



# Inventory of energy subsidies in the EU's Eastern Partnership countries Ukraine

This document represents the Executive Summary of the draft report on “Energy subsidies in Ukraine”. It provides a brief overview of Ukraine's policies that can be qualified as energy subsidies. This work is part of a regional study on energy subsidies in the six EU's Eastern Partnership (EaP) countries.

The EaP study is being prepared within the framework of the “Greening Economies in the Eastern Neighbourhood” (EaP GREEN) Project, supported by the European Union and coordinated with governments of the EaP countries. It is being implemented jointly with UNECE, UNEP and UNIDO.

This Executive Summary will support the discussion during the Round Table which will be held on 25 April 2016 at the Verkhovna Rada of Ukraine.

The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

*Action required:* For review and comments.

Participants are kindly requested to return their comments and suggestions for improvement to Nelly Petkova, OECD Project manager (tel.: + 33 1 45 24 17 66, e-mail: [nelly.petkova@oecd.org](mailto:nelly.petkova@oecd.org)) not later than **20 May 2016**.

# Energy subsidies in Ukraine

Among all countries of the EU's Eastern Partnership, Ukraine stands out as having both significant energy subsidies and an active programme for their reform. The reform is subject to discussion and action by several important government actors and other stakeholders.

The analysis presented in this study draws on a versatile body of publicly available sources and summarises the context, the state of play, and the mechanics of the complex and evolving landscape of energy subsidies in Ukraine.

## Over the years, Ukraine has designed a complex web of support mechanisms in the gas sector ...

Over the years, various strategic documents and state programmes included plans to reform energy subsidies but the Government of Ukraine had been trying to postpone these politically sensitive decisions for a long time. Electricity, gas and heat tariffs for households were kept frozen for years despite increasing international prices and production costs of utility suppliers. As a result, the government developed a plethora of support measures to compensate the resulting losses to utility providers, either through direct budget transfers or complex indirect mechanisms.

One such example is the mutual settlement of arrears between energy and utility companies accumulated due to the difference between actual costs of supply and regulated tariffs (a mechanism administered by the Ministry of the Regional Development, Construction and Utilities). Those arrears that could not be compensated through mutual settlements were covered by local budgets and financed through transfers from the national budget. Another complex mechanism, designed to indirectly cover Naftogaz's deficit, involves the issuing of state bonds and selling them for Naftogaz shares, issued specifically for this purpose. In addition, the requirement for state-owned domestic gas producers to sell gas to households for domestic needs at regulated tariffs (well below-market levels) is de facto an implicit subsidy to households. Regulated tariffs covered production costs but did not allow for investments in modernisation and exploration of new deposits. The opportunity cost for domestic producers (i.e., the sales price that could be recovered in a fully liberalised market) is estimated at UAH 36.7 bln (USD 3.1 bln) and UAH 53.9 bln (USD 2.5 bln) in 2014 and 2015, respectively.

## ... and continues to cross-subsidise electricity consumption across different groups

Cross-subsidisation of electricity consumption by preferential consumer groups (households in the first place) at the expense of industry, railway transport and state-funded institutions is also huge. The latter three categories of consumers pay, on average, 26% higher electricity prices due to such cross-subsidisation. At the same time, households consume electricity at a price which, in January 2015, covered only 21% of the total cost (of power generation, transmission and distribution) of supplying that electricity. The total value of cross-subsidies has increased by about 8 times, from UAH 5.4 bln (USD 1 bln) in 2006 to UAH 43.8 bln (USD 2 bln) in 2015.

## However, government support for the coal sector has significantly declined over the past several years...

Government support to unprofitable, state-owned, mines was traditionally a heavy burden on the budget. Although the total number of state-owned mines has shrunk — from 145 in 2005 to 82 in 2013, with a corresponding drop in output from 46.1 mln tonnes to 24.1 mln tonnes — the amount of budget transfers to the sector has continued to grow. State support provided to compensate the losses of unprofitable mines increased from UAH 0.9 bln (USD 0.18 bln) in 2005 to UAH 13.3 bln (USD 1.7 bln) in 2013. Overall, the total amount of direct government spending on the coal sector peaked in 2013 at UAH 15.3 bln (USD 1.9 bln), which constituted 3.8% of budget outlays. In 2014, UAH 9.4 bln (USD 0.8 bln) was allocated within budget programmes to support state-owned mines (2.2% of budget expenditures). In 2015, subsidies were reduced considerably to UAH 2 bln (USD 0.09 bln), as the majority of unprofitable mines in the Donbass region are now located on a territory not controlled by the Ukrainian Government.

## ... while targeted subsidies to vulnerable groups have largely increased driven by the rise of utility tariffs

Targeted state support to vulnerable groups has been provided in Ukraine since the 1990s. Taking into account the fact that utility tariffs were traditionally kept relatively low and the procedure of application for subsidies was quite complicated, the number of subsidy beneficiaries was not smaller than would have been expected (1.2 mln households in 2014). When, at the beginning of 2015, utility tariffs were increased considerably, the amount of funds allocated for targeted subsidies to low-income households increased several times to UAH 19.1 bln (USD 0.88 bln) and is planned to be increased further to UAH 36.2 bln (USD 1.4 bln) in 2016.

**Altogether, by the end of 2015, fossil-fuel subsidies have declined significantly and are expected to shrink even further ...**

Overall, the detailed bottom-up inventory of energy subsidies in Ukraine suggests that government support to both the production and consumption of fossil fuels peaked at UAH 202.8 bln (USD 17 bln), in 2014. However, as a result of the set of comprehensive measures put in place by the Government, energy subsidies in Ukraine declined to UAH 153.2 bln (USD 7 bln) in 2015. In 2016, the total number of subsidies is expected to drop even further as the result of phasing out several major subsidy schemes. Nevertheless, existing data gaps suggest that more research is needed in order to obtain a better picture of the complex landscape of subsidies in Ukraine.

**... while at the same time, government support for energy-efficiency measures and incentives to renewable energy producers have increased**

In contrast to fossil-fuel subsidies, government support to energy efficiency and renewable energy producers has been quite limited until recently. However, the State Energy Efficiency Programme was considerably reinforced in 2015. This programme provides soft loans to households and condominiums willing to improve the thermal insulation of buildings. According to the State Agency of Energy Efficiency and Energy Saving of Ukraine, about 80 thousand loans worth UAH 1.3 bln (USD 59.6 mln) were provided in 2015, of which UAH 302 mln (USD 13.9 mln) was compensated from the budget. The latest budget envisages that about UAH 790 mln (USD 31.6 mln) will be allocated to this programme in 2016.

Feed-in tariffs (FITs) for renewable-energy producers have been the main policy incentive to stimulate the sector's development. FITs have boosted electricity production from renewables from just 51.8 MWh in 2009 to over 2000 MWh, in 2014, though the share of renewables in total power generation remains tiny (about 1%). As the renewables sector has been growing rapidly, the total amount of induced transfers in the form of FITs increased from UAH 1.7 bln (USD 218 mln), in 2009, to UAH 6.1 bln (USD 278 mln), in 2015. Renewable energy producers also enjoyed a number of tax benefits over the observed period.

**What more can Ukraine do to advance reform efforts?**

The exceptionally difficult economic and political situation over the last two years has made it impossible for Ukraine to cope with the increasing burden of energy subsidies, and the government had no choice but to undertake some radical energy-subsidy reform measures. Utility tariffs were increased substantially in 2014 and 2015 and are planned to be increased further to reach market levels by 2017. At the same time, the government has reinforced targeted support schemes to most vulnerable groups.

Given that the increase of utility tariffs is a very politically sensitive issue, there are certain risks of the reform's rollback. In all countries, such risks also typically increase before elections. Hence, for the longer-term success of the reform, it is essential to depoliticise energy tariff-setting, to make it as much a technocratic issue as possible. In this respect, the successful experience of other countries with fossil-fuel reforms shows that the introduction of an automatic pricing mechanism can help. In Ukraine, the Government can approve a special mechanism or formula that will enable a regular automatic revision of utility tariffs to reflect fluctuations in the international energy market regardless of the political agenda.

Another important issue that needs to be considered is how to ensure that targeted subsidies are allocated in the most efficient way. The burden of increased utility tariffs on low-income households could be eased not only by providing subsidies to the poor to help them make utility payments but also by encouraging full metering and incentivising energy saving. In this regard, it is necessary to facilitate the installation of gas and heat meters, as the majority of households do not still have such meters and currently pay for consumption based on normative values, which in some cases is considerably higher than properly metered consumption volumes.

Although the existing targeted subsidy scheme provides an essential lifeline for vulnerable groups, it could also act as a disincentive to energy saving at the household level. This is particularly true taking into account the fact that about a third of households are currently receiving partial compensation for the payment of utility services within normative consumption volumes. This, in turn, could impede the long-awaited modernisation of the housing sector. One way of addressing this problem could be the provision of subsidies to low-income households in the form of conditional cash transfers, which can create incentives to cut the expenditure on utility bills and spend the savings in an alternative way. However, monetisation of benefits requires detailed analysis and planning to design an effective and feasible mechanism.

### **Concluding remarks**

The Ukrainian Government has recently undertaken considerable efforts to reform fossil-fuel subsidies, which has helped to reduce the budget deficit. At the same time, generated savings were partially rechanneled to targeted subsidies for low-income groups and the energy-efficiency programme in the residential sector. Overall, Ukraine has all prerequisites for a successful reform of energy subsidies if the government delivers on its commitments on the liberalisation of energy prices by 2017 and if appropriate safeguards are put in place to prevent a rollback. Although short-term effects of increased utility tariffs are always difficult to cope with, the reform is likely to deliver multiple benefits in the mid- and long-run in terms of macroeconomic stabilisation, reduced energy consumption and, hence, dependence on energy imports. Improved environmental quality and associated health benefits are also likely to be significant.

**Appendix A. Government support measures to production and consumption of fossil fuels, UAH million**

	Type of subsidy	Sources, methodology	2012	2013	2014	2015	2016p
<b>I. Support measures in the gas sector</b>							
Increasing the statutory capital of "Naftogaz" via the mechanism of issuing state bonds to cover its deficit	Consumer subsidy, Transfer of risk to government	Resolutions of the Cabinet of Ministers	6 000.0	8 000.0	96 609.6	29 700.0	0
Requirements for domestic gas producers (more than 50% owned by the state) to sell gas for household needs at regulated tariffs	Consumer subsidy, Induced transfer	Price gap method based on data from NCSREPU and Naftogaz reports	43 168.1	44 493.0	36 678.7	53 893.2	..
Transfers from the national budget to local budgets to settle arrears accumulated due to the difference between actual costs of central heating and services of centralised water supply and wastewater treatment, on the one hand, and regulated tariffs, on the other	Consumer subsidy, Direct transfer	Treasury reports on budget execution	14 442.8	2 052.5	12 423.1	4 685.1	n.a.
Compensation to "Naftogaz" for the difference between the purchase prices of imported natural gas and the regulated price of its sale for district heating purposes	Consumer subsidy, Direct transfer	Treasury reports on budget execution	3 900.0	.0	n.a.	n.a.	n.a.
<b>Subtotal of measures in the gas sector</b>			<b>67 511</b>	<b>54 545</b>	<b>145 711</b>	<b>88 278</b>	<b>..</b>
<b>II. Cross-subsidisation in the electricity sector</b>							
Compensating energy supply companies for losses due to electricity supply to certain categories of consumers through the application of a system of subsidy certificates (cross-subsidisation)	Consumer subsidy, Induced transfer	Reports of NCSREPU	34 467	37 557	40 825	43 848	..
<b>III. Support measures in the coal sector</b>							
State support to coal mining enterprises for partial compensation of production costs of finished marketable coal	Producer subsidy, Direct transfer	Treasury reports on budget execution	10 172	13 302	8 705	1 212	n.a.
Restructuring of coal and peat industry	Producer subsidy, Direct transfer	Treasury reports on budget execution	1 078	1 178	355	206	656
Rescue measures at coal mining enterprises	Producer subsidy,	Treasury reports	414	430	288	234	290

	Direct transfer	on budget execution					
State support for the construction of coal and peat mining enterprises, technical re-equipment of these enterprises	Producer subsidy, Direct transfer	Treasury reports on budget execution	1 293	343	54	n.a.	n.a.
Measures to improve safety measures at mining enterprises, such as installation of modern equipment to control air parameters at mines and devices to control degassing parameters	Producer subsidy, Direct transfer	Treasury reports on budget execution	40	37	3	n.a.	n.a.
Replenishment of current capital or increase of statutory funds of coal mines to settle arrears of wages to employees as of 1 January 2015	Producer subsidy, Direct transfer	Treasury reports on budget execution	n.a.	n.a.	n.a.	200	500
State support for the construction of mine №10 "Novovolynska"	Producer subsidy, Direct transfer	Treasury reports on budget execution	n.a.	n.a.	n.a.	146	n.a.
<b>Subtotal of measures in the coal sector</b>			<b>12 998</b>	<b>15 290</b>	<b>9 405</b>	<b>1 998</b>	<b>1 446</b>
<b>IV. Targeted subsidies to low-income households</b>							
Transfers from the state budget to local budgets for the provision of benefits and housing subsidies to low-income households for electricity, natural gas, heat, water supply and wastewater treatment, rent (maintenance of houses and buildings and house adjoining areas), removal of domestic waste and liquid sewage	Consumer subsidy, Direct transfer	Treasury reports on budget execution	6 718	6 046	6 173	17 995	35 000
Transfers from the state budget to local budgets for the provision of benefits and housing subsidies to low-income households for the purchase of solid and liquid household furnace fuel and liquefied gas	Consumer subsidy, Direct transfer	Treasury reports on budget execution	738	733	715	1 121	1 205
<b>Subtotal of targeted subsidies to low-income households</b>			<b>7 456</b>	<b>6 779</b>	<b>6 888</b>	<b>19 116</b>	<b>36 205</b>
<b>V. Revenue foregone measures</b>							
Corporate income tax exemption with respect to expenditures of energy enterprises planned within investment programmes approved by the NCSREPU to finance capital construction (reconstruction, modernisation) of international, trunk and distribution (local) electricity networks, CHP, trunk gas networks, etc. and/or for repayment of loans received to finance objectives specified above.	Producer subsidy, Tax revenue foregone	Ministry of Finance (cross-reference)	975	761	..	..	..
Zero VAT rate applied to operations on supply of natural gas (excluding the costs of transportation, distribution and supplying) imported into the	Producer subsidy, Tax revenue	Ministry of Finance (cross-	1 464	n.a.	n.a.	n.a.	n.a.

customs territory of Ukraine by NJSK "Naftogaz of Ukraine" (except for gas supply to the population, to public institutions and organisations financed through the state budget and/or local budgets, heat generation enterprises producing heat energy for households and other consumers that are not subject to this tax) for the period from 1 July 2011 till 31 December 2012.

foregone

reference)

<b>Subtotal of revenue forgone measures</b>	<b>2 438.6</b>	<b>761</b>	<b>..</b>	<b>..</b>	<b>..</b>
<b>Total all measures</b>	<b>124870</b>	<b>114932.9</b>	<b>202828.9</b>	<b>153240.3</b>	<b>37650.8</b>

Notes: "n.a." – not applicable, ".." - not available, p – provisional.

**Appendix B. Government support to energy-efficiency measures and renewable energy producers, UAH million**

	<b>Type of subsidy</b>	<b>Sources, methodology</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016p</b>
Implementation of the State Targeted Economic Programme on Energy Efficiency for 2010 - 2016	Consumer subsidy, Direct transfer	Treasury reports on budget execution	57	0	2	302	790
Feed-in tariff for electricity from renewable energy projects (wind, solar, biomass, small hydro, etc.)	Producer subsidy, Induced transfer	Price gap method based on data from NCSREPU reports	1 700	3 029	4 322	6 095	..
Zero excise tax rate is applied per litre of 100% ethanol produced from bioethanol used for the production of biofuel	Producer subsidy, Tax revenue foregone	Ministry of Finance (cross-reference)	752	2 773	..	..	..
Corporate profit tax exemption with respect to the profit of power producers, which generate electricity exclusively from renewable energy sources	Producer subsidy, Tax revenue foregone	Ministry of Finance (cross-reference)	454	594	..	n.a.	n.a.
Corporate profit tax exemption with respect to the income of biofuel producers obtained from sales of biofuels	Producer subsidy, Tax revenue foregone	Ministry of Finance (cross-reference)	15	18	..	n.a	n.a
Corporate profit tax exemption with respect to the income of combined heat and power plants using biofuels, and thermal energy using biofuels	Producer subsidy, Tax revenue foregone	Ministry of Finance (cross-reference)	548	0.01	..	n.a.	n.a.
<b>Total</b>			<b>3 527</b>	<b>6 414</b>	<b>4 325</b>	<b>6 397</b>	<b>790</b>

Notes: "n.a." – not applicable, ".." - not available, p – provisional.