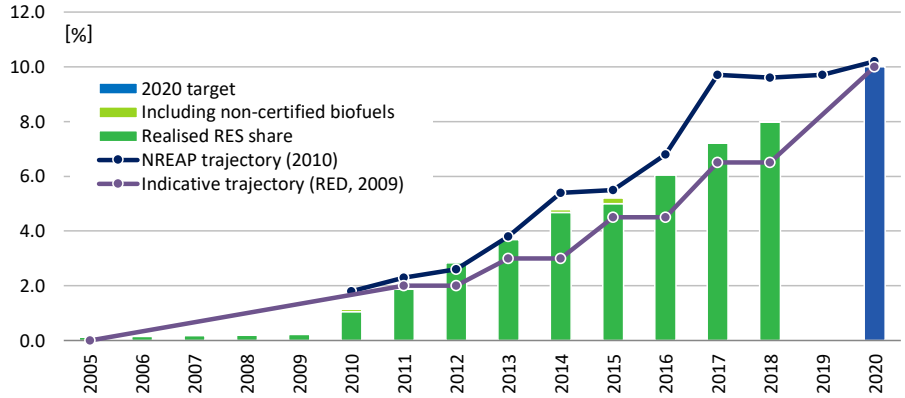
# Malta

# Renewable Energy Policy Factsheet

October 2020


**Summary**

Electricity generated by PV installations is supported by feed-in tariffs. Project developers of PV installations of 1 MWp or higher capacity have to participate successfully in tenders to become eligible. Solar water heaters and aerothermal heat pumps for domestic use is stimulated by investment subsidies. Biofuels for transportation are fostered by a biofuels quota scheme.

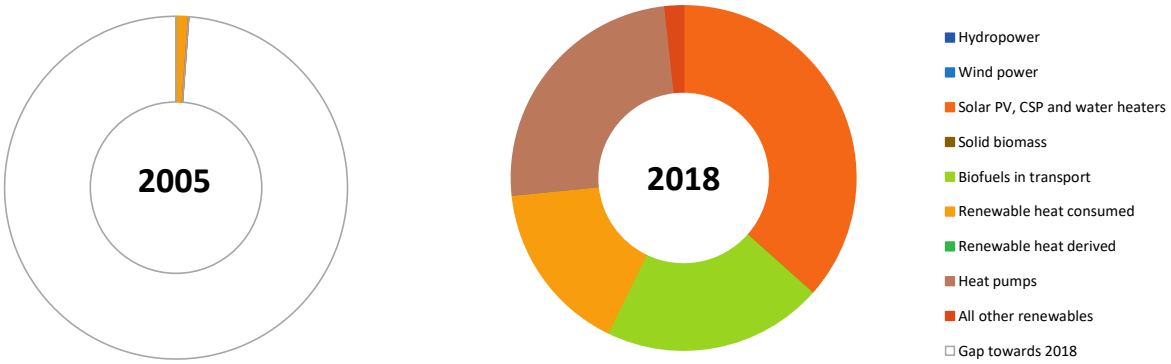

Source: EEA, Eurostat

**Abbreviations used:**

RES: renewable energy sources
RES-E: renewable electricity
RES-H/C: renewable heating/cooling
RES-T: renewable transport fuels

**Data for 2018**

| | | | |
|---|---|---|---|
| Overall RES share: | 8.0% | Avoided fossil fuels: | 0.1 [Mtoe] |
| Overall RES 2020 target: | 10.0% | Avoided fuel expenses: | 0.0 [billion euro] |
| Share RES-E in electricity: | 7.7% | RES Turnover: | 110 [MEUR] |
| Share RES-T in transport: | 8.0% | RES Employment: | 1100 [jobs] |
| Share RES-H/C in heating: | 23.4% | | |




Source: Eurostat, 2020.

| | 2005 | 2018 | | |
|---|---|---|---|---|
| | Energy | Energy | Employment | Turnover |
| Hydropower | 0.0 ktoe | 0.0 ktoe | <100 Jobs | <10 MEUR |
| Wind power | 0.0 ktoe | 0.0 ktoe | <100 Jobs | <10 MEUR |
| Solar PV, CSP and water heaters | 0.0 ktoe | 16.3 ktoe | 300 Jobs | 30 MEUR |
| Solid biomass | 0.0 ktoe | 0.0 ktoe | <100 Jobs | <10 MEUR |
| Biofuels in transport | 0.0 ktoe | 9.2 ktoe | <100 Jobs | <10 MEUR |
| Renewable heat consumed | 0.5 ktoe | 7.2 ktoe | | |
| Renewable heat derived | 0.0 ktoe | 0.0 ktoe | | |
| Heat pumps | 0.0 ktoe | 11.1 ktoe | <100 Jobs | <10 MEUR |
| All other renewables | 0.0 ktoe | 0.8 ktoe | 300 Jobs | 30 MEUR |
| Gap towards 2018 | 44.0 ktoe | | | |

Source: Eurostat, EurObserv'ER, 2020.

*Hydropower jobs & turnover only covers 'small hydropower'. PV=Photovoltaics, CSP=Concentrated Solar Power. Biofuels in transport only covers compliant fuels (employment and turnover additionally cover the non-compliant biofuels). Derived heat includes heat produced in main activity producer plants and heat sold produced in autoproducer plants. Its counterpart is the final heat consumption in the final consumption sectors (such as households).*

## *CURRENT RENEWABLE ENERGY POLICY*

Malta launched a National Energy Policy in December 2012, aimed at diversifying the energy mix used in Malta while accelerating a shift in the energy culture. The national energy policy is based on the principles of diversification, security of supply, efficiency and affordability.

Malta aims to achieve its 2020 renewable energy target through different technologies, mainly solar, heat pumps, biofuels and waste to energy projects.

In its national reporting on the progress towards the 2020 binding RES target, Malta points out that, due to several major technology-related developments, it has revised the original RES mix which was presented in the National Renewable Energy Action Plan (NREAP). Among others, the large offshore wind farm, which was expected to be a major contributor to the RES target in the original NREAP is not being considered further. Additionally, the significant price reduction for PV systems since 2005, mainly due to the cost of modules, has provided an alternative, cost-effective path for Malta to reach its 2020 RES target. The Maltese Government's policy is to prioritize investment in PV systems installed on rooftops and brown field sites (land that has been used for industrial and commercial purposes and is now derelict and possibly contaminated, or previously developed land that has the potential for being redeveloped).

Malta enjoys an abundance of sunshine and mild temperatures. This, coupled with other factors such as the existence of flat roofs as the standard way of building and the recent trend of increased power consumption in summer due to air conditioning, also favours the application of solar PV on a wide scale.

For the promotion of *renewable electricity*, Malta has a feed-in tariff scheme in place for PV systems targeted at households. After successful participation in dedicated tenders, also PV and windpower installations ≥ 1 MW can benefit from a feed-in tariff on a pay as bid basis. So far, two tenders for a total of 50 MW capacity each were organised in October 2017 and October 2018 respectively. Generally, eligibility to feed-in tariffs is capped at 1600 $kWh/kW_p$/year. Any network injection in excess of this cap has to be marketed by the project operator concerned.

For *renewable heating*, grants for solar water heating systems and aerothermal heat pumps to private householders are provided for 50% of the investments costs up to 700 euros.

Support for *renewable energy in the transport sector* is provided through a biofuels quota scheme imposed on importers and wholesalers of fossil fuels.

In addition, subsidy and tax mechanisms are provided for the purchase of battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs) by a package of measures, including:

- Subsidies on the purchase of a BEV, a PHEV or an electric quadricycle
- Highly concessional registration tax for a BEV amounting to €10
- Annual ownership tax for BEVs is the minimum rate: €10/year
- A range of corporate tax benefits for purchase and operation of company BEVs, PHEVs and electric quadricycles
- Incentives in some local areas such as Valletta (no CVA charge, use of priority lanes)
- Investment subsidy for company chargers and no registration tax for company EVs
- Reduced electricity rates for households with home chargers
- Malta has no immediate plans to establish a hydrogen refuelling network.

In 2017, there were 332 registered electric vehicles in Malta, ranging from passenger vehicles, motorcycles and quads to electric light and heavy-duty vehicles. Another 861 vehicles were registered as hybrid (Government of Malta, 2019).

So far, the assessment by the European Commission of draft National Energy and Climate Plans of the Member States is available. The Commission's assessment of the draft integrated National Energy and Climate Plan of Malta – regarding the targets for year 2030 for the share of renewable energy and gross final energy consumption only[1] – is shown in Table 1 below.

**Table 1: Overview of Malta's actual performance (2018), targets (2020), proposed contributions (2030) under the Governance Regulation, Regulation (EU) 2018/1999 and contribution ambition assessment by the European Commission, regarding the share of renewables and the level of gross final energy consumption**

| National targets and contributions | 2018 | 2020 | 2030 | Assessment of 2030 ambition level |
|---|---|---|---|---|
| Share of energy from renewable sources in gross final consumption of energy (%) | 8.0 | 10.0 | 10.6-13.3 | Below 21% (result of RES formula) |
| Final energy consumption (Mtoe) | 0.8 | 0.6 | 0.9 | Very low |

Source: European Commission, (2019); Eurostat (2020a, 2020b)

To date, compared to the EU at large Malta has relatively low energy consumption per capita and energy intensity (energy consumption per €) levels. Based on the formula contained in Annex II of the Governance Regulation, Malta's renewables share would have to reach the level of 21% in 2030 (European Commission, 2019) against the historical rate of 8.0 % in 2018 (eurostat, 2020a). The European Commission (2019) considers the proposed interval of the RES share by 2030 of 10.6 – 13.3 **%** to show low ambition and not fully reflecting Malta's potential. The Commission deems the ambition level of the proposed **0.858 ktoe** as Malta's proposed contribution to the EU 2030 target for final energy consumption to show a very low ambition level as well, considering the level of efforts required at the EU level to collectively reach the Union's 2030 efficiency target. In 2018 Latvia's gross final energy consumption amounted to **0.8 Mtoe** (Eurostat, 2020b).

Malta's final National Energy and Climate Plan (NECP) presents a target for the renewables share by year 2030 of **11.5%** excluding RES ambient cooling by air-to-air reversible heat pumps (Government of Malta, 2019) compared to 10.6 – 13.3 % as proposed interval in its draft NECP with sub-sectoral targets for the share of renewables being: 11% of electricity consumption, 26% of energy consumption for heating and cooling purposes and 15% of transport fuels consumed. In the final NECP transparent absolute amount figures of RES consumption projections in 2030 per sub-sector are wanting. The 11.5 % overall target share falls short by far compared to the rate of 21 % resulting from the formula in Annex II of the Governance Regulation. The final NECP enumerates numerous factors to corroborate the statement that Malta's renewable resource base is rather limited, such as high population density curbing on-land renewable resources, no indigenous biomass as well as environmental and geophysical factors, constraining maritime renewable resources . With a population density of 1457 persons/km$^2$ (1-1-2017) Malta is the EU member state with the highest population density, which tends to affect public acceptance of onshore wind and ground-mounted PV negatively. Existing and additional policies Malta sets out to implement to push the uptake of renewables include (Government of Malta, 2019):

- Extension of current policy framework in the area of RES for the period until 2030 whilst providing new initiatives tailored to local specificities

[1] Gross final energy consumption is included as well as its level negatively affects the share of renewables: given a certain level of final consumption from renewable sources, the more total final energy consumption can be reduced, the higher share of renewables can be achieved.

- Financial support schemes for Solar PV
- Schemes to support solar water heaters and heat pump water heaters
- Continuation of the biofuels quota scheme (blending programme) with a gradually rising quota for imported automotive fuels over time.

As for Malta's contribution to the EU energy efficiency target for year 2030, in its final NECP Malta sets a target of **786 ktoe**. This is a more ambitious energy efficiency target than the 858 ktoe (0.858 Mtoe) level in 2030 proposed in Malta's draft NECP.

***OVERVIEW OF MAIN SUPPORTING POLICIES***

An overview of the main RES support measures applied in Malta are shown in Tables 2 and 3 below. See the previous section for more details.

**Table 2: Overview of support schemes to promote renewable energy in Malta**

| | NON-FISCAL SUPPORT SCHEMES | | | | | FISCAL AND OTHER STATE FUNDED INCENTIVES | | |
|---|---|---|---|---|---|---|---|---|
| | Feed-in tariffs | Heat bonus for CHP | Quota obligation without certificates system | Tendering | Net-metering/ net-billing | Subsidy (Energy Aid) and/or Investment Aid | Tax regulation mechanism | Loans |
| **RES-E** | | | | | | | | |
| - Offshore wind | | | | | | | | |
| - Onshore wind | x | | | x | | | | |
| - Solar | x | | | x | | | | |
| - Hydro | | | | | | | | |
| - Geothermal | | | | | | | | |
| - Solid biomass | | | | | | | | |
| - Biogas | | | | | | | | |
| **RES-H/C** | | | | | | | | |
| - Solar thermal | | | | | | x | | |
| - Geothermal | | | | | | | | |
| - Biomass | | | | | | | | |
| - Biogas | | | | | | | | |
| - Aerothermal heat pumps | | | | | | x | | |
| - Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves | | | | | | | | |
| - Others | | | | | | | | |
| **RES-T** | | | | | | | | |
| - Biogasoline | | | x | | | | | |
| - Biodiesel | | | x | | | | | |
| - Biogas | | | | | | | | |

Sources: RES Legal, EurObserv'ER

**Table 3: Brief description of key policy instruments aimed at promoting RES in Malta**

| *Instrument* | *Description* |
|---|---|
| Feed-in tariffs for grid-connected PV systems and ≥ 1 MW onshore wind systems | A (capped) feed-in tariff is paid for the production of renewable electricity from solar PV installations. Project promotors of PV and windpower installations ≥ 1 MW have to successfully participate in tenders. |
| Grant schemes for solar water heaters and aerothemal heat pumps in the domestic sector | Private households are eligible for a once-only grant per eligible installation. |
| Biofuels quota scheme | Importers and wholesalers of automotive fuels shall include a pre-set percentage of biofuels, applicable for the year concerned, in marketed automotive (diesel and gasoline) fuels |

***For further information:***


CEER, 2017. Status Review of Renewable Support Schemes in Europe. http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_PAPERS/Electricity/2017/C16-SDE-56-03%20Status%20Review%20RES%20Support%20Schemes.pdf

European Alternative Fuels Observatory, https://www.eafo.eu/countries/malta/1744/incentives

European Commission, 2019. Assessment of the draft National Energy and Climate Plan of Malta. SWD(2019) 268. Brussels, 18 June https://ec.europa.eu/energy/sites/ener/files/documents/mt_swd_en.pdf

EEA, 2019. Progress towards renewable energy source targets at member State and EU-28 levels. Copenhagen, 19 December https://www.eea.europa.eu/data-and-maps/daviz/actual-res-progress-indicative-trajectory-9#tab-chart_3

European Union, 2018. Regulation (EU) 2018/1999 on the Governance of the European Union and Climate Action, OJEU L328/1, Brussels, 21 December https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R1999&from=EN

Eurostat, 2020a. Renewable energy statistics; Share of renewable energy almost doubled between 2004 and 2018. Luxembourg, January https://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable_energy_statistics

Eurostat, 2020b. Energy consumption in 2018. Primary and final energy consumption still 5% and 3% away from 2020 targets. Luxembourg, 4 February https://ec.europa.eu/eurostat/documents/2995521/10341545/8-04022020-BP-EN.pdf/39dcc365-bdaa-e6f6-046d-1b4d241392ad

Government of Malta, 2012. The 2012 National Energy Policy for the Maltese Islands, Valleta, December http://cdz.com.mt/wordpress/wp-content/uploads/2012/12/ENERGY-POLICY-I.pdf

Government of Malta, 2019. Malta's 2030 National Energy and Climate Plan. Valletta, December https://ec.europa.eu/energy/sites/ener/files/documents/mt_final_necp_main_en.pdf

International Energy Agency (IEA) database on policies and measures https://www.iea.org/policies?topic=Renewable%20Energy

Member State Progress Report, available at the Renewable Energy pages of the European Commission, http://ec.europa.eu/energy/en/topics/renewable-energy

REN21, 2020. Global Status Report 2020. Paris, 16 June https://www.ren21.net/wp-content/uploads/2019/05/gsr_2020_full_report_en.pdf

RES Legal database: http://www.res-legal.eu/search-by-country/malta

https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-malta_en.pdf (European Commission/ DG ENER, Energy Union Factsheet Malta, November 2017)

## *What is meant by …?*

| | |
|---|---|
| Auctions for granting renewable energy support | An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers. |
| Feed-in tariff (FiT) | A support scheme which provides for a technology-specific remuneration per unit of renewable energy payable to eligible renewable energy producers. A proper, periodic review of FiT rates is often undertaken with the aim to prevent both too high FiTs so as to minimise regulatory rents, i.e. supra-normal returns and too low FiTs to preclude below-target market uptake because of FiT levels that are perceived by market participants to be less attractive. In addition, feed-in tariffs often include "tariff degression", a mechanism according to which the price (or tariff) ratchets down over time. |
| Feed-in premium (FiP) | A scheme which provides for a support level per unit of renewable energy to eligible renewable energy producers, typically for a period of 10-20 years, at a pre-set fixed or floating rate. The premium is typically adjusted periodically to exactly offset change in the average energy wholesale market price, based on a pre-specified benchmark market price. A floating FiP may move freely or may only be allowed to move within a pre-set interval. |
| Grants | Grants are non-repayable funds disbursed by one party (grant makers), often a government department, corporation, foundation or trust, to a recipient, often (but not always) a non-profit entity, educational institution, business or an individual. (Source: Wikipedia.org) |
| Green public procurement | In Green public procurement contracting authorities take environmental issues into account when tendering for goods or services. The goal is to reduce the impact of the procurement on human health and the environment. (Source: Wikipedia.org) |
| Renewable quota scheme (RQS) | A RQS mandates certain market actors (typically retail suppliers or large energy end-users) to respect a pre-set minimum share or amount of their total energy procurements from renewable sources of energy. Typically a tradable green certificate (TGC) scheme is operated to enable the obligated parties to prove their compliance with the prevailing renewable quota target by means of TGCs. |
| Sliding feed-in-tariff | A FiT scheme which pre-sets technology-specific declining feed-in tariffs for certain prospective vintages in line with the technology-specific learning curve, as projected by the National Regulatory Agency (NRA). Often a degression rate is used indicating the %/annum decrease in the rate level. |
| Soft loans | Loans at concessional (below market-based) terms, for example at sub-market-conform interest rates, made available in several Member States to stimulate certain renewable energy technologies. |
| Tax credits | These are amounts a tax paying entity is allowed to deduct when declaring payable taxes, for example company tax or income tax, to the tax authorities , for example the producer tax credits (PTCs) used in the United States to stimulate among others wind energy deployment. |

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