Main areas of concern of the R&I community related energy transition

<<Plenary Session-Roundtable 1>>
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Objective of this presentation

- To provide an overview of the public policies on energy transition for Cyprus and Malta
- To identify the main challenges and the barriers- if any- for supporting energy transition
- Common R&I priorities for both countries.
- Discuss ways of moving forward.

Content

- Cyprus energy transition policies
- Malta energy transition policies
- Evaluation
- Common frames R&I priorities
- Conclusion

Policy categories

Policy categories

1. Climate action, decarbonizing the economy
2. Energy Efficiency
3. Energy security and interconnection
4. Integrated electricity market
5. R&D performance

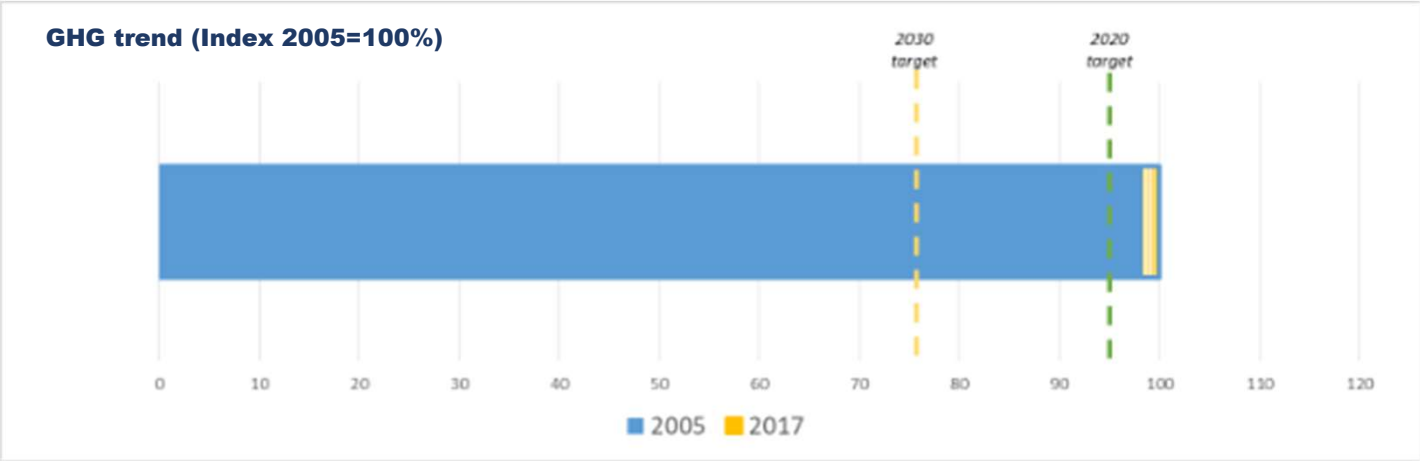
Cyprus energy transition policies

- **Target of share of renewables** in gross final consumption of energy is **13%** by 2020 (9.9% in 2017).
- Cyprus promotes renewable electricity generation through a subsidy and a **net metering scheme**/ net billing scheme for PV and Biomass/biogas.
- The penetration of renewable energy in **transport sector** in Cyprus according to Eurostat data in 2017 was **2.6%**. The target according to the first Renewable Directive (RED I) is 10%.
- At the moment, there is **no** support scheme **for RES-T** in Cyprus. Share of newly registered plug-in electric vehicles (PEV) in the 2017 was 0.78% (EU rank 12 of 28).
- The planned EuroAsia **interconnector** would end Cyprus' energy isolation.
- Cyprus intends to install **Advanced Metering Infrastructure (AMI)** and Smart Meters. The AMI includes the roll-out of 400 000 smart meters

EU H2020 Programme GA No. 824389

State of GHG emissions-Cyprus

- **GHG emissions** in Cyprus continue to increase, and according to preliminary 2017 data and the latest national projections, Cyprus is expected to miss its target with a significant margin of around 12 percentage points,
- **Climate change mitigation** is one of the main targets identified in the Cypriot strategy for sustainable development launched by Ministry of Agriculture, Rural Development and Environment



R& D status of Cyprus

- Cyprus is a **moderate** innovator
- The R&D intensity in Cyprus stood at **0.56%** of GDP in 2017, higher than its EU 2020 target (0.5%)
- Incentives have been put in place to improve knowledge transfer
- Progress in implementing **the smart specialization strategy** is key in diversifying the economy.
- In addition, a policy support facility measure to stimulate the utilization of research laboratories of government–funded organizations by the business community was planned to start in 2019.
- No roadmap available

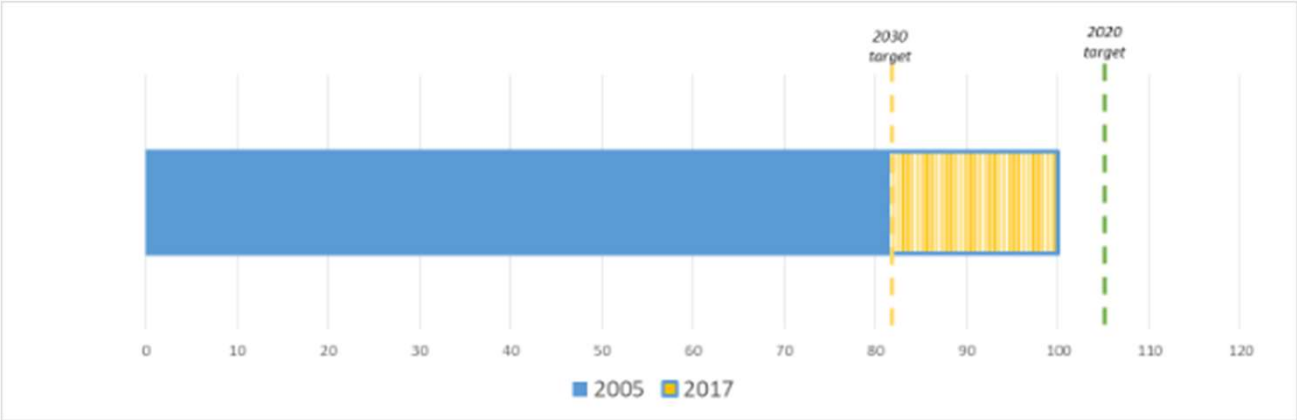
Malta's energy transition policies

- Target of share of renewables in gross final consumption of energy is **10%** by 2020 (7.2%-2017).
- Electricity generated by PV installations in Malta is originally supported through a **feed-in tariff**
- Support for renewable energy sources (RES) used in the transport sector is provided through a **substitution obligation on importers and wholesalers of fossil fuels.**
- Share of newly registered plug-in electric vehicles (PEV) in the 2017 was **0.41%** (EU rank 18 of 28).
- The new interconnector between the electricity grid of Malta and Italy represents major improvement, increasing Malta's electricity interconnection level from 0% to over 24%

State of GHG emissions-Malta

- Malta **lacks an integrated approach** to climate policy with a cross-sectoral focus. Its Low-Carbon Development Strategy has not been completed (to be finalised in the beginning of 2020), Malta does **not yet have an action plan** to reach its 2020 targets.

GHG trend (Index 2005=100%)

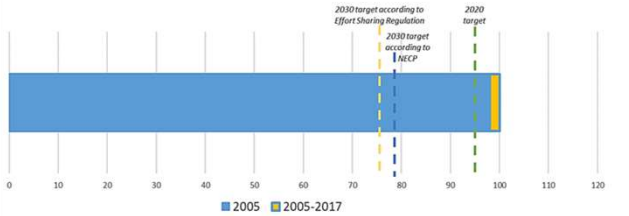


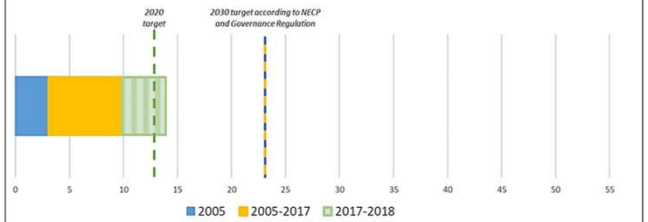
R& D status of Malta

- Malta is a **moderate** innovator
- R&D intensity remained flat in recent years (0.55% of GDP in 2017 against 2.07% for the EU) and the country is likely to miss its target of 2% R&D intensity by 2020.
- Malta gets a significant part of their national R&D expenditure from the Horizon 2020 funding i.e. 10%
- The recent slight increase in public R&D intensity is partly explained by the significant inflow of structural funds. The low level of public R&D investment in the public science base limits the full usage of the country's scientific and technological potential
- No roadmap available

Evaluation for achieving the targets

CYPRUS

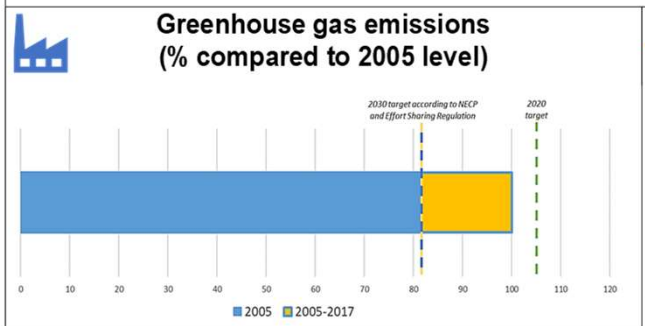


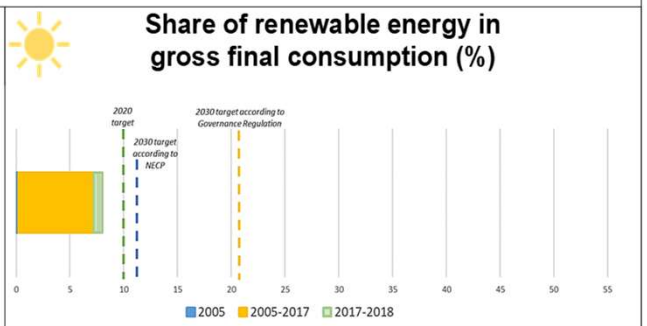


	GHG emissions (% compared to 2005 level)	Share of renewable energy in gross final consumption (%)	Energy efficiency	RES in transport	Inter-connection	R&D intensity (% of GDP)
Latest data	*In 2017:* –1,96%	*In 2018:* 13,9%	*In 2018:* PEC: 2,6 Mtoe FEC: 1,9 Mtoe	*In 2018:* 2,67%	*In 2017:* 0%	*In 2018:* 0,55% of GDP
2020 target	–5%	13%	PEC: 2,2 Mtoe FEC: 1,8 Mtoe	10%	10%	0,5% of GDP
2030 target	NECP: –20,9% Eff.Sh.Reg: –24%	NECP: 23% Gov.Reg.: 23%	PEC: 2,4 Mtoe FEC: 2,0 Mtoe	14%	15%	*2023 target:* 1,5%

Target will be achieved — *Targed may be achieved* — *Target will not be achieved*

MALTA





	GHG emissions (% compared to 2005 level)	Share of renewable energy in gross final consumption (%)	Energy efficiency	RES in transport	Inter-connection	R&D intensity (% of GDP)
Latest data	*In 2017:* –18,75%	*In 2018:* 8%	*In 2018:* PEC: 0,8 Mtoe FEC: 0,7 Mtoe	*In 2018:* 7,97%	*In 2017:* 24%	*In 2018:* 0,55% of GDP
2020 target	+5%	10%	PEC: 0,823 Mtoe FEC: 0,623 Mtoe	10%	10%	2% of GDP
2030 target	NECP: –19% Eff.Sh.Reg: –19%	NECP: 11,5% Gov.Reg.: 21%	PEC: 1,051 Mtoe FEC: 0,786 Mtoe	15%	15%	N/A

Target will be achieved — *Target may be achieved* — *Target will not be achieved*

Common R& I priorities of both countries

According to the NECPs

Decarbonization
• Wind energy resources utilization • Solar Energy exploitation **(PV panels)**
Energy Efficiency
• Thermal insulation **building systems** • Deployment of **PVs**
Internal Energy Market
• **Load profile management through demand response**

Conclusions

- Common challenges (technical& policy) for achieving the energy transition targets are ahead us.
- Energy transition targets for both countries are not easy to be reached.
- R&I priorities through a solid roadmap would support the targets and the investment on smart grids.
- Coordinated R&I at national level and strengthen networking activities at EU level would be beneficial.

THANK YOU FOR YOUR ATTENTION!

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