



Comprehensive Assessment of the Potential for Efficient Heating and Cooling

Report for Point E Overview of Existing Policies Relevant for
Efficient Heating and Cooling

Report for Ministry of Energy Commerce and Industry (MECI) of the
Republic of Cyprus

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1 Introduction

Annex X of the Energy Efficiency Directive (EU) 2023/1791 requires that the comprehensive assessment of national heating and cooling potentials includes an overview of existing policies and measures (PaMs) relevant to heating and cooling:

- i. as described in the Member State's most recent Integrated National Energy and Climate Plan (NECP); plus
- ii. any further PaMs implemented to date and not identified in the NECP.

As required by Article 1(2) of the Governance Regulation (EU) 2018/1999, PaMs are categorised by the five energy union dimensions, which are:

1. Decarbonisation;
2. Energy efficiency;
3. Energy security;
4. Internal energy market; and
5. Research, innovation and competitiveness.

Cyprus's latest NECP was published in 2023. Sections 2.1 to 2.5 summarise, by the five energy union dimensions, those PaMs relevant to heating and cooling included under the NECP 'With Existing Measures' (WEM) scenario.

2 Summary of Existing Policies and Measures Relevant to Heating and Cooling

2.1 Dimension Decarbonisation

This dimension is split into two sub-groups: the first being measures related to the management of direct GHG emissions; and the second relating to expansion in the use of Renewable Energy Sources (RES).

2.1.1 Greenhouse Gas Emissions and Removals

Name of policy or measure	Short description	Relevance to heating and cooling	Status
Preparation of the proper recovery system for F-gases in equipment	Preparation of the proper recovery system for F-gases in equipment; This is an obligation according to EU and national legislation. It is however still not properly implemented. WEM considers that 5% recovery rate by 2030. Commencement has been delayed to 2024.	All applications with older cooling or heat pump equipment, though assumed not to affect energy demand.	F-gases collection scheme being prepared for 2024 implementation.
Promotion of anaerobic digestion for the treatment of animal waste.	Further promotion of anaerobic digestion for the treatment and management of animal waste; promotion of anaerobic digestion in existing biogas plants; encouragement of new biogas plants to exploit organic waste from livestock breeding. This does not involve additional financial support measures. The promotion comes from implementation of existing pollution legislation.	As well as reducing CH ₄ emissions, biogas from AD is typically used to generate renewable electricity. Also, if there are suitable heat loads in the vicinity, useful renewable heat can be generated via CHP.	Implemented Ongoing

Name of policy or measure	Short description	Relevance to heating and cooling	Status
Waste collection	Existing measures targeting sorting of waste at source, increase in organic waste sites, biogas recovery and an increase in AD.	Availability of biogas, which can be used as a renewable energy source for heating systems, thereby reducing reliance on fossil fuels.	Implemented
Liquid waste treatment	Increase of AD treatment of wastewater from food industries.	Biogas production, which can be used as a renewable energy source for heating and cooling applications.	Implemented
Greenhouse gas emissions reduction plan for businesses	355 kt CO2 decrease in emissions from enterprises	Improved energy efficiency of technologies used for heating and cooling.	To be implemented

2.1.2 Renewable Energy Sources

Name of policy or measure	Short description	Relevance to heating and cooling	Status
Support scheme for the production of electricity from renewable energy sources for own use. Category A: Net-metering	<p>The implementation of the measure started in 2013 as national policy to promote RES electricity. Currently Net-metering category is available for small scale photovoltaic systems with capacity up to 10.4kW, for all consumers (residential and non-residential). The scope of the net-metering is to provide the option to residential and small commercial consumers to cover all or part of their electricity consumption from PV. The generated RES electricity is subtracted from building's electricity consumption. Consumers pay only for the difference between the energy consumed and energy produced (net electricity used) plus a cost that reflects the cost of the electricity grid to support continuous supply and taxes (VAT, RES levy).</p> <p>Scheme capped at 48MW total capacity; 30MW residential, 18MW non-residential.</p>	Where electricity is used for heating and/or cooling, particularly heat pumps and cooling plant.	<p>Adopted 2013 & ongoing</p> <p>Capacity caps are revised annually.</p> <p>In March 2024 the total installed capacity of PVs in net-metering category was 276.36MW.</p>

Name of policy or measure	Short description	Relevance to heating and cooling	Status
<p>Support scheme for the production of electricity from renewable energy sources for own use.</p> <p>Category B: Net-billing</p>	<p>The implementation of the measure started in 2018 as national policy to promote RES electricity and reduce the cost of electricity to commercial and industrial consumers. Currently net-billing is available for RES installations (PV, biomass/biogas systems, etc.). The scope of the measure is to provide an option to medium and large-scale electricity consumers to cover all or part of their electricity consumption, up to a capacity of 8MW, from RES. The generated RES electricity that is not self-consumed is credited to the consumer at the respective wholesale price of electricity from RES and that amount is subtracted from the cost of the electricity bought from the grid. Fees that reflect the cost of the grid to support continuous supply and taxes (VAT, RES levy) are applied.</p> <p>Scheme cap is unchanged since 2021 at 20MW total capacity.</p>	<p>Where electricity is used for heating and/or cooling, particularly heat pumps and cooling plant.</p>	<p>2018-2030</p> <p>In March 2024 the total installed capacity of PVs in the net-billing category 67.88MW.</p>
<p>Installation of net metering PV systems in houses of vulnerable consumers</p>	<p>Financial aid measure for vulnerable consumers to install PV systems in dwellings with a building permit before 01/01/2017.</p>	<p>Where electricity is used for heating and/or cooling, particularly heat pumps and cooling plant.</p>	<p>Adopted in 2013</p> <p>Ongoing</p>
<p>Support scheme for the installation of net-metering photovoltaic systems with capacity up to 20kW, in public school buildings.</p>	<p>The measure provided the regulatory framework for the installation of 4.9 MW of photovoltaic systems in public schools. The PV systems operate under the net-metering scheme. Each PV system has a power up to 20kW. The roof tops where PV will be installed were also thermally insulated.</p>	<p>Where electricity is used for heating and/or cooling, particularly heat pumps and cooling plant.</p>	<p>Completed in 2022.</p> <p>Around 4,9MW of photovoltaic systems were installed in public schools buildings.</p>
<p>Renewable Energy Communities</p>	<p>Installation of PV Systems in Governmental buildings with the net-billing scheme.</p>	<p>Where electricity is used for heating and/or cooling, particularly heat pumps and cooling plant.</p>	<p>Ongoing</p> <p>Planned for 2019-2030</p>
<p>Energy Communities</p>	<p>Drawing up a regulatory framework for the promotion of energy communities in accordance with the provisions of Article 22 of RED II and operating a support scheme.</p>	<p>Collective investment in RES for enhancing heating and cooling systems.</p>	<p>Expected 2024</p>
<p>Support scheme for the installation or replacement of solar water heaters in households</p>	<p>Financial support measure for the installation or replacement of solar hot water production in existing dwellings with a building permit before 21/12/2007.</p>	<p>Hot water production</p>	<p>2004-2030</p> <p>Ongoing - the scheme is repeated annually</p>

Name of policy or measure	Short description	Relevance to heating and cooling	Status
Certification of small-scale RES system installers	From 2015 a certification scheme is available for installers of small scale (up to 30kW) biomass boilers and stoves, photovoltaic systems, solar thermal system, shallow geothermal systems and heat pumps. The candidates after the completion of their training and a success in a theoretical and practical examination can be registered in a registry of certified installers of RES systems of the Ministry of Energy, Commerce and Industry.	Important for ensuring that such RES systems for heating and/or cooling perform successfully, which gives confidence to potential adopters.	Implemented in 2015. Ongoing.
Support scheme for the production of electricity from renewable energy sources for own use. Category C: Virtual Net-metering	Measure for installation of PV systems up to 10.4 kW for household consumers and up to 20 kW for professional farmers, for own consumption to cover all or part of their electricity consumption. The measure is aimed at consumers who do not have space available to install a PV system on their premises.	Where electricity is used for heating and/or cooling, particularly heat pumps and cooling plant.	2021-2024
Support scheme for the production of electricity from renewable energy sources for own use. Category D: Virtual clearing of bills	Measure for installation of PV systems up to 150 kW for all consumers for own consumption to cover all or part of their electricity consumption. The measure is mainly targeted at commercial/industrial consumers who do not have space available to install a PV system on their premises.	Where electricity is used for heating and/or cooling, particularly heat pumps and cooling plant	2023-2026
Promotion of electricity storage	Promoting the use of electricity storage technologies.	Will enable use of RES to supply heat pumps at times when supply is below demand	2023-2030
Simplification and acceleration of permitting procedures for RES projects	Measure to involve; Study to optimise the existing framework, Creation of the One-stop-shop for RES investments, Preparation of a digital platform for submission and assessment RES projects applications, Exemption from the obligation to obtain permits for installation of solar on roofs.	Streamlining the adoption of renewable energy technologies enhancing the efficiency and feasibility of integrating RES in heating and cooling systems	2022-2024
Installation of heat pumps	Economic incentives for the installation of high-efficiency heat pumps and the replacement of old oil boilers.	Support of low carbon heating	2024-2030
Promotion of geothermal systems	Economic incentives to install geothermal systems	Incentives to install geothermal, including ground source systems for heating and cooling.	2024-2030
Energy upgrading of public buildings	Installation of RES systems and energy efficiency measures in public buildings	Energy efficiency measures likely to address heating and/or cooling.	2020-2030

Name of policy or measure	Short description	Relevance to heating and cooling	Status
Creation of an Aid Plan for Renewable Energy Sources (RES) projects with the possibility of energy storage	Implementation of an Aid Plan for Renewable Energy Sources (RES) projects with the possibility of energy storage, which will be subject to public consultation. The budget of the Plan will range from EUR 10 million to EUR 40 million (JTF, RES and ES Fund, etc. The project will operate on the basis of Contracts for Difference (CfDs, either two-way or unilateral).	Support installation of RES for heating and/or cooling.	2024-2027

2.2 Dimension Energy Efficiency

Name of policy or measure	Short description (precise scope and modalities of operation)	Relevance to heating and cooling	Status
Grant scheme 'Encouraging greenhouse gas emission reductions in enterprises'	Public sponsorship to encourage the reduction of GHG emissions from existing enterprises. Eligible expenditure categories will include, management of organic waste, food waste monitoring devices, replacement of old mobile or fixed air-conditioning systems with new environmentally friendly air conditioning systems, building/energy management system (BMS/EMS), smart meters, thermal insulation of the building envelope, energy efficiency windows and double glazing, energy efficient electrical appliances, installation of photovoltaic systems for self-generation, installation of solar thermal systems, etc.	Energy saving measures likely to mainly address heating and/or cooling.	Operational 2023-2030
Grant scheme "Save – upgrade to businesses and other bodies"	The Plan aims to promote energy saving investments in buildings and facilities, owned and/or used by small and medium-sized enterprises and non-profit organisations. Support is provided for the renovation and energy upgrading of buildings/infrastructure as well as for improving the efficiency of production processes.	Energy saving measures likely to mainly address heating and/or cooling.	Operational 2021 - 2026
Additional building factor for new buildings and buildings being renovated	In the case of new buildings and buildings being renovated, the building factor may be increased by 5 % if the primary energy consumption of a building does not exceed 50 (kWh/m ² year). The aim is to incentivise the construction or renovation of buildings that go beyond the NEET requirements.	Energy saving measures likely to mainly address heating and/or cooling.	2014-2024 (Revised in 2020)
Horizontal measures (information campaigns, training eco-driving, organisation of workshops, etc.) to attain the target referred to in Article 7 of the Directive.	This consists in implementing energy savings information campaigns, carrying out advertising actions, organising workshops, conducting pupils' competitions, etc. All these are organised by MECl on an annual basis.	Broad activities that will include energy efficiency in heating and cooling.	Implemented 2014 Ongoing to 2030

Name of policy or measure	Short description (precise scope and modalities of operation)	Relevance to heating and cooling	Status
Article 5 EED: Individual energy efficiency interventions and energy upgrades in selected state buildings.	Article 5 of Directive 2012/27/EU requires Member States to renovate annually 3 % of the total surface area of buildings owned and occupied by central government authorities, with the revision of the directive these areas should be converted into buildings with a relative zero energy consumption.	Renovations likely to address heating and/or cooling.	2021-2030
European Regional Cooperation Programme INTERREG V-A Greece – Cyprus 2014-2020..	The objective of the Cyprus project is the energy upgrading of five buildings in the wider public sector. Some of the key energy efficiency measures to be implemented in buildings are thermal insulation of roofs and walls, replacement of windows, replacement of lighting, replacement of heating and cooling systems, and installation of photovoltaic systems. The Energy Performance Certificate of all buildings after energy upgrading should be at least B.	Heating/cooling system replacement and heating/cooling saving measures.	2018-2023
Incentives for new buildings with higher energy efficiency than EPBD requirements	New buildings and buildings renovated can receive a 5% extra building factor if the PEC is below 50 kWh/m ² /y (in 2023). Ongoing with different minimum requirements for the period 2021-2030	Energy saving measures likely to mainly address heating and/or cooling.	Implemented 2016-2020 2021-2030
Energy efficiency in existing hotels	Financial support, in the form of grants, for individual energy efficiency interventions. Implemented by the National Government	Energy saving measures likely to mainly address heating and/or cooling.	Implemented 2017 Ongoing
Grant scheme “Save – upgrade in homes”	Grant funding for energy upgrading of existing dwellings.	Applies to insulation, shading and air conditioning which impact heating/cooling demand.	2021-2027 The 2th Project Notice took place in May 2023.
Energy upgrading of hospitals and/or hospital units and construction of new energy efficient hospitals and/or hospital units	Upgrading hospital departments or units with >30% reduction in PE demand. Construction of new hospital units with PE demand >20% lower than NZEB legislation.	Reduction in heating and/or cooling demand.	2023-2030 Implementation approved for upgrade of 8 hospital units and 3 new energy efficient units

Name of policy or measure	Short description (precise scope and modalities of operation)	Relevance to heating and cooling	Status
Grant plans of the RES and E Fund for the promotion of energy efficiency investments in the residential, tertiary and public sectors.	<p>Grant schemes operational since 2021 include funding for; Thermal insulation of dwellings, solar thermal, air conditioners.</p> <p>In all buildings where investments are to be made, they must be converted into zero-energy buildings and comply with the criteria laid down in the relevant national legislation.</p>	Energy saving measures likely to mainly address heating and/or cooling.	2021-2026

2.3 Dimension Energy Security

There are no specific policies and measures relevant to heating and cooling that affect energy security. In general terms, reductions through energy efficiency in end use demand improves energy security. However, a shift over time from fossil fuel heating systems to heat pumps risks increasing the stress on centralised electricity supply infrastructure. This can be ameliorated through increased local renewable power generation, particularly solar photovoltaics, and through greater energy efficiency of non-heating and cooling uses of electricity such as lighting, motive power, and appliances.

2.4 Dimension Internal Energy Market

Name of policy or measure	Short description (precise scope and modalities of operation)	Relevance to heating and cooling	Status
'Great Sea Interconnector' electricity interconnection (Electricity infrastructure)	Aims to end the island's energy isolation, with an electricity interconnection rate of 35.1 %.	Increasing provision of electricity will support electrification of heating.	To be completed and operational by 2029
2023-2032 Ten-Year Transmission System Development Plan	The main objective of this measure is the development and secure operation of the transmission network	Increasing resilience of electricity supply for low carbon heating and/or cooling.	2023-2032
Regulatory Decision No 02/2018 on the implementation of a binding timetable for the massive deployment and operation by the DSO of the infrastructure for intelligent metering systems (AMI).	<p>AMI shall provide the necessary observability, monitoring and retrieval of electricity and power data and measurements at the customer's connection point. It helps manage photovoltaic systems and monitor production, optimise RES generation forecast, maximise RES penetration, enable remote DSO functions (connections/disconnections, meter reading).</p> <p>Quantitative target installation of 400 000</p>	DSR will support electrification of heating	2023 – 2026

<p>Regulatory Decision 01/2017 on the implementation of a binding timetable for the full commercial operation of the new electricity market model.</p>	<p>Introduction of the forward, pre-day and intraday markets, as well as the balancing market, including the possibility of operating a 'strategic reserve' capacity mechanism in order to make the competitive electricity market in Cyprus work and increase the share of RES in the electricity balance.</p>	<p>Will support electrification of heating by lowering carbon intensity and cost of electricity.</p>	<p>Adopted</p>
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2.5 Dimension Research, Innovation and Competitiveness

There are no specific measures relevant to heating and cooling. Though several measures will support projects that have the potential to address heating and/or cooling.



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