

DRAFT NATIONAL ENERGY AND CLIMATE PLAN

2021 – 2030



The Energy and Water Agency

- Agency within the Ministry for Energy and Water Management
- Main role: the design and implementation of national policy in the energy and water sectors
- Leading role in the development of Malta's NECP, together with the Ministry for Environment, Sustainable Development and Climate Change

The Energy Union

The Vision for Energy and Climate

- 2020 climate and energy package
- 2030 climate and energy framework
- 2050 low-carbon economy

The Energy Union's 2030 targets (to be reached by the *EU collectively*):

- **40%** reduction in GHG emissions
- **32%** renewable energy share
- **32.5%** energy efficiency
- **15%** electricity interconnections

Energy Union Dimensions

Decarbonisation

Energy efficiency

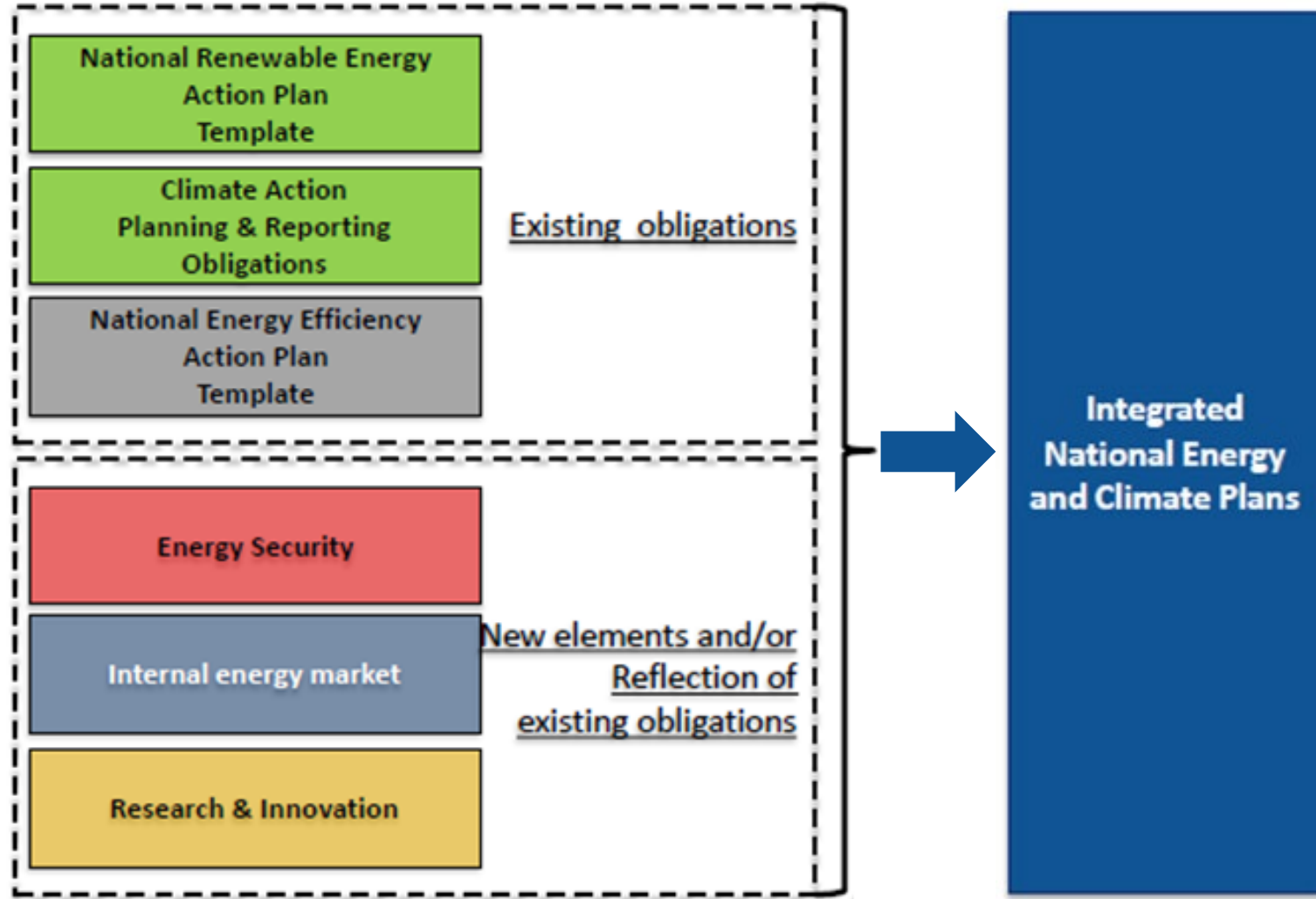
Internal Energy
Market

Energy Security

Research,
Innovation &
Competitiveness

Regulation on the Governance of the Energy Union

- Regulation (EU) 2018/1999
- ‘Umbrella’ piece of legislation which aims to ensure that the **EU’s 2030 energy and climate targets** are achieved
- Aims to integrate planning, reporting and monitoring requirements of **existing and new elements** under the EU energy and climate legislation



National Energy and Climate Plan

- An **integrated plan**, submitted to the European Commission by each Member State, establishing the direction of national energy and climate policies for at least the next 10 years (2021 – 2030)
- A strategic **planning, framework and policy document** that will guide Malta's contribution to achieving the Union's 2030 objectives and targets, primarily in the areas of GHG emissions reductions, renewable energy, energy efficiency and electricity interconnectivity.
- Member States are required to **set out their own national contributions** to the EU's 2030 targets

Preparation of the Draft NECP

In 2017, Cabinet established an **Inter-Ministerial Steering Committee** with the scope of ensuring a coordinated approach by all Ministries relevant to the development of the NECP

- Two **technical working groups** were established: one on energy modelling and another on non-energy (climate-related) modelling

Government Ministries/Entities involved: MEW, EWA, MESDC, MTIP, MFIN, MEAE, MEIB, MEDE, OPM, MCCA, MCST

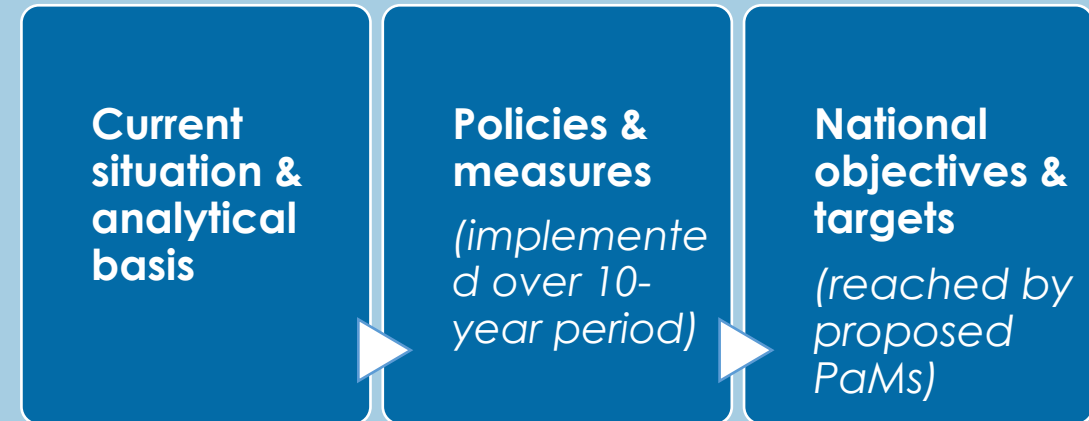
Main challenges:

- Agreement on macro-economic parameters to be used for the various energy and climate models
- Lack of sophisticated energy modelling tools
- Alignment of diverse Ministerial priorities and timeframes to develop an integrated National Plan and submit by the tight deadline

NECP: Content

Draft National Plan includes a description of:

- Current situation
- Draft National objectives and targets
- Planned policies and measures
- Analytic section – assumptions & projections



Draft NECP being assessed by European Commission – **recommendations** will be sent to Member States by June 2019.

Final NECP to be submitted by end of 2019.

Context & projections

Current situation:

- High annual GDP growth (6.6% in 2017)
- Increase in population (approx. 2% annually) attributed to rapid economic expansion and increased demand for labour force
- Growing demand in the housing market
- Increase in tourist arrivals

A set of assumptions to forecast **macroeconomic indicators** was developed for the purpose of the NECP

- Indicators consist of population, GDP, sectoral GVA, household size, number of households and disposable income

GHG emissions

Decarbonisation

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- MESDC is in the process of developing the **Low Carbon Development Strategy (LCDS)**, to chart a roadmap towards the decarbonisation of our economy, with a time horizon until 2050
- The **mitigation potential** across sectors will be defined in the LCDS, together with the **financial, economic and social impacts** of introducing additional policy measures to mitigate GHG emissions
- Through the **definition of sectoral targets**, necessary policy action based on a **Marginal Abatement Cost (MAC)** curve will be undertaken. The “with additional measures” scenario in the final NECP shall be aligned accordingly

GHG emissions

Decarbonisation

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- Malta acknowledges its limited mitigation potential as a result of:
 - Already low GHG emissions per capita
 - Service-based economy with low energy-intensive industries
 - Geophysical constraints
- The **limited cost effective** mitigation potential led Malta to seek flexible options in line with the provisions of the Effort Sharing Regulation
- Malta is nonetheless committed to address climate issues and to contribute towards the European Union's collective target of 40% reduction of its GHG emissions by 2030
- **Climate adaptation** action is considered equally important to mitigation and will also feature in the LCDS

Renewable energy

Decarbonisation

- No Member State-specific target
- Malta's contribution will depend on ongoing analysis, recommendations from the Commission and stakeholder feedback
- The Draft Plan proposes:
 - Continued government support for solar for period 2021 – 2030;
 - Extension of substitution obligation for fuel suppliers in line with requirements of new Renewable Energy Directive for period 2021-2030



Renewable energy

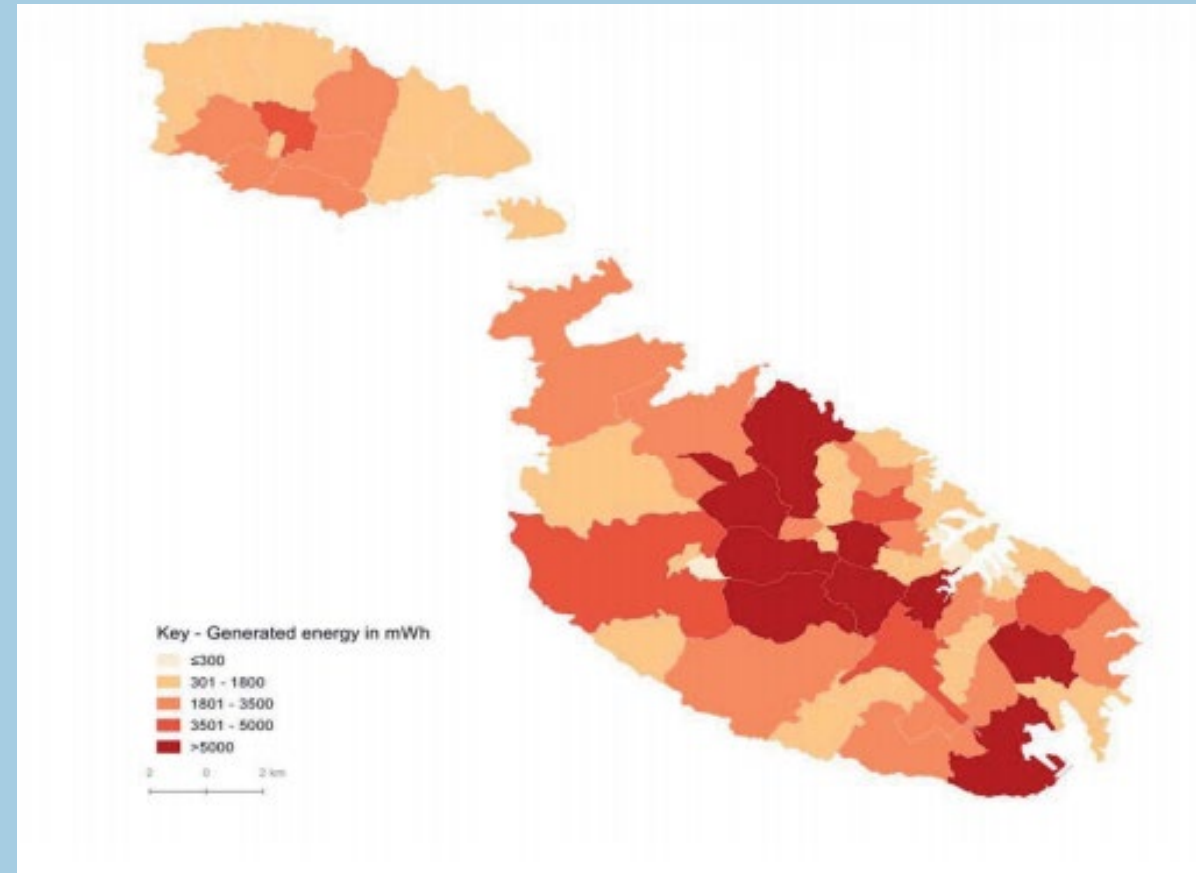
Decarbonisation

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Malta's **technical potential for RES deployment** is mainly affected by:

- Technological advancement and availability of the resource
- Grid integration considerations
- Cost of land and geospatial constraints
- **Nevertheless** The draft Plan aims at doubling the present PV capacity by 2030

Two scenarios are presented in the plan to assess the impact (or otherwise) of RES cooling towards Malta's 2030 renewable energy target.

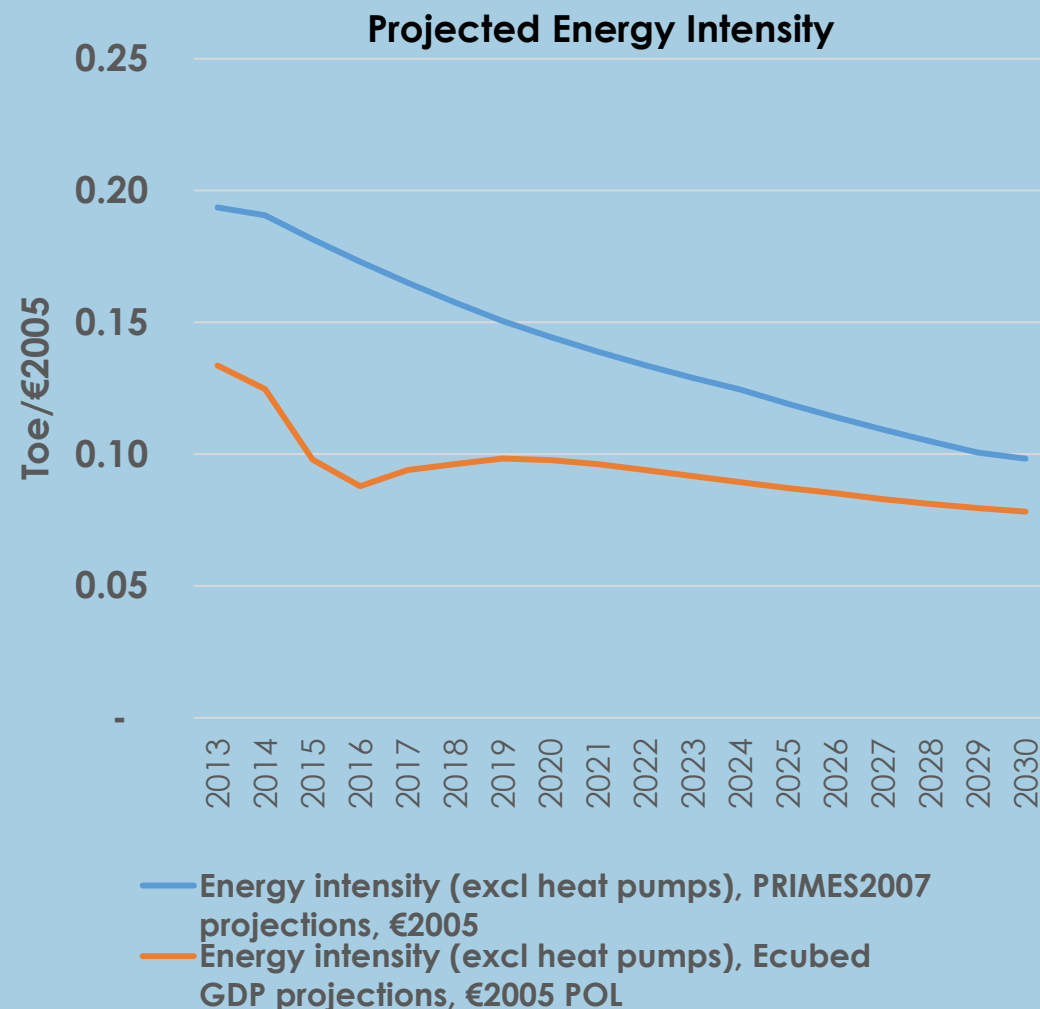


Energy efficiency

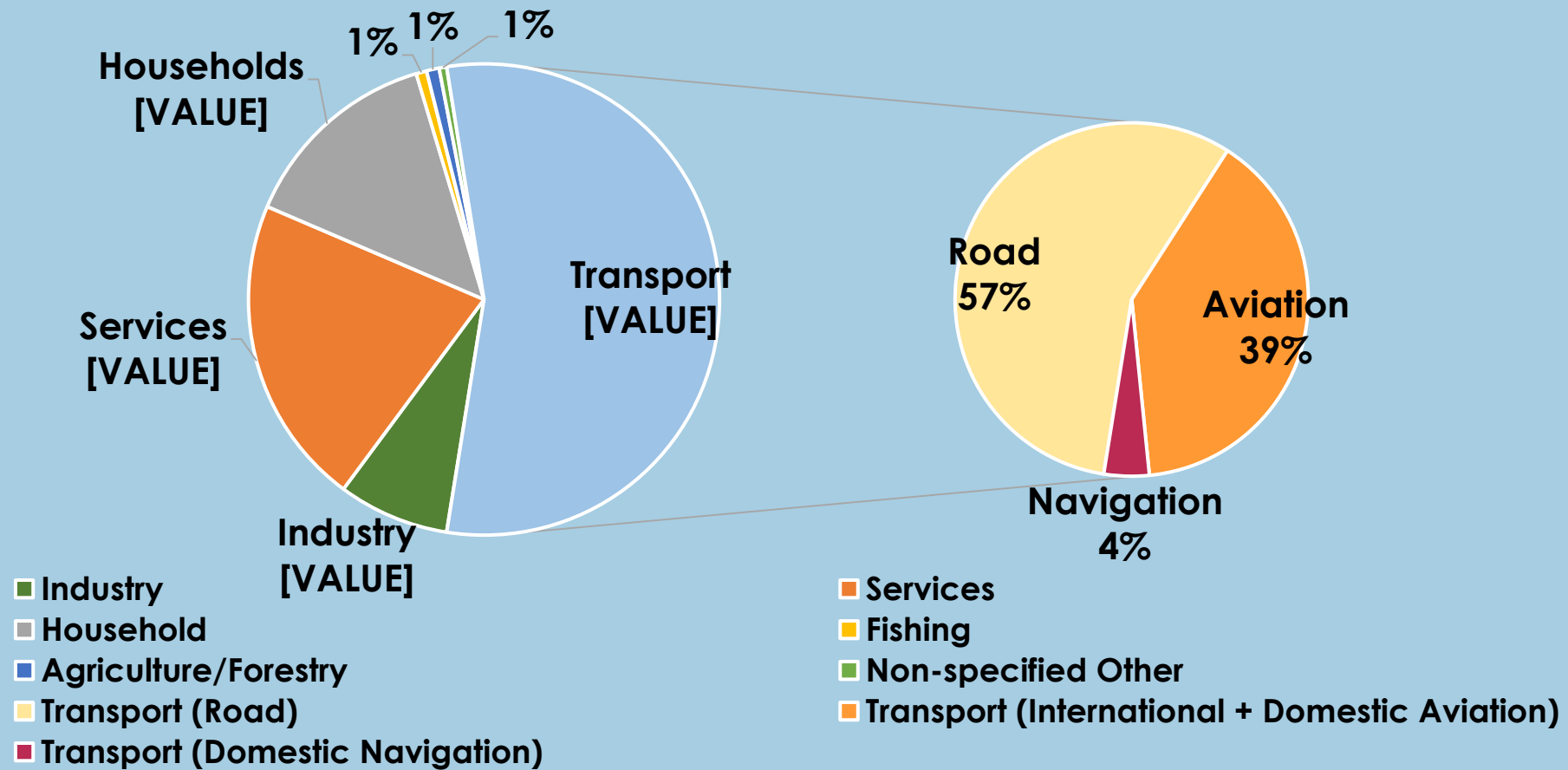
Energy efficiency

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- Malta's indicative energy efficiency contribution to the EU's 2030 target is provided in terms of **energy intensity**
- Malta's mainly service-based economy is relatively low energy-intensive (3rd lowest in the EU)
- Population and GDP growth in recent years have made it difficult to restrain energy consumption, with increasing energy demand expected to continue post-2020
- Energy savings for the period 2021 – 2030 are expected to be achieved through measures in households, services and industry sectors, and transport
- **Energy Efficiency Target** Under Article 7 of the EED is **binding**.



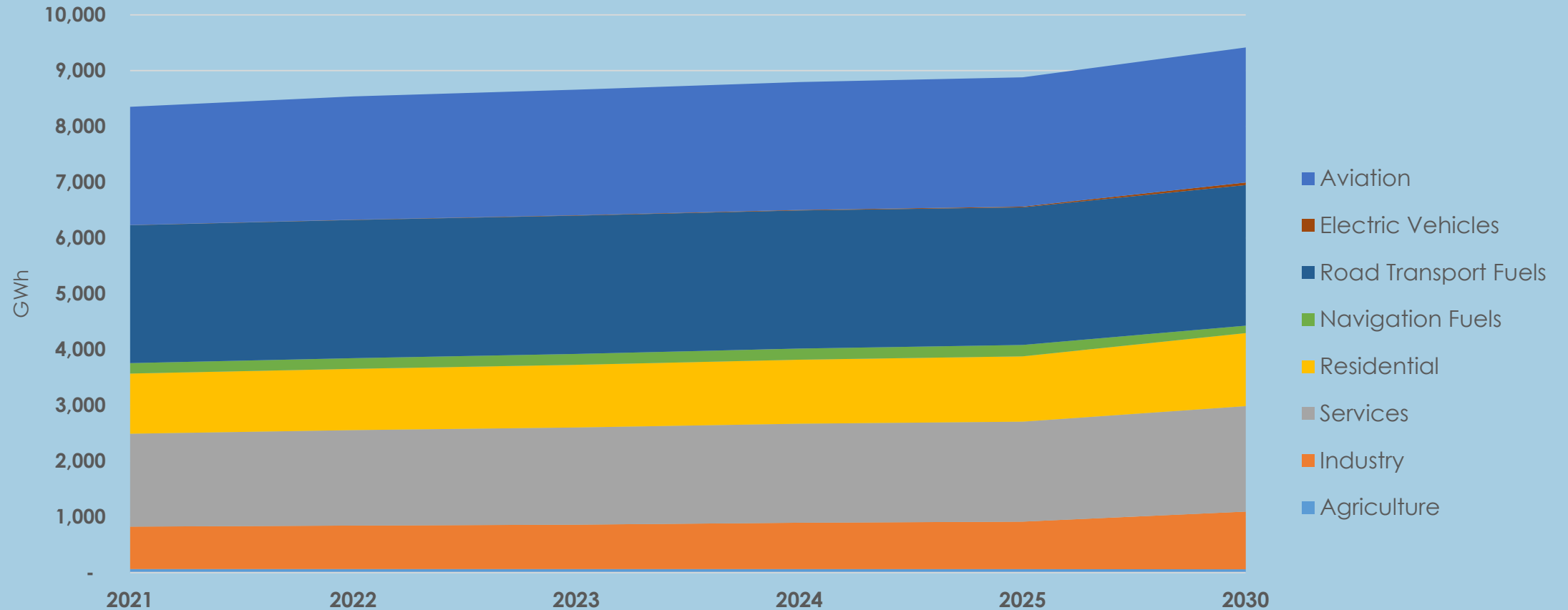
Energy Efficiency



- Final plan needs to include further Policies and Measures in the Buildings and Transport sectors.

2030 Projected Final Energy Consumption (Draft)

Projected Final Energy Consumption: WPM Scenario



Energy Security

Energy Security

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- The Government is committed to the **diversification of energy sources** and contingency planning in the case of supply disruption in order to strengthen the security of supply
- Proposed measures:
 - Gas pipeline project between Malta and Sicily
 - Demand Management and Energy storage
 - At present assessing options to ensure future electricity demand is met

Internal energy market

Internal energy
market

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- The electricity network in Malta is linked to the European grid through a 200MW interconnector
 - The level of interconnectivity is expected to remain well above the 15% EU target for the period until 2030
- No liquid wholesale market in Malta
- Small electricity system (circa 2.4 TWh/year) at the periphery of the EU electricity grid.

Underlying policy: ensure competitive electricity prices for households, commercial and industrial sectors by using best-available technology and measures targeting the protection of energy consumers, including vulnerable consumers.

Research, innovation and competitiveness

R&I and
competitiveness

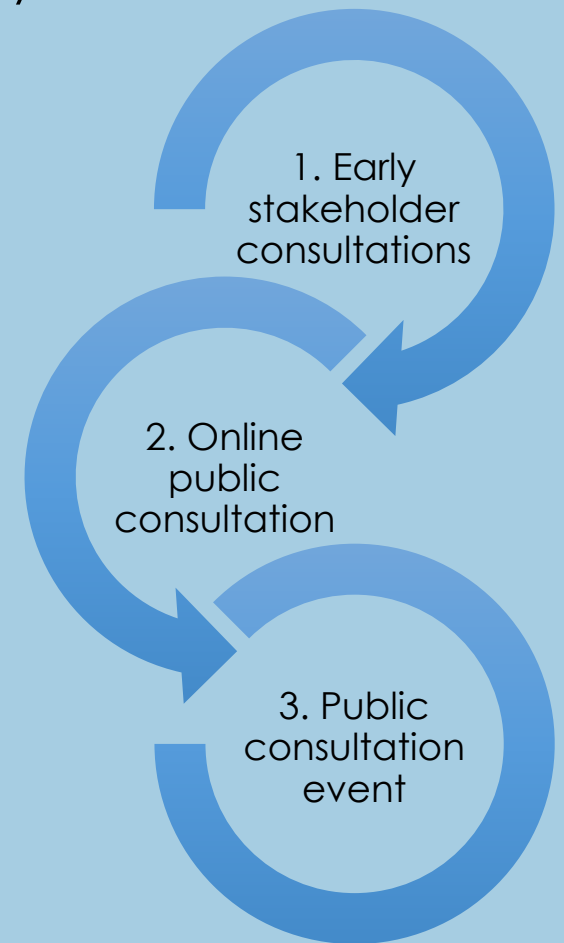
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Malta is set to have:

- A general R&I strategy in place by the end of 2020
 - Within the remit of OPM/MCST
- A specific R&I strategy in the area of energy and water by the end of 2019
 - To be developed by the Energy & Water Agency in time for Malta's submission of the Final NECP to the European Commission
 - A specific public consultation process will be launched for this R&I strategy

Stakeholder consultation

- The involvement of stakeholders and the public are considered key processes under the Governance Regulation.
- Our approach:
 - 1) Early consultations with key stakeholders (During 2018)
 - 2) Public consultation held via online platform
 - 3) Public consultation – MEUSAC event (Held on 4th April 2019)



Way Forward

- Further development of energy modelling tools
- Support through SRSS Programme – funded by the EC
- Refined demand projections for electricity and road transport
- Simulate impact of policy measures + Impact Assessment
- SEA of NECP
- Update and Submission of NECP document by end of 2019

THANK YOU FOR
YOUR ATTENTION