



GOVERNMENT OF MALTA
MINISTRY FOR THE ENVIRONMENT,
CLIMATE CHANGE AND PLANNING

Republic of Malta Multilateral Assessment

SBI 52

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Elements of the presentation

- Understanding the context – An overview of key national circumstances
- The EU policy framework
- Where we are at present
- The future outlook and key policy developments

[NOTE: historic emissions data quoted in this presentation refer to Malta's GHG inventory submission of 2021. Data originally reported in BR4 referred to Malta's 2019 GHG inventory submission.]

Malta

- Small island state that experienced significant demographic changes and economic progress over recent years
- In just 4 years (2015–2019), the Maltese islands experienced unprecedented socio-economic changes
- Population increased by 8%, workforce by 27%, and tourism by 22%
- Malta had also one of the steepest increases in population in the EU, which has contributed to an increase in energy demand
- Economic growth has largely been driven by a service-based economy that is low on carbon intensity
- Early leader in ditching coal (in 1995) and heavy fuel oil (2018) for indigenous electricity generation
- As a consequence, emissions intensity of electricity generation has improved substantially

National circumstances (1)



	2017	2019
Total area (km ²)	316	
Population (million)	0.48	0.51
Population density (/km ²)	1,505	1,628
Tourist arrivals (million)	2.3	2.7
GDP (million €)	11,126.0	13,208.5

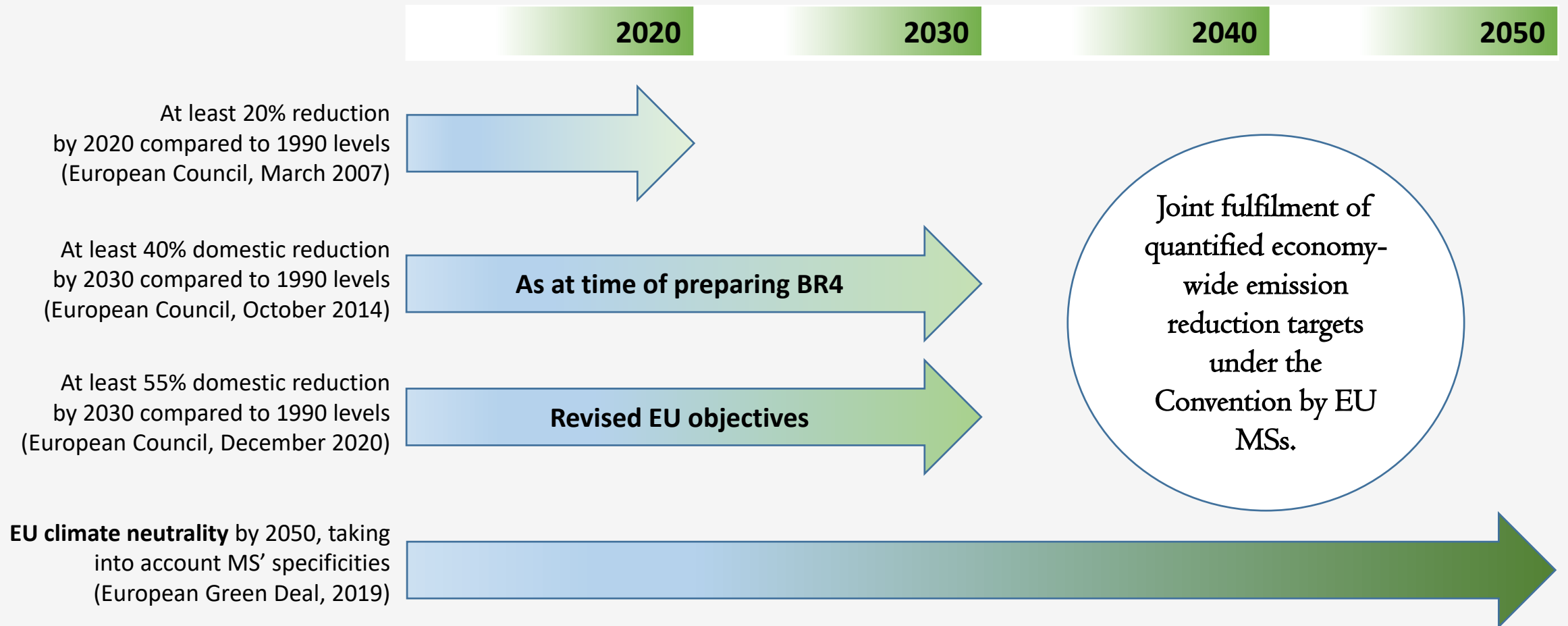
National circumstances (2)

- Small geographical area
- Dense population (the highest in the EU)
- Geo-physical limitations, together with Mediterranean climate trends; hot and dry summers, decreasing rainfall and no access to natural freshwater streams
- No rivers or lakes
- Small economy which is mainly based on services (85% of GVA) particularly in the arts and recreation, professional services, ICT and financial services, manufacturing and construction contribute to around 14% of GVA
- Policy constraints with regards to insularity

National circumstances (3)

- Emissions mitigation technologies not financially feasible on MT scale
- Certain technologies, like rail, hydropower, onshore wind (major sources of renewables in other Member States) are not applicable to MT
- Disproportionately higher marginal abatement cost than mainstream EU countries
- Composition of emissions, particularly the relatively high share of transport emissions
- Limited connectivity with dependence on aviation and maritime transport which leads to cost effectiveness issues
- Very limited carbon sinks
- Policy relevant advantages: Singular measures that can have a high relative impact

EU objectives

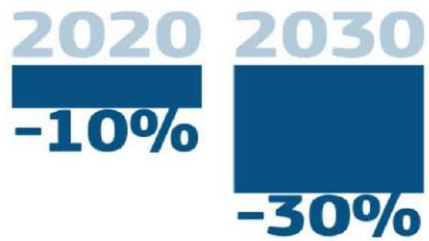


EU Policy framework

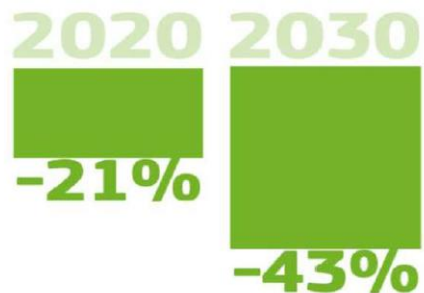
- The Council of the European Union, agreed to raise the Union's target from the previously established emissions reduction of 40% to 55% over 1990 levels by 2030
- The EU policy framework is currently being updated to meet the expectations of the 'Green Deal' adopted
- The main legal instruments of interest are:
 - The EU Emission Trading Scheme (ETS), an EU-wide cap and trade system, which covers specific sectors
 - The Effort Sharing Regulation (ESR) covers the other sectors not covered by the ETS. Member states are held accountable for these emissions
- Malta contributes to the EU collective target

Malta in EU policy context (pre -55% decision)

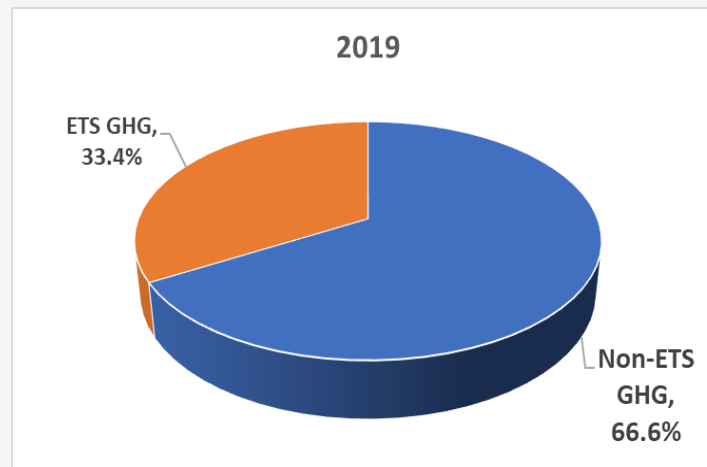
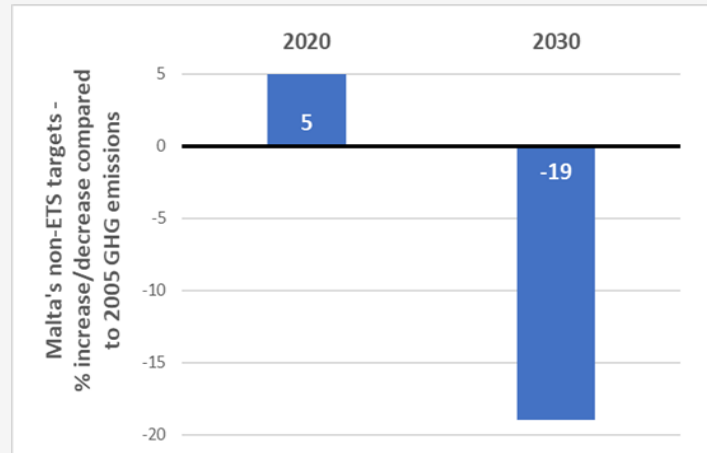
**EMISSION
REDUCTIONS
IN ETS AND
NON-ETS
COMPARED TO 2005**



NON-ETS
INCLUDING ROAD TRANSPORT, HOUSING, AGRICULTURE etc.



ETS
INCLUDING POWER/ENERGY SECTOR & INDUSTRY



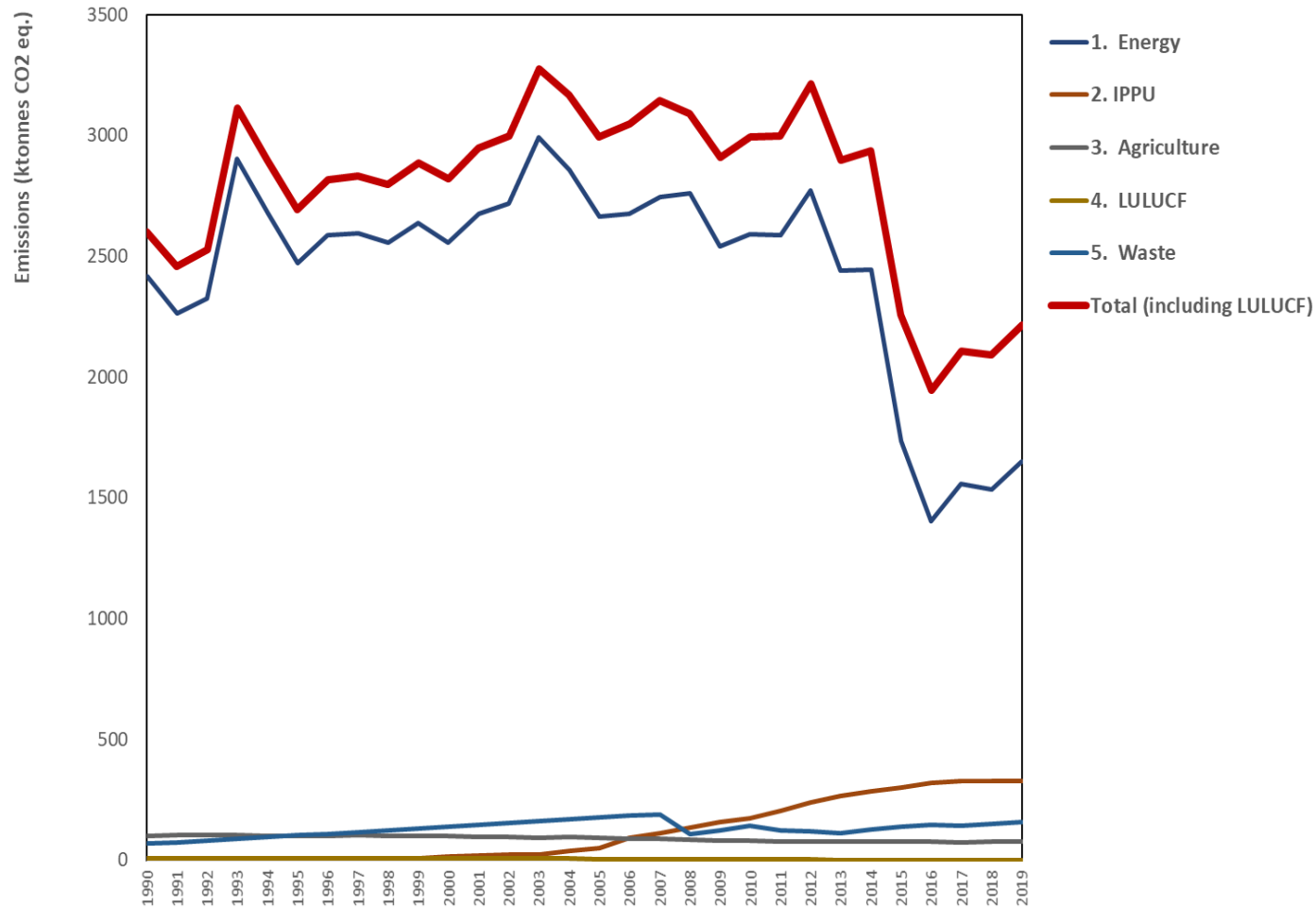
Malta's targets as set out in Effort Sharing Decision (2020) and Effort Sharing Regulation (2030)

Electricity generation only; accounts for $\approx 1/3$ of national emissions

National policy framework

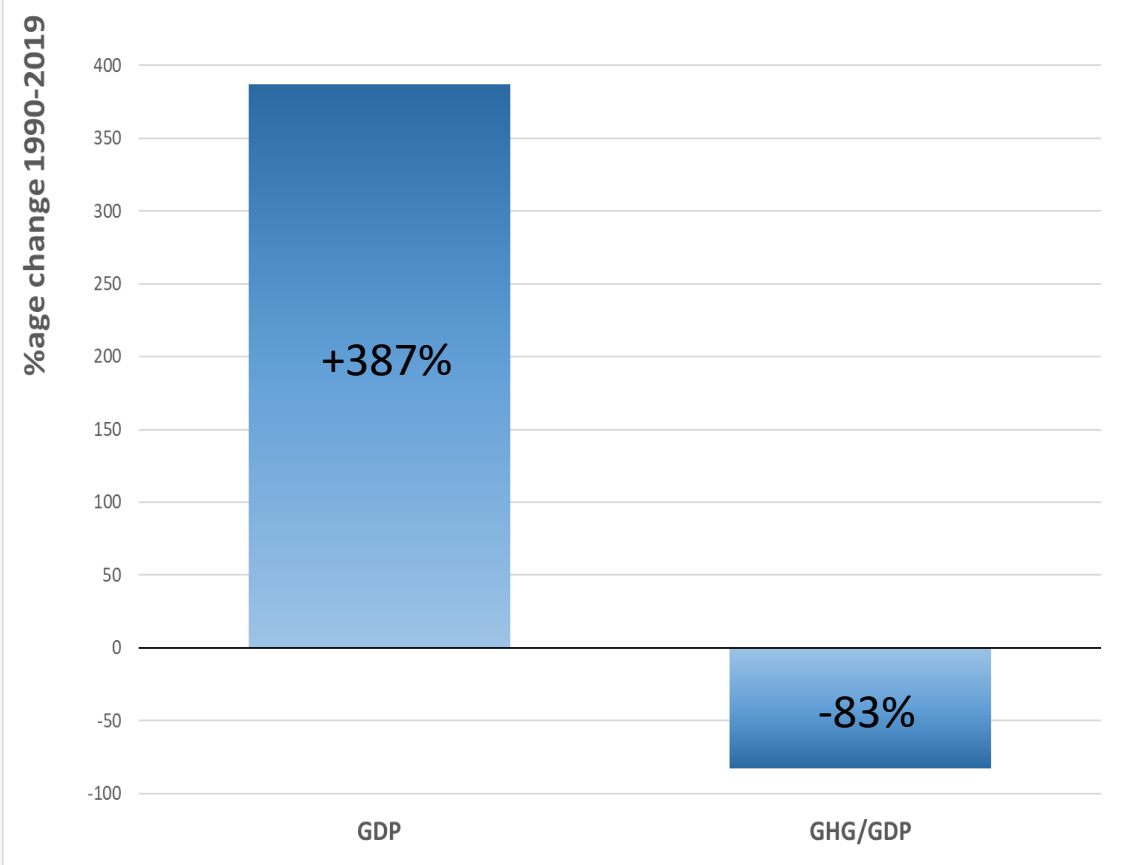
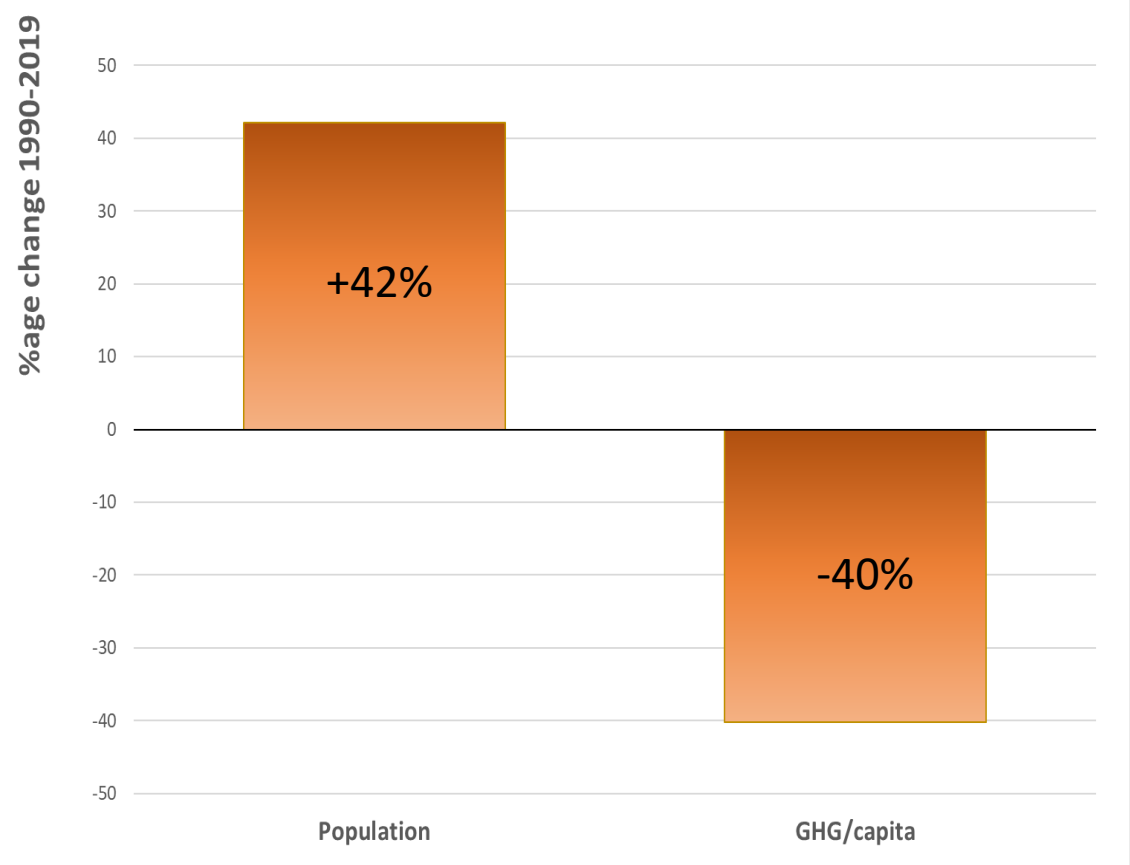
- In 2015, Malta adopted the Climate Action Act setting in this legislation the responsibility of government and citizens to take on climate action
- In 2019, the climate emergency motion was adopted in the Maltese Parliament reaffirming Malta's commitment to continue tackling the global fight of climate change
- Pursuant to Regulation (EU) 2018/1999, Malta developed its National Energy and Climate Plan in 2019
- Currently finalising the development of Malta's Low Carbon Development Strategy (ongoing ministerial consultation and will be issued for public consultation in the coming weeks)
- Recently, the Government declared carbon neutrality as one of the five pillars of Malta's economic vision

National emission trends

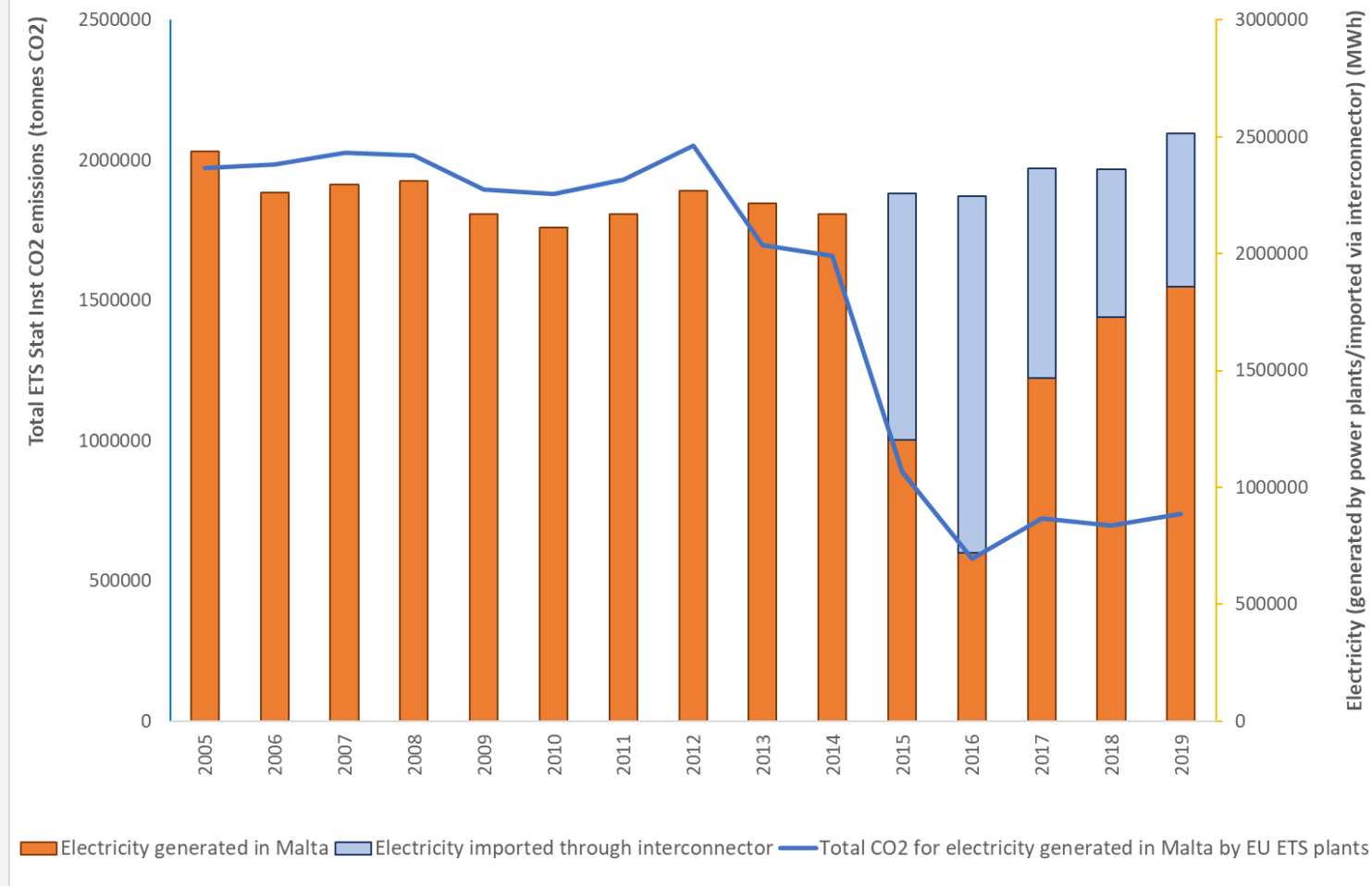


- Strong influence of the Energy sector
- Large decrease, driven by investment in power generation (more efficient generation capacity; fuel switch; interconnector; steady increase in RES)
- IPPU greatest rate of increase, due to increased uptake of refrigeration and air-conditioning (climatic conditions)
- Forestry represents nil sink/source contribution (existing mature woods and limited space for large-scale expansion)

Key indicators

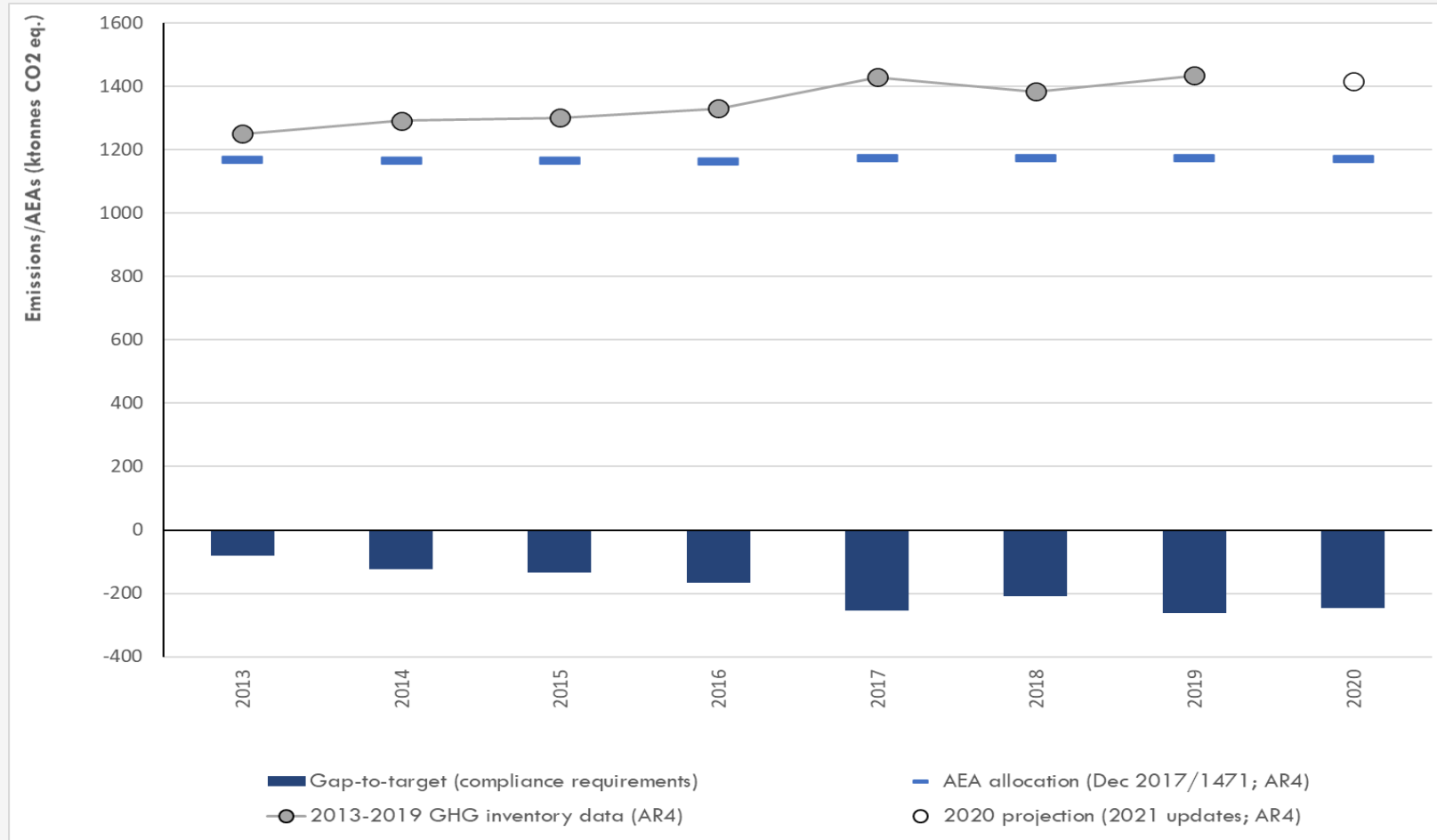


Malta ETS emissions trend



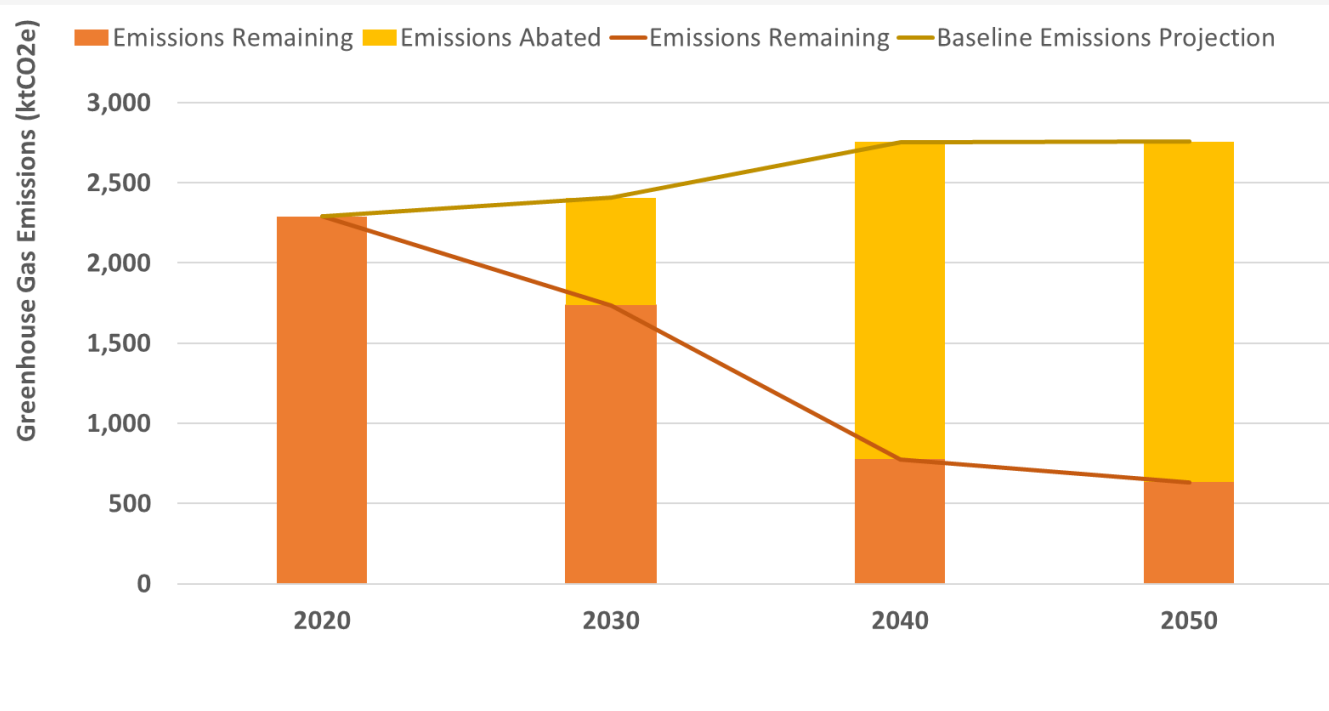
- Electricity supply has undergone significant changes:
 - Investment in more efficient generation capacity
 - Fuel switching, now mainly dependent on natural gas
 - Interconnector to European grid
 - Increased RES contribution (2019: 8.5% of Gross Final Energy Consumption)
 - Improved demand-side efficiency
- Emissions intensity of indigenous generation has improved:
 - 0.8 kgCO₂/kWh in 2005
 - 0.4 kgCO₂/kWh in 2019

Malta non-ETS GHG emissions to 2020



The LCDS - a game changer for Malta

- Malta's 2050 vision:
 - social and economic development to occur in a low-carbon and climate resilient manner
 - Mainstreaming decarbonisation across all economic sectors



- Malta's LCDS:
 - Mitigation and adaptation
 - Sectors covered: Energy; Transport; Buildings; Industry; Waste; Water; Agriculture and LULUCF

Mitigation action

Key short term (2030) measures	Key long term (2050) measures
<ul style="list-style-type: none">• Extended free Public Transport• Electrification of vehicles• Electric Vehicles charging points• Electrification of government fleet• Electrification of public transport• Active Transport• Remote Working• PV systems• Energy-efficiency single measures and retrofitting to achieve NZEB level• Schemes for deep renovation• Support scheme for services and industry• Energy Efficiency and renovations in public buildings• Incineration pre-sorting• High Bio-Waste Capture• Waste Prevention	<ul style="list-style-type: none">• Explore the possibility of alternative sources of supply (such as hydrogen, offshore wind and solar) to cover more security of supply• Assess the cost-effectiveness and affordability of green hydrogen energy for power generation• Study feasibility of Mass transit systems• Include of ICE cut-off date to accelerate uptake of electric vehicles• Agriculture measures: improved agricultural irrigation, explore possibility of introducing innovative agricultural methods like aquaponics, and nitrate diets for cattle• Increase measures in relation to the building envelope and sustainable materials• Support domestic and industrial water conservation and reuse measures• Achieve net impact utility status within the water production and distribution sector



Main challenges moving ahead

- Limited geographical area – land use conflicts
- Natural resource scarcity
- Climatic conditions
- Cost effectiveness of innovative renewable energy sources
- Price disparity of electric vehicles
- Cost optimality of energy efficiency measures in buildings
- Cost effectiveness of measures hindered by unfavourable economies-of-scale
- Low additional mitigation potential as a result of an already low carbon intensive economic structure
- Resultant high mitigation costs
- COVID-19: Financing in a post-pandemic context

Thank you