

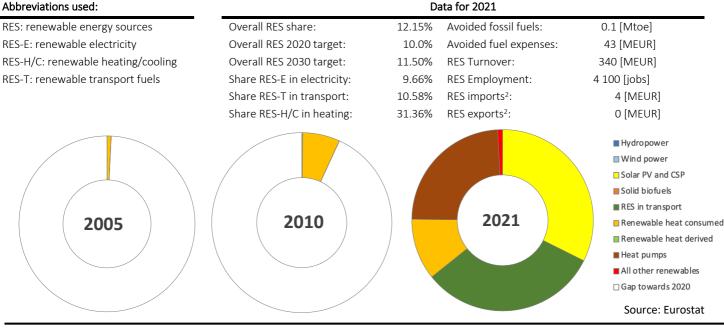
Malta

Renewable energy status

Share of energy from renewable sources in total gross final energy consumption



Abbreviations used:



_	2005	2010		2021	
	Energy in ktoe	Energy in ktoe	Energy in ktoe	Employment in FTE	Turnover in MEUR
Hydropower	0.0	0.0	0.0	<100	<10
Wind power	0.0	0.0	0.0	<100	<10
Solar PV, and CSP	0.0	0.1	22.0	200	<10
Solid biomass	0.0	0.0	0.0	<100	<10
Ren. energy in transport ³	0.0	0.0	21.7	<100	<10
Renew. heat consumed	0.5	4.3	7.4		
Renew. heat derived	0.0	0.0	0.0		
Heat pumps	0.0	0.0	16.3	3 100	250
All other renewables	0.0	0.0	0.6	400	40
Gap towards 2020	63.5	59.6	Source: Eurostat, EurObserv'ER		

FTE = Full time equivalent, 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).

¹ From Integrated National Energy Climate Plan

² Referring to the International Trade chapter from the publication: EurObserv'ER - The State of Renewable Energy in Europe, 2022 edition ³ Employment and turnover are only referring to biofuels in transport.



CURRENT RENEWABLE ENERGY POLICY

General

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 has surpassed its 2020 renewable energy target of 10% by 0.7% through different technologies, mainly solar, heat pumps, biofuels and waste-to-energy projects.

The significant price reduction for PV systems since 2005, mainly due to the cost of modules, has provided a cost-effective path for Malta to reach its 2020 RES target. The Maltese Government's policy is to prioritise 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.

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 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.

Malta's final National Energy and Climate Plan (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 1,610 persons/km² (2020) 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
- 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.

RES-E

In 2020, Malta's renewable electricity capacity consisted primarily of solar power, which made up 98%. With no wind, geothermal and hydro/marine capacity, the remaining 2% of total renewable capacity in the electricity sector stem from bioenergy. Compared to 590 MW non-renewable power, solar power provided 184 MW and bioenergy 5 MW of renewable electricity capacity in 2020.

Malta thereby surpassed its 12% target of renewable electricity in 2020, with 24% of total installed electricity capacity coming from renewable sources (IRENA, 2021).

RES H&C / RES-T

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 2021, there were 2,180 registered BEV (Battery Electric Vehicles) and 714 registered PHEV (Plug-in Hybrid Electric Vehicles) in Malta.

As of May 2022, the share of alternative fuels vehicles is 0.85% of the total fleet, with 13 newly registered BEV and 6 PHEV.

There are no targets within the National Policy Framework for alternative fuels infrastructure for 2025 (European Commission, 2022). However, Malta targets to increase the share of RES in the transport sector by 14% in 2030 (base year 2020).

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).

Table 1: Brief description of key policy instruments aimed at promoting RES in Malta

Instrument	Description
2021 Renewable Energy Sources Scheme	The RES Scheme is administered by the Regulator for Energy and Water Services to further encourage the better use of the renewable energy being generated by the country. This scheme is funded through national funds and applies to private individuals (natural persons) for use on their residential properties, and for organisations that are not carrying out an economic activity, provided that photovoltaic installation should have no active feed-in tariff allocation. If the photovoltaic installation was allocated a feed-in tariff, the guaranteed period should be expired.
	This scheme has been extended until 31st December 2022 by means of Government Notice 1666 of 2021.
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. PV systems being approved as per Second Schedule LN 69 of 2022 equal or greater than 1kWp but less than 40kWp.
Grant schemes for solar water heaters and aerothermal heat pumps in the domestic sector	Private households are eligible for a once-only grant per eligible installation. Support schemes for solar water heaters and collectors expired in 2018.
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.
Tax and other financial benefits for electric vehicles	For Electric Vehicles registration Tax is zero, which means additional cost savings between 1,000 and 3,000 Eur. Electric Vehicles pay 10 Euros ownership tax per year.
Alternative fuel infrastructure incentives	New Car Importers and Fleet Management companies can apply for a maximum grant of 25,000 Euro to update their service garages or re-train staff.
	Electric Car owners can charge their vehicles at home using residence electricity subsidies. Make use of the three solar car ports around Malta for charging and I22.

For further information:

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

Government of Malta, National Renewable Energy Action Plan, 2017, https://drive.google.com/file/d/18afxVA-V6YmrNrF0yus6Xv-rmHuTnLCM/view

Regulator for Energy & Water Services Malta, <u>https://www.rews.org.mt/#/en/sdgr/463-2021-</u> renewable-energy-sources-scheme-active

European Alternative Fuels Observatory, <u>https://alternative-fuels-observatory.ec.europa.eu/transport-mode/road/malta</u>

Eurostat, https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-4c.html

The Energy & Water Agency of Malta, <u>https://www.energywateragency.gov.mt/renewable-energy</u>

IRENA, Energy Profile Malta, <u>https://www.irena.org/IRENADocuments/Statistical Profiles/Europe/Malta Europe RE SP.pd</u> <u>f</u>

IEA, Policies Database Malta, <u>https://www.iea.org/policies?country=Malta</u>

The World Bank, https://data.worldbank.org/indicator/EN.POP.DNST?locations=MT

What is meant by ...?

Auctions for granting renewable energy support Feed-in tariff (FiT)	An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers. 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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