-party access) and 33 (Market opening and reciprocity) of Directive 2009/72/EC granted to Malta pursuant to Article 44 of Directive 2009/72/EC and until such time as the aforesaid derogations remain in force, the licence for the supply of electricity shall be issued only to the distribution system operator, designated under same regulations.

Therefore, Enemalta plc remains the only undertaking in Malta holding a licence to supply electricity to final customers and therefore customer switching cannot be implemented in Malta.

3.2.2.1 Monitoring the level of transparency, including compliance with transparency obligations, and the level and effectiveness of the market opening and competition

o Article 37(1) (i), (j), (k), (l), (u) and Article 40 (3)

The electricity retail market is not open to competition. All consumers of electricity are on regulated retail tariffs approved by the REWS.

3.2.2.2 Recommendations on supply prices, investigations and measures to promote effective competition

- o Article 37(1)(o)
- o Article 37(4)(b)

The supply market is not open to competition. The procedure for the approval of the electricity retail prices is established by Article 36 of the Electricity Supply Regulations S.L.545.01.

The principles underlying the determination and approval of the retail tariffs are published on the Regulator's website⁷. In the event of a review of the electricity retails tariffs, the REWS publishes the documents related to the review process.

Electricity tariffs are established through legislation which is published in the Government Gazette (the official Government publication for the promulgation of laws), the REWS's website and the websites of Enemalta plc and of Automated Revenue Management Services Ltd (ARMS Ltd.) respectively.

The regulated electricity retail tariffs are composed of a fixed annual service charge and a kWh consumption tariff structure. For non-residential consumers a maximum demand charge also applies. No tariffs specifically for the use of the network are applied.

The fixed annual service charge differentiates between a single-phase service and a three-phase service and between residential/domestic premises and non-residential premises. In addition, all consumers with a service connection capacity rating exceeding 60Amps/phase are required to pay a maximum demand tariff.

The kWh consumption tariff structure consists of tiers of consumption with the corresponding kWh tariff. The tariffs are based on a cumulative consumption per annum and are applied *pro rata* on basis of the number of days covered by the bill. The kWh tariff structure applicable for the consumption of electricity differentiates between registered primary residence premises, domestic premises and non-residential premises.

Household consumers may benefit from a percentage reduction of electricity rates, referred to as an 'eco reduction' on their electricity consumption bill on one registered primary residence as follows:

- households composed of two or more persons may benefit from a two tier eco reduction mechanism provided that the consumption per person does not exceed 1750kWh per annum. A reduction of 25% in the consumption bill is possible if the consumption does not exceed 1000kWh per person for the first tier. The second tier consists of a reduction of 15% in the bill on the next 750 kWh per person/household,
- single person households enjoy a reduction of 25% in their consumption bill if their annual electricity consumption does not exceed the 2000kWh/annum.

The domestic premises tariffs are applicable for electricity consumed in premises intended for domestic use and which are not registered as a primary residence.

The non-residential premises tariffs are applicable for electricity consumed in all the other premises which are not registered either as a primary residence or as domestic premises. Non-residential consumers with a service rating above 100A/phase may choose to be billed on a kVAh

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⁷ REWS website: www.rews.org.mt

tariff. A night and day tariff is available for non-residential consumers with annual consumption exceeding of 5GWh (5.5kGVAh).

During the year under review there were no changes in the retail tariffs for household and non-household customers.

Figure 5 shows the developments in the household bill between 2010 and 2019 based on a consumption of 3500kWh and the national average electricity price per kWh for the reference band of consumption DC (2500kWh<consumption<5000kWh) as reported by the Maltese National Statistics Office to Eurostat. It should be noted that tariffs and tariff bands are applied pro rata according to the days covered by the bill and therefore a change in the billing period may affect the average price per kWh.

The household tariffs are inclusive of 5% value added tax and 0.0015€/kWh excise duty.

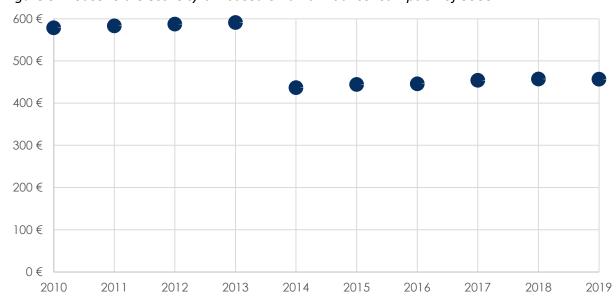


Figure 5: Household electricity bill based on an annual consumption of 3500kWh.

Presently there are no plans for the phasing out of regulated prices.

3.3 SECURITY OF SUPPLY

3.3.1 Monitoring balance of supply and demand

o Article 4 72/2009

The REWS is responsible for monitoring the Security of Supply (SoS). During the year under review the REWS was not required to implement any safeguard measures in terms of Article of Directive 2009/72/EC.

The report related to security of supply of electricity is prepared in collaboration with the distribution system operator, Enemalta plc. In addition, on a monthly basis, Enemalta plc submits

to the REWS information related to local generation capacity availability, faults on the generation side, peak demand and amounts of electricity locally generated and imported.

The total system demand in 2019 (including losses of the grid) was 2,655.70 GWh of which 1,799 GWh (67.7% of the total) was supplied from local fossil generation plants. The local fossil fuel electricity sent out mix for the year 2019 consisted of 1.24% gas oil and 98.76% natural gas. The contribution to the demand of imports from the interconnector with Italy (Sicily) during 2018 and 2019 remained at the same level of around 25% of the system demand. The electricity generated and sent out to the grid from generators producing from renewable energy sources (mainly solar photovoltaic installations) in 2019 was 199.76GWh⁸, that means an increase of 10.0% over the previous year. This figure does not include electricity generated by RES and consumed on site by the producers.

Figure 6 shows the evolution of the energy mix of the electricity sent out to the Maltese grid, in percentage terms. It has to be noted that after years of major changes in the electricity supply, characterized by the realization of the interconnector to Sicily and the replacement of fuel-oil with natural gas in power plants, in 2019, the fuel mix of the electricity supply remained similar to that recorded in 2018. The only noteworthy development is the increase in the renewable energy share.

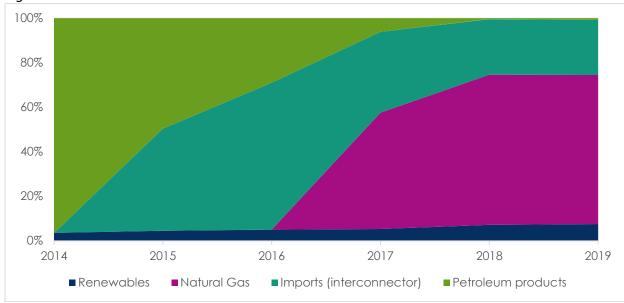


Figure 6: Fuel mix evolution between 2014 and 2019.

During the year 2019, the system demand reached a maximum of 522.2MW which represents an increase of 14.77% over the previous year. This peak, as reported by Enemalta plc, occurred on the 10th July at 13:08. The figure for the peak demand includes the internal consumption of the local fossil fuel power stations. The peak demand was met by 235MW provided by local fossil fuel generation capacity, 192.2MW imported through the Italy-Malta interconnector and a contribution from solar photovoltaic installations estimated at 95MW.

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⁸ The figure is provisional

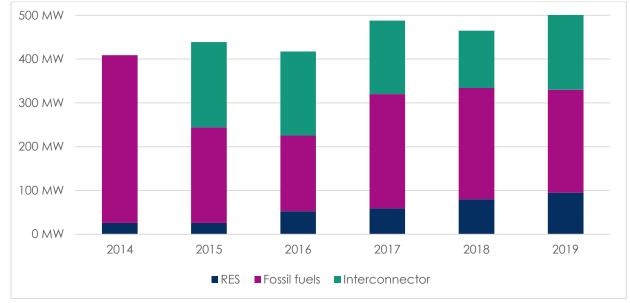


Figure 7: Peak system demand between 2014 and 2019.

3.3.2 Monitoring investment in generation capacities in relation to SoS

o Article 37(1) (r)

Operational network security.

o Article 7 2005/89/EC

Investment in interconnection capacity for the next 5 years or more.

o Article 7 2005/89/EC

Expected future demand and envisaged capacity for the next 5 years and 5-15 years.

o Article 7 2005/89/EC

In the year under review the Regulator did not receive any request to authorise the construction or to licence new fossil fuel generation capacity.

As shown in *Table 7* the total local fossil fuel nominal generation capacity at the end of 2019 remained at 588.6 MW. All the fossil fuel generation capacity is located at the Delimara Power Station site except for a 37 MW open cycle gas turbine, denominated GT9, located in the Marsa Power Station.

DPS-2A Open Cycle Gas Turbine, MPS-GT9 Open Cycle Gas Turbine and DPS-2B Combine Cycle Gas Turbine, owned by Enemalta plc, since 2017 have been used as backup reserve capacity.

Table 7: Local fossil fuel generating plants figures for the year 2019.

Generating plant name	Technology	Fuel	Licensee	Installed Nominal Capacity (MW)
DPS-2A / MPS-GT9	Open Cycle Gas Turbine	Gas Oil	Enemalta plc	111
DPS-2B	Combined Cycle Gas Turbine	Gas Oil	Enemalta plc	110
DPS-3	Combined cycle diesel engines converted	Natural Gas / Gas Oil	D3 Power Generation Ltd	152.6
DPS-4	Combined Cycle Gas Turbine	Natural Gas	ElectroGas Malta Ltd	215
_				588.6

Source: Enemalta plc and other sources.

To note that half of the combined cycle diesel engines capacity (DPS-3) is dual fuel (natural gas/gas oil) while the other half runs on natural gas only.

The total electricity generation capacity from renewable energy sources installed by the end of 2019 was 157.7MWp. As may be deduced from the breakdown in *Table 8*, the renewable energy generation capacity installed consists mainly of solar photovoltaic installations.

Table 8: Installed capacity renewable energy as the end of the year 2019.

Renewable energy technology	Capacity installed (MW)
Solar photovoltaic systems	154.6MWp
Micro wind	0.0698MWp
Biogas plants	3.037 MWe
Total capacity installed	157.7MWp

Source: REWS and Enemalta plc records.

During the year under review, 22.4 MWp of new solar photovoltaic capacity was connected to the public grid (that means 16.9% increase in total capacity over the previous year taking into account decommissioned capacity).

The largest solar photovoltaic installation is 2MWp while 96.7% of the PV installations connected to the grid by the end of 2018 have a capacity of 11kWp or lower.

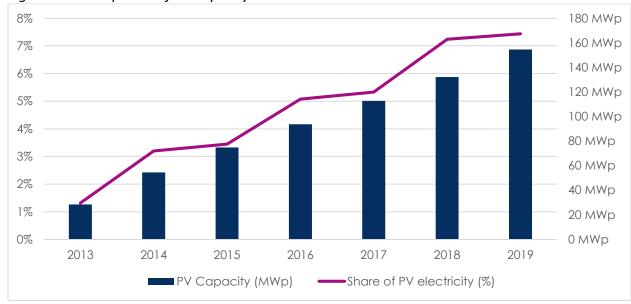


Figure 8: Development of PV capacity between 2013 and 2019.

No fossil fuel generation capacity is expected to come into operation in the near future.

The distribution system operator did not report any plans for new investments concerning electricity interconnectors and therefore in terms of electricity interconnections Malta will continue to rely on the 200MW⁹ HVAC interconnector with Italy commissioned in 2015 for the foreseeable future.

The forecasted electricity demand in MWh till 2023 is shown in *Table 9* and compared with past demand in *Figure 9*. These estimates take also into account the expected effect of the COVID-19 emergency on the electricity demand. The latest forecast for 2020 shows an expected drop of around 6% in the electricity demand in comparison with 2019.

Table 9 – Demand of electricity forecast 2020-2023.

Year	Estimated Demand (MWh)
2020	2,496,799
2021	2,559,219
2022	2,661,588
2023	2,768,052

Source: Enemalta plc.

⁹ The net maximum importation capacity of electricity to the interconnector is 192MW due to losses in the interconnector.

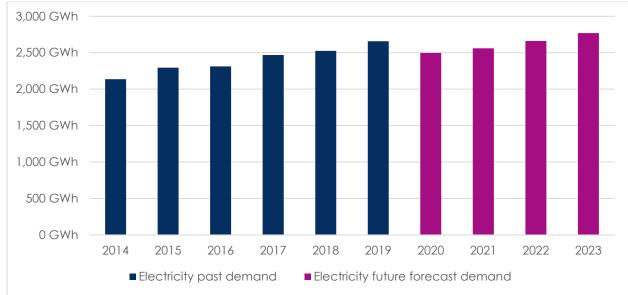


Figure 9: Past demand and future forecast of electricity.

3.3.3 Measures to cover peak demand or shortfalls of suppliers

There is only one supplier of electricity in Malta and the onus to meet all the demand including the peak demand is on Enemalta plc as the distribution system operator and sole supplier of electricity to final customers.

4 Gas Market

Since the year 2017, LNG is imported through an LNG facility consisting of a floating LNG floating storage unit (FSU) and onshore regasification plant on the Delimara site. The FSU has an LNG storage capacity of 125,000 m³ and the regasification plant with a maximum natural gas output rate of 89,000 Nm³/hr of natural gas.

The capacity of the LNG terminal is fully contracted to supply natural gas to two electricity generation plants DPS-3 (owned by D3 Power Generation Ltd.) and DPS-4 (owned by ElectroGas Malta Ltd) electricity generation plants. The regasification plant is designed to meet simultaneously the full load natural gas requirements of DPS-3 and DPS-4.

ElectroGas Malta Ltd has a licence to carry out the functions of an LNG system operator and an authorisation to import LNG and to supply natural gas to the two electricity generation plants, issued under the Natural Gas Market Regulations (S.L. 545.12).

At present in Malta there is no transmission or distribution of natural gas, and therefore no TSO or DSO is operating in the gas sector.

An Investment request to establish the first gas transmission system in Malta was submitted to REWS and ARERA (Italian regulatory authority) by Melita TransGas Co. Ltd on the 17th April 2019. This project aims to connect Malta to the European natural gas network through the so called Melita TransGas Pipeline (MTGP) that is foreseen having an interconnection point in Gela, Italy. On the 4th of June 2019 REWS and ARERA (Italian regulatory authority) issued a joint decision regarding the Cross-Border Cost Allocation (CBCA) for the MTGP project.

4.1 NETWORK REGULATION

4.1.1 Unbundling

- Articles 10,11 2009/73/EC Article 3 Regulation (EC) 715/2009
- Article 26

There are no natural gas transmission systems or distribution systems in Malta. The LNG terminal constructed by ElectroGas Malta Ltd forms part of a single project which includes the construction of the combine cycle gas turbine by the same company with the sole scope of supplying electricity and natural gas to Enemalta plc. ElectroGas Malta Ltd is required to keep separate accounts in its internal accounting for the LNG terminal, supply of natural gas and generation of electricity.

4.1.2 Technical functioning

Balancing services (Article 41(6)(b), Article 41(8))
 Not applicable since there is no gas transmission system established in Malta.

Security and reliability standards, quality of service and supply (Article 41(1)(h))

Not applicable since there is not transmission or distribution of natural gas in Malta.

Monitoring time taken to connect and repair (Article 41(1)(m))

Not applicable since there is no distribution of natural gas other than to the two power plants DPS-3 and DPS-4.

O Monitoring access to storage, line pack and other ancillary services (Article 41(1)(n))

Not applicable since there is no transmission neither distribution of gas in Malta.

 Monitoring correct application of criteria that determine model of access to storage (Article 41(1)(s))

Not applicable since there is no gas storage in Malta.

Monitoring safeguard measures (Article 41(1)(t))

Malta does not have household gas customers, or small/medium sized enterprises or essential services that are connected to the gas network or any gas-based district heating. Other than two electricity producers there are no other end-users of gas. To minimize the impact from a disruption to gas supply, Malta will maintain a formalized procedure for prioritizing electricity supply to priority customers in order of urgency.

4.1.3 Network and LNG tariffs for connection and access

Article 41(1)(a), Article 41(6)(a), Article 41(8), Article 41(10) and Article 41(12)

The capacity of the LNG terminal is fully contracted to supply natural gas to the power plants DPS-3 and DPS-4 and LNG terminal tariffs form part of the fees payable by Enemalta plc to ElectroGas Ltd in terms of the gas and electricity supply agreements concluded pursuant to a tendering procedure.

Prevention of cross-subsidies (Article 41(1)(f))

Not applicable since there is not transmission or distribution of gas at regulated tariffs.

Regulated and negotiated access to storage 41(1)(s)

Not applicable since there is not gas storage in Malta.

4.1.4 Cross-border issues

 Access to cross-border infrastructure including allocation and congestion management (Article 41(6)(c), Article 41(8), Article 41(9), Article 41(10) and Article 41(12))

Not applicable since there are no natural gas interconnectors.

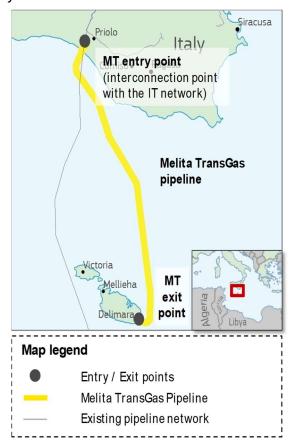
Cooperation (Article 41(1)(c))

Not applicable since there are no natural gas interconnectors.

 Monitoring investment plans and assessment of consistency with Communitywide network development plan Article 41(1)(g), PCIs and national development plans

The Regulator continues to monitor the work on the planned natural gas transmission pipeline that will connect Malta (Delimara) to the Italian natural gas grid in Gela.

Figure 10: Geographical project overview of MTGP.



Source: Investment Request for the Melita Transgas pipeline project-17 April 2019.

The Melita TransGas Pipeline (MTGP) project consists of a natural gas pipeline with a capacity of 2 bcm/year, diameter of 22" (DN 560) and an approximate length of 159km (151 km offshore, 7 km onshore in Sicily and 1km onshore in Malta). Notwithstanding the design catering for bi-directionality, MTGP will initially be utilized in the direction Italy to Malta with a maximum operational capacity of 1.2 bcm/year.

Additionally, MTGP can be designed to allow the transport of a blend of hydrogen and/or biomethane with natural gas.

The MTGP will reach the aims to end Malta's isolation from the European gas network, to integrate it in the EU gas market and to improve its security of energy supply.

The MTGP was identified as a Project of Common interest (PCI 5.19) under the priority corridor "North-South gas interconnection in Western Europe" in the first PCI list in 2013, and subsequently confirmed in the second, third and fourth PCI lists, in 2015, 2017 and 2018 respectively, and is a candidate for inclusion in the fifth PCI list in 2020. The commissioning of the MTGP is expected to occur by 2025.

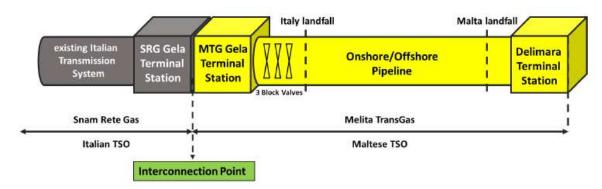


Figure 11: Components of the MTGP and the interface with the Italian gas network

Source: Investment Request for the Melita Transgas pipeline project-17 April 2019.

On the 17th of April 2019, the Regulator for Energy and Water Services and the Italian Regulatory Authority for Energy, Networks and Environment (ARERA) received an investment request from Melita TransGas Co. Ltd, the project promoter of the Melita Transgas pipeline.

The submission of an investment request to the relevant regulatory authorities for a cross-border cost allocation decision (CBCA) is a requirement for Project of Common Interest in terms of Regulation (EU) 347/2013 on guidelines for trans-European energy infrastructure. After assessing the investment request, consulting with Melita TransGas Co. Ltd, and acting in accordance with the respective national legal frameworks, relevant regulations and recommendations of the Agency for the Cooperation of Energy Regulators, REWS and ARERA reached a cross-border cost allocation (CBCA) agreement on the MTGP project. The CBCA agreement was ratified through a decision that the two regulatory authorities issued on the 4th of June 2019. Based on the cost-benefit analysis, which demonstrated that only Malta would have significant benefits from the implementation of the MTGP, the CBCA decisions established that Malta should bear 100% of the costs of the MTGP project and that no monetary transfer in compensation between Italy and Malta is necessary.

On the 2nd of July 2019, in accordance with Chapter V of the Regulation (EU) 2017/459 establishing a network code on capacity allocation mechanisms in gas transmission systems, the Italian gas transmission system operator SNAM Rete Gas S.p.a. the project promoter Melita TransGas Co. Ltd launched the incremental capacity procedure to assess the market request for incremental capacity between Malta and Italy.

On the 21st of October 2019, according to the process set in Article 26 of the Regulation (EU) 2017/459, SNAM and Melita TransGas Co. Ltd published jointly the Demand Assessment Report of the received request with the conclusion to initiate an incremental capacity process for the potential creation of an interconnection between Malta and Italy.

Demand Assessment Report has been followed by a public consultation, according to Article 27(3) of the Regulation (EU) 2017/459, that has been carried out in the first months of 2020.

In August 2019, the REWS delegated the task of preparing the reference gas tariff methodology to MTG Co. Ltd, as the prospective Maltese Gas Transmission System Operator, pursuant to Article 6(1), Article 26(1) and Article 27(1) of the Regulation EU 2017/460 establishing a network

code on harmonized transmission tariff structures for gas. The reference price methodology will enable the charging of future users of the MTGP infrastructure fair and transparent fees for gas transmission to recover the outlays invested in the MTGP project.

4.1.5 Compliance

 Compliance of regulatory authorities with binding decisions of the Agency and the Commission (Article 41(1)(d)) and with the Guidelines (Article 43))

Nothing to report.

Compliance of transmission and distribution companies, system owners and natural gas undertakings with relevant Community legislation, including cross-border issues (Article 41(1)(b), Article 41(1)(r), Article 41 (3) and Article 41(5)) + imposing penalties (Article 41(4)(d))

Nothing to report.

4.2 PROMOTING COMPETITION

4.2.1 Wholesale markets

Since 2017, LNG is imported in Malta by ElectroGas Malta Ltd, regasified onshore and supplied to the power plants DPS-3 and DPS-4 by the same company.

4.2.1.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

Article 41(1) (i), (j), (k) (l) (u) and Article 44(3)

Not applicable since there is no natural gas market.

4.2.2 Retail market

Not applicable since there is no retail market for natural gas.

4.2.2.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

Article 41(1) (i), (j), (k), (l), (u) and Article 44(3)

Not applicable since there is no natural gas market.

4.2.2.2 Recommendations on supply prices, investigations and measures to promote effective competition

Article 41(1)(p)

Not applicable since there is no natural gas market.

o Article 41(4)(b)

Not applicable.

4.3 SECURITY OF SUPPLY

4.3.1 Monitoring balance of supply and demand

Under the Natural Gas Market Regulations, the REWS has the responsibility to monitor the balance between supply and demand of natural gas, the level of expected future demand and available supplies, envisaged additional capacity being planned or under construction, quality and level of maintenance of the networks, as well as measures to cover peak demand and to deal with shortfalls of one or more suppliers.

Data for LNG imports and consumption of natural gas is collected from ElectroGas Malta Ltd.

During the year under review ElectroGas Malta reported one major incident to the Regulator related to the removal of the FSU from its berthing point as a precautionary measure due to the severe weather conditions. This incident occurred on the 11th of November 2019 and the regasification plant was not feed by the FSU for approximately 44 hours and during this time the supply of natural gas to the power plants was disrupted and demand for electricity was met by local generation running on gas oil and the imports from the interconnector.

In December 2019 the Ministry for Energy and Water Services, competent authority for the implementation of the Gas Security of Supply (Regulation (EU) 2017/1938), submitted to the European Commission the Preventive Action Plan and the Emergency Plan.

The Preventive Action Plan, though the adoption of the "N-1" assessment criteria, highlighted the strategic dependency on the FSU-RU facility. Also, a close link with the electricity sector has been underlined, since the only use for natural gas in Malta is the production of electricity. During normal situation, a monthly assessment of the Security of Supply will be carried out on the information collected by the Regulator from operators in the gas and electricity sectors. The Security of Supply report will be then forwarded to the competent authority for assessment and further action, if necessary. This procedure is expected to be established during the year 2020. The Emergency Plan ensures that appropriate crisis management arrangements are in place, and that better coordination with the bodies responsible for civil protection and national emergency contingency planning enables a more effective response in a crisis. Malta will respond to crisis situations with appropriate market and non-market-based measures both to decrease gas demand and to increase gas supply. In order to achieve this, Malta could require the cooperation of its European neighbours to support the supply of 'top-up' deliveries of gas to the LNG facility.

4.3.2 Expected future demand and available supplies as well as envisaged additional capacity

LNG import in Malta started in 2017. The total amount of LNG delivered to Malta during 2019 was 4,100 GWh (HHV). The total amount of natural gas delivered to the electricity generation plants during 2019 was 3,639 GWh (HHV), that is in line with the data registered in 2018.

During 2019 all the importation of LNG was from non-EU Member States.

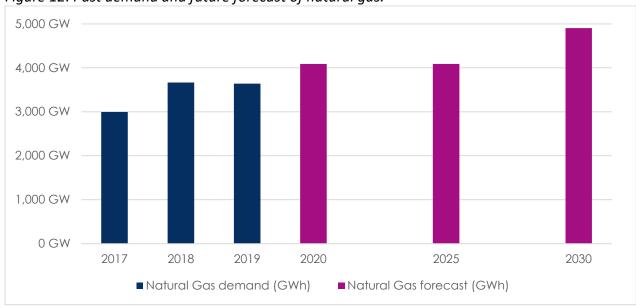
The forecasted demand of natural gas for electricity generation for the years 2020, 2025 and 2030 is shown in *Table 10* and compared with past demand in *Figure 12*.

Table 10: Forecast for the natural gas daily consumption for electricity generation.

Year	Estimated Demand (MWh/day)
2020	11,200
2025	11,200
2030	13,430

Source: Enemalta plc.

Figure 12: Past demand and future forecast of natural gas.



4.3.3 Measures to cover peak demand or shortfalls of suppliers

ElectroGas Malta, the LNG system operator and importer of LNG and supplier of natural gas, is contractually bound in terms of a gas supply contract, to maintain at all times, a minimum stock of LNG of 20,000 m³.

The average daily consumption of LNG during the year was 9.97GWh, while the peak daily consumption was 16.4 GWh (that is an increase of 3.8% over 2018). The gas consumption peaked on the 8th of August.

Presently, in the event of a shortage of natural gas, the oil-based generation plants owned by Enemalta plc, the dual fuel part of DPS-3 and the interconnection to the Italian electric grid are expected to act as a backup reserve capacity to meet the electricity demand.

5 CONSUMER PROTECTION AND DISPUTE SETTLEMENT IN ELECTRICITY AND GAS

5.1 CONSUMER PROTECTION

Compliance with Annex 1 (Article 37(1)(n)) and (Article 41(1)(o))

The Electricity Market Regulations (S.L.545.13) transpose the measures related to customer protection provided in Annex I of Directive 2009/72 and establish the obligation to provide universal service to all household customers by the distribution system operator. The Electricity Market Regulations require also that electricity suppliers provide customers, in or with the bills and promotional materials, information related to the energy sources mix and environmental impact of the electricity supplied.

In addition, customers are to be provided with:

- information concerning their rights as regards the means of dispute settlement available to them in the event of a dispute; and
- contact information of consumers' organisations, energy agencies or similar bodies, including website addresses from which information may be obtained on available energy efficiency improvement measures, comparative end user profiles and, or objective technical specifications for energy-using equipment.

The requirements emanating from the Electricity Market Regulations related to customer protection and provision of information are included in the licence conditions of Enemalta plc as supplier of electricity.

In general, the terms and conditions for the electricity supply service are currently implemented through legislative instruments, mainly, the Electricity Supply Regulations (S.L.545.01) which specify *inter alia* the services and maintenance provided, applicable tariffs, and conditions for termination and renewal. The rights and obligations of customers are detailed in the Customer Charter published by Enemalta plc which constitute the basis of the deemed contract of customers with Enemalta plc.

Since there is only one supplier, the contract of supply is automatically of an indefinite nature. In the absence of an open electricity supply market, customer switching is not possible to implement.

Customer Complaints

In terms of the Electricity Market Regulations (S.L.545.13) and the Natural Gas Market Regulations (S.L. 545.12) the Regulator carries out the function of an energy ombudsman in order to ensure the efficient treatment of complaints and out-of-court dispute settlements.

Customer complaints must be addressed at the first instance by Enemalta plc or by its contractor ARMS Ltd. ARMS Ltd deals with issues related to billing or meter reading, while Enemalta plc

deals directly with issues related to connection to the grid and voltage quality. Enemalta plc is required to retain and update a register of all complaints related to the electricity service and to submit information on an annual basis related to the complaints received and time to respond to such complaints as part of the licence monitoring reports. Currently the complaints register held by Enemalta plc does not distinguish between households and non-household customers.

Customers that cannot resolve their complaint with Enemalta plc following the completion of their complaints handling process may refer their complaint to the REWS for consideration. The dispute resolution procedures to be followed by the Regulator are established by the (S.L.545.30) Dispute Resolution (Procedures) Regulations published during the year 2016. Generally, the Regulations require that the REWS is to issue a determination to resolve the dispute within four months from the date on which the dispute is notified to it by a party to the dispute.

During 2019, the Regulator received 47 complaints related to electricity from customers that were not satisfied with the solution provided by the supplier. Most of the complaints were related to billing issues and were resolved without the need of a formal decision procedure being initiated and concluded.

Disconnections for non-payment

As part of the conditions of its licence, Enemalta plc is required to report to the REWS data related to disconnections of customers for non-payment. The total number of disconnections for non-payment of electricity consumption that was reported to the Regulator for 2019 was 528 of which 393 were household customers and 135 non-household customers. *Table 11* shows the number of disconnections for non-payment between the years 2015 and 2019.

Table 11 – Number of disconnection for Residential/ Non-Residential consumers (2015-2019).

Year	2015	2016	2017	2018	2019
Residential/Domestic	7,162	5,695	2,053	1,447	393
Non-residential	4,538	6,082	924	668	135

Source: Enemalta plc.

In general, a customer failing to pay a bill within 45 days recognised from the date of issue of the bill receives a reminder requesting the settlement of the outstanding amounts within 10 days. In the event of non-payment, the customer receives a final notice to settle amounts due within 7 days otherwise the supply could be suspended. The actual suspension of supply depends on the amount due, the length of time for which the debt has been due and taking into account established thresholds.

In addition, customers who are unable to pay their bills are afforded the facility to enter into an agreement with Enemalta plc to pay their bill by instalments, to avoid disconnection.



Figure 13: Number of disconnections between occurred between 2015 and 2019.

Vulnerable consumers

Vulnerable electricity customers are catered for within the social policy framework. The Department of Social Policy has established the criteria whereby certain categories of energy consumers may be eligible to receive energy benefits. The energy benefit amounts are deducted directly from the electricity bills.

Consumers that may benefit from energy benefits include families with low incomes, households having a family member with a disability, families on social assistance or special unemployment benefit, and persons on a pension or a carer's pension.

During the year 2019, the consumers that received energy benefits amounted to 23,560 which represents 8.55% of all household consumers, as shown in *Table 12*.

Table 12 – Vulnerable customers and their share over household customers (2015-2019).

Year	2015	2016	2017	2018	2019
Number of vulnerable customers	23,662	24,044	20,488	23,638	23,560
Share of vulnerable customers	8.1%	8.84%	8.3%	9.48%	8.55%

Source: Enemalta plc.

Ensuring access to consumption data (Article 37(1)(p)) and (Article 41(1)(q))

Electricity bills issued to customers include contact details of ARMS Ltd who is responsible for meter reading, billing, debt collections, and the provision of customer relations services on behalf of Enemalta plc, the electricity supply licence holder.

By the end of 2019, 297,626 electricity meters supplying households and non-households were smart meters complete with Automatic Metering Management (AMM) function capability, with an increase of 14.6% over the past year.

Table 13 and Figure 14 report the data relating the smart meters roll out over the past years. It is possible to highlight that at the end of 2019 this technology represents 90.85% of household meters active in Malta.

Table 13: Smart Meter (SM) installation development between 2014 and 2019.

Year	2014	2015	2016	2017	2018	2019
Total SM reachable remotely	209,839	219,760	219,773	243,712	259,822	297,626
Total Active meters	295,164	300,749	310,471	317,747	314,942	336,254
Share of SM reachable remotely	71.09%	73.07%	70.79%	76.70%	82.50%	88.51%
Household SM reachable remotely	179,570	182,454	212,191	212,479	248,672	258,536
Household Active Meters	239,936	244,509	297,792	269,025	275,106	284,572
Share of Household SM reachable remotely	74.84%	74.62%	71.25%	78.98%	90.39%	90.85%

Figure 14: Household Smart Meter development between 2014 and 2019. ■ Household reachable remotely Smart Meters ■ Household traditional Meters

In general, households not yet provided with a smart meter, receive bills calculated on actual consumption at least every six months, while households provided with a smart meter connected to the Automatic Metering Management (AMM) receive bills based on actual readings on a

bimonthly basis. The frequency of actual bills for non-household consumers varies from one month to six months.

The bill includes a breakdown of the bill calculations, total electricity consumption for the period covered by the bill, the average consumption per day, applicable tariffs and CO₂ emissions. The bill also includes the consumption related to the previous year and projections for electricity annual consumption.

Where the customer is also a producer of renewable electricity, the bill includes the number of units generated and exported to the grid together with a breakdown of the calculation of the revenue due from the sale of the electricity to Enemalta plc. Most of the electricity generated from renewable energy and exported to the grid is produced by solar photovoltaic installations. In general, the metering set-up used in the case of customers who are also producers consists of a generator meter and import-export meter thus customers who self-consume the electricity produced can keep track of their consumption.

Customers have the possibility to register on the ARMS Ltd portal to have access to a detailed breakdown of unpaid bills and history of previous bills and payments.

5.2 DISPUTE RESOLUTION

- o Article 37(11), 37(5)(c), Article 37(4)(e)
- o Article 41(11) and Article 41(4)(e)

The Electricity Market Regulations (S.L. 545.13) and the Natural Gas Market Regulations (S.L. 545.12) provide that complaints against the distribution system operator may be referred to the Regulator for Energy and Water Services. The REWS is obliged to issue a decision within four months from the date that a complaint is lodged. The timeframe for the issue of the decision may be extended by a further two months with the agreement of the complainant. Before a decision is issued, the REWS discusses the complaint with the parties involved who may make any submissions that they deem necessary.

Any decision taken by the Regulator for Energy and Water Services under the Act is binding unless overruled on appeal.

An appeal on a decision issued by the Regulator for Energy and Water Services may be lodged to the Administrative Review Tribunal.

No binding decisions related to the disputes or refusals related to connection to the network and/or network tariffs were issued by the REWS during 2019.