Cyprus

Key issues

The full liberalisation of the electricity market was formally achieved on 1st January 2014, but it is not yet implemented in practice, as EAC, a semi-public body, is currently the sole supplier. Consequently, there is no scope yet for consumer switching.

Liberalisation should be planned in detail, taking into account the EU targets for renewables, energy efficiency and GHG emissions. There is a need to create an investment-friendly framework in order to attract alternative suppliers and ensure a smooth transition for consumers.

Renewable energy could play a vital role in security of supply and should be promoted.

1. General overview

The gross inland energy consumption in 2012 was 2.51 Mtoe, a drop of 6.3% from 2011. The energy mix pattern continues to be dominated by oil and petroleum products, which represent 94.9% of the gross energy consumption in 2012. The contribution of renewable energy to the gross inland energy consumption has steadily increased over recent years and the renewables share has reached $6.8\%^{84}$ in 2012. Cyprus remained above its 2011/2012 interim trajectory and is on track to reach its national 2020 RES target of 16% by 2020^{85} .

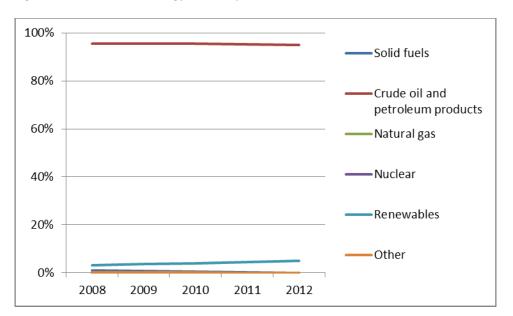


Figure 1: Gross inland energy consumption mix 2008-2012 (source: Eurostat)

The gross electricity generation in 2012 was 4.72 TWh, a drop of 4.3% compared to 2011. Electricity in Cyprus is generated mainly by crude oil and petroleum products. Only 3.6% of electricity is generated by renewables, despite Cyprus' remarkable potential in solar and wind. However, renewables are increasing their contribution in electricity generation. In 2012, electricity generation

_

⁸⁴ Eurostat.

⁸⁵ CERA, 2013 National Report to the European Commission, 2013.

from renewables more than tripled compared to 2010 levels, mainly due to the increase of wind power generation. The National Renewable Energy Action Plan projected that by 2018 the electricity generation capacity from renewable energy sources would reach 400 MW. In 2012, the installed renewables have reached 172 MW. The gross electricity generation is presented graphically the period 2008-2011⁸⁶.

120% Solid fuels 100% Crude oil and petroleum products 80% Natural gas 60% Nuclear 40% Renewables 20% Other 0% 2008 2009 2010 2011

Figure 2: Gross electricity generation mix 2008 – 2011 (source: EU Energy in Figures – Pocketbook 2012 and 2013)

2. Regulatory framework

General

An important regulatory development for 2012 was the implementing legislation of the Third Energy Package, which came into force in late 2012⁸⁷.

National Energy Regulator

The Cyprus Energy Regulatory Authority (CERA) was established in 2003. The objective of CERA is to regulate and monitor the Electricity and Natural Gas Markets. CERA employs 11 people. Further recruitment has been postponed as a result of government decisions for the wider public sector; CERA's lack of resources is a source of concern. The revenue of CERA for the year 2012 was EUR 1.96 million, an increase of approximately 14% from 2011. CERA closed the year with a net surplus of EUR 0.97 million⁸⁸.

Unbundling

The incumbent Electricity Authority of Cyprus (EAC) owns both the transmission and the distribution system. The TSO is legally but not functionally unbundled from EAC, since all its staff is seconded from EAC. The obligation of ownership unbundling of the TSO does not apply, since Cyprus has

⁸⁷ CERA, 2013 National Report to the European Commission, 2013.

⁸⁶ Eurostat.

⁸⁸ Annual Report of the Cyprus Energy Regulatory Authority for the year 2012, October 2013.

obtained a derogation from Article 9 of the 2009/72/EC Directive. The DSO is responsible for managing, operating and developing the network, safeguarding access to the distribution network and equal treatment for all users. EAC has unbundled the accounts of the DSO.

3. Wholesale Markets

Electricity

Whilst full liberalisation of the market was legally achieved on 1st January 2014 when a derogation granted under the Second Energy Package pursuant to its status of small isolated system expired, Cyprus is not integrated and not interconnected with any neighbouring power systems. No wholesale market is currently operating in Cyprus; in the Memorandum of Understanding with the "Troika" (the European Commission, the International Monetary Fund and the European Central Bank) Cyprus engaged to develop open and competitive energy markets.

The installed generating capacity in 2012 was 1,546 MW, out of which 1,374 MW was thermal power stations and 172 MW was renewable capacity mainly from wind parks. The installed capacity of cogeneration of heat and power was 9.4 MW in 2012⁸⁹.

Based on the supply interruption data for 2012 the overall minutes lost per voltage level per year are estimated at 41 minutes for H/V, 157 minutes for M/V and 8 minutes for L/V. This represents an increase over the years for which data was available⁹⁰.

Gas

Currently, natural gas is not supplied to Cyprus. However in December 2011, significant gas resources were discovered within the Eastern Mediterranean Sea. The Cypriot authorities have established two National Hydrocarbons Companies whose respective tasks and functions are currently being defined: in principle EYK (formerly KRETYK) should be in charge of upstream and export issues, while DEFA should focus on the development of domestic market. Both have the legal form of private companies 100% owned by the State. In addition, an interim solution was planned for the supply of the electricity generation sector with natural gas until the indigenous natural gas reserves are made available. On 27 September 2012, DEFA and EAC issued an invitation for the Expression of Interest for the supply of natural gas to Cyprus. Seventeen applications were submitted, but none was accepted. A second invitation was issued in January 2014 with a deadline of 24 March 2014^{91,} subsequently extended to 14 April 2014.

4. Retail Markets

Domestic consumers became legally eligible to switch suppliers on 1st January 2014. However, EAC is still the sole electricity supplier in Cyprus and thus switching procedures do not exist. Electricity

⁸⁹ Annual Report of the Cyprus Energy Regulatory Authority for the year 2012, October 2013.

⁹⁰ CERA, 2013 National Report to the European Commission, 2013.

⁹¹ Annual Report of the Cyprus Energy Regulatory Authority for the year 2012, October 2013.

prices are well above the EU average. The network component in households represented 15% of the total bill, while in industry it represented 11% of the end price⁹².

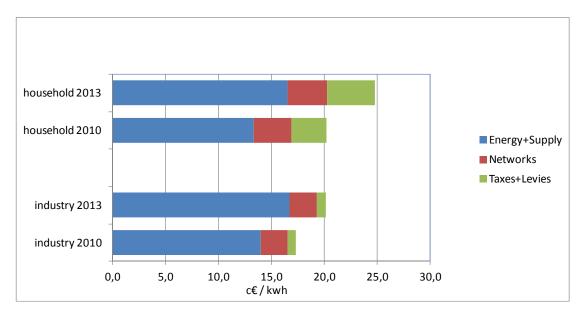


Figure 3: Electricity price change by component 2010 – 2013 (source: Eurostat, energy statistics)

Electricity demand in 2012 decreased by 4.6% compared to 2011, which was the largest drop amongst all EU Member States⁹³.

According to EU law, Member States are obliged to ensure the deployment of smart metering systems, which may be subject to a cost-benefit analysis, on 80% of electricity customer premises by 2020 where positively assessed. To prepare for this medium-term goal, the EAC is implementing a pilot project of 3,000 smart meters⁹⁴.

5. Consumers

The retail electricity market in Cyprus is performing just below the EU average (70.7 points compared to 72.0⁹⁶) and ranks 18th EU-wide. The proportion of consumers encountering problems in this market is the lowest in the EU. (The questions on switching, ease of switching and choice have not been asked given that the market is a monopoly).⁹⁷

The consumer protection measures, including those set out in Annex I of the directives 2009/72/EC and 2009/73/EC, are effective and enforced through the Laws N.211(I)/2012 and N.219(I)/2013 on Regulating the Electricity and Gas Markets, respectively. As stated earlier, from 1st January 2014 the

⁹³ ACER/CEER – Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/10_edition/index_en.htm

⁹² Eurostat.

⁹⁴ V. Efthimiou, "Digital Agenda for Europe & Cyprus – Smart Meter Agenda for Cyprus", November 2011.

⁹⁵ European Monitoring Centre on Change, European Monitoring Centre on Change,

http://www.eurofound.europa.eu/emcc/.

96 However the difference is not statistically significant.

⁹⁷ 10th Consumer Markets Scoreboard,

electricity market is technically fully liberalised, but there is still only one supplier, and no scope for switching. Energy poverty, vulnerable consumers' categories and measures to protect them were defined in a Ministerial Decree, which includes measures such as reduced prices on electricity tariffs and financial incentives for participating in a Plan for setting up a Photovoltaic system at their house, with a capacity of up to 3kW with the net-metering method. In 2012, 3% of all household consumers were defined as consumers with special needs.

6. Infrastructure

In accordance with the requirement in the TEN-E Regulation, Cyprus authorities have established a one stop shop for the permitting of Projects of Common Interest (PCIs).

Prior to the discovery of gas resources in the EEZ of Cyprus, the construction of an LNG regasification terminal and pipelines to the three power stations in Vasilikos, Moni and Dhekelia were planned by the Cypriot Authorities. The construction of the pipelines is supported under the European Energy Program for Recovery (EEPR) and entitled to a EUR 10 million grant.

With the recent discoveries, infrastructures are also planned for the export of gas. Pipeline and LNG projects are currently being assessed and should allow for gas export by the end of the decade. These infrastructures have been identified as PCIs under the Regulation on the Guidelines for the Trans-European Energy Network.

A future interconnection project called "Euroasia Interconnector" is in the feasibility phase. The project will have a capacity of 2,000 MW and interconnect the Cypriot, Israeli and the Greek transmission networks.

In total four projects involving Cyprus have been identified as PCIs in accordance with the guidelines for Trans-European energy infrastructure.

7. Security of supply

The consequences of the energy crisis after the explosion which damaged the Vassilikos Power Station in July 2011, ended earlier than originally estimated. This was due to both the adequacy and the swift repair achieved in restoring Vassilikos Power Station and to a reduction in demand. Although the installed capacity of thermal power stations in 2012 was 1,374 MW (a decrease of 13.6% compared to 2011⁹⁸), including 286.6 MW of temporary generating units, the maximum generation demand was 997 MW, achieving a reserve of 38%, which was the largest reserve recorded since 2004⁹⁹ ¹⁰⁰. All existing fossil fuel generators run on heavy fuel oil or diesel oil, and some can be converted to run on natural gas.

8. Key indicators

Electricity		Gas	
Number of companies representing	1	Number of entities bringing natural	N/A
at least 95% of net power generation		gas into country	

⁹⁸ Eurostat.

-

⁹⁹ CERA, 2013 National Report to the European Commission, 2013.

¹⁰⁰ Annual Report of the Cyprus Energy Regulatory Authority for the year 2012, October 2013.

Number of main power-generation companies	1	Number of main gas entities	N/A
Market share of the largest power-	100%	Market share of the largest entity	N/A
generation company		bringing natural gas	
Number of electricity retailers	1	Number of retailers selling natural	N/A
		gas to final customers	
Number of main electricity retailers	1	Number of main natural gas retailers	N/A
Switching rates (entire electricity	N/A	Switching rates for gas (entire retail	N/A
retail market)		market)	
Regulated prices for households –	Yes	Regulated prices for households –	N/A
electricity		gas	
Regulated prices for non-households	Yes	Regulated prices for non-households	N/A
– electricity		– gas	
HHI in power-generation market	10000	HHI in gas supply market	N/A
HHI in electricity retail market	10000	HHI in gas retail market	N/A
Electricity market value 101 (bn€)	1.2	Gas market value ¹⁸ (bn€)	N/A
Installed generation capacity (MW)	1,742		
Peak load (MW)	997		
Number of smart meters installed	N/A		

_

Market value is an estimation of the size of the retail electricity and gas markets. It is calculated using data on electricity and gas consumption in the household and non-household sectors (average bands) and annual average retail prices.