



## ***EU-UKRAINE ENERGY COOPERATION***



### **NINTH JOINT EU-UKRAINE REPORT**

## **Implementation of the EU-Ukraine Memorandum of Understanding on Energy Cooperation during 2014**

### **CONTEXT**

Energy sector co-operation continues to be a key element in EU-Ukraine relations.

The Memorandum of Understanding (MoU) on co-operation in the field of energy between the EU and Ukraine<sup>1</sup> was signed on 1 December 2005 within the context of implementation of the EU-Ukraine Action Plan. It sets out how the two sides plan to organise their work to bring their energy markets closer together. The implementation of the MoU continues to be an important part of the EU-Ukraine Association Agenda<sup>2</sup>.

The MoU establishes a joint strategy towards the progressive integration of the Ukrainian energy market with that of the EU and consists of road maps covering (1) nuclear safety; (2) the integration of electricity and gas markets; (3) security of energy supplies and the transit of hydrocarbons; and (4) the coal sector. The MoU also envisaged a fifth roadmap which was agreed in March 2008 with the aim to increase co-operation in energy efficiency and the promotion of renewable energies.

Joint progress reports have since been signed on an annual basis, the first of which covered 2006. This ninth Joint Report highlights progress which has been achieved during 2014.

### **CONTEXT AND KEY PROGRESS SINCE JANUARY 2014**

During 2014 Ukraine underwent serious political changes with Presidential elections held in May and Parliamentary pre-term elections in October 2014. The developments described in this report must be seen in a very difficult political, economic, social context including the illegal annexation of Crimea and Sevastopol by Russia and the conflict in Eastern Ukraine. The interruption of gas supplies to Ukraine by Gazprom in June and problems in the unified power system due to shortages of coal supplies to thermal power plants were the key challenges that the interim and thereafter newly elected leadership of the Ministry of Energy and Coal Industry of Ukraine had to resolve ahead of the 2014-2015 winter period. It is important that Ukraine finds a comprehensive and quick response to the challenges posed by the current crisis. The

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<sup>1</sup> [http://ec.europa.eu/energy/international/bilateral\\_cooperation/doc/ukraine/2010\\_ukraine\\_mou.pdf](http://ec.europa.eu/energy/international/bilateral_cooperation/doc/ukraine/2010_ukraine_mou.pdf)

<sup>2</sup> [http://eeas.europa.eu/ukraine/docs/index\\_en.htm](http://eeas.europa.eu/ukraine/docs/index_en.htm)

country needs to fully use its membership in the Energy Community and to swiftly implement the 3<sup>rd</sup> EU Legislative Energy Package - the progressive integration into the EU energy market will help to improve the competitiveness and sustainability of the Ukrainian energy market and bring long-term competitive and affordable energy prices to consumers in Ukraine. This will also bring incentives for energy efficiency improvements and protect Ukraine's energy security by ensuring diversification of supply sources.

On 21 March, Ukraine signed the political provisions of the Association Agreement (AA) and the provisions of the remaining parts on 27 June 2014. On 16 September 2014, the Association Agreement was ratified by the Ukrainian Parliament and consent given by the European Parliament, enabling the provisional application of the relevant provisions of the Association Agreement on 1 November 2014 and of the provisions of the Deep and Comprehensive Free Trade Agreement (DCFTA) on 1 January 2016. Energy provisions, including those commitments in the context of the Energy Community Treaty, are an important part of the Association Agreement.

With the aim to ensure that the Ukrainian authorities have all the support they need in undertaking the political and economic reforms that are necessary to stabilise the country, the European Commission proposed in March 2014 an overall support package worth at least €11 billion and decided in April to create a Support Group for Ukraine (SGUA) to provide a focal point, structure, overview and guidance for the Commission's work to support Ukraine. Energy sector reforms represent one of the key focus areas in the financial support package and in the scope of work of SGUA.

In this rapidly changing context, the decision by the Ukrainian Government to revise the Energy Strategy for Ukraine (as published in early 2014) seeks to respond to the existing challenges in Ukraine. The work on its revision was launched, but not finalised during the year. In parallel, the Parliamentary Coalition Agreement and the Action Programme of the Government of Ukraine have defined the key priorities for reforms including in the energy sector.

Ukraine held, in 2014, the Presidency of the Energy Community Treaty. This coincided with the new Government's reaffirmation of its commitments to the full implementation of its obligation as a contracting party. Despite this political commitment, the "Annual Implementation Report"<sup>3</sup> by the Energy Community Secretariat on the implementation of the acquis under the Treaty establishing the Energy Community" published in August 2014 could only note rather slow progress of Ukraine in the Energy Community process. The key priorities identified are legislative changes and implementation steps to comply with the 3<sup>rd</sup> EU Legislative Energy Package and ensure independence of the Energy Regulator.

Major progress was made by contrast in opening and increasing capacity for gas flows from Europe to Ukraine. This work was accelerated in view of the interruption of gas supplies from Russia to Ukraine in June 2014, which followed disputes over the payment of outstanding debt and disagreement on the price of gas. By the end of the

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<sup>3</sup> [https://www.energy-community.org/portal/page/portal/ENC\\_HOME/DOCS/3356393/Energy\\_Community\\_Implementation\\_Report\\_2014\\_WEB.pdf](https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/3356393/Energy_Community_Implementation_Report_2014_WEB.pdf)

year, Ukraine had imported a record 5 billion cubic meters of gas from Europe, with a capacity of 31.6 mcm/day made available from Slovakia (since then further increased to 40 mcm/day), 4 mcm/day from Poland and up to 16 mcm/day from Hungary, though the latter remained interrupted until early January 2015.

In the context of the dispute of the gas contracts between Russia and Ukraine, the European Commission decided in March 2014 to facilitate negotiations between the parties with a view to seeking an interim solution that would ensure gas supplies to Ukraine and guarantee smooth gas transit flows in Europe. This led, after 7 months of negotiations, to the signing of a Protocol for the provision of gas during the winter months on 30 October 2014.<sup>4</sup>

## **1. ROAD MAP ON NUCLEAR SAFETY**

Ukraine has fully participated in the nuclear stress tests based on the EU specifications. The Ukrainian stress test reports have been submitted to the Commission and have been peer reviewed. The main results were included in the Commission's October 2012 Staff Working Document "Technical Summary on the implementation of comprehensive risk and safety assessments of nuclear power plants in the European Union"<sup>5</sup>. A peer review workshop on the National Action Plans in April 2013 organised by the Member States (ENSREG<sup>6</sup>) noted that the Ukrainian National Action Plan indicates clearly the schedule of improvements to nuclear power plants in Ukraine in the aftermath of the Fukushima accident according to national assessments, recommendations and suggestions from the European Stress Tests and the conclusions of the process of revising the IAEA Convention on Nuclear Safety.

The updated National Action Plan was prepared by the national regulator and submitted to the European Commission in January 2015, in line with the agreement under the stress tests process. This report shows the improvement measures completed, on-going and planned for the period 2013–2017. According to ENSREG, Ukraine is following the good practice of implementing measures first as a pilot, in plants of a certain reactor type, before considering their implementation at all other NPPs of this type.

A number of safety improving measures were defined before the Fukushima event and are subject to the on-going "Comprehensive (Integrated) Safety Improvement Programme" (for operating plants) and to the "Safety Improvement Plan for Chernobyl NPP Nuclear Installations". The scope and priorities of these measures were revised with due consideration of their relevance in the light of the Fukushima accident.

The physical security of the Ukrainian nuclear power plants was increased by several additional measures in 2014 given the worsening security situation and specifically in view of the developments in the East of the country.

The new programme "Instrument for Nuclear Safety Cooperation" (INSC) does not contain provisions to support the nuclear operator anymore. With a view of a closer integration with the EU energy market, a EURATOM/EBRD loan has been granted to

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<sup>4</sup> [https://ec.europa.eu/energy/sites/ener/files/documents/20141030\\_trilateral\\_protocol.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/20141030_trilateral_protocol.pdf)

<sup>5</sup> [http://ec.europa.eu/energy/nuclear/safety/doc/swd\\_2012\\_0287\\_en.pdf](http://ec.europa.eu/energy/nuclear/safety/doc/swd_2012_0287_en.pdf)

<sup>6</sup> European Nuclear Safety Regulators Group (ENSREG).

support the implementation of the Comprehensive (Integrated) Safety Improvement Programme.

Loan agreements of EUR 600 million (split 50/50) were signed on 12<sup>th</sup> March 2013 and 7<sup>th</sup> August 2013 with the EBRD and Euratom respectively for safety upgrades of the 15 nuclear units in operation in Ukraine. The programme of work related to the upgrading of the safety systems is scheduled for completion by the end of 2017. During 2014, Ukraine had to meet the loan pre-conditions. These were successfully reviewed by the end of December by both Euratom and EBRD which will allow the disbursement of the first loan tranches to take place in 2015.

New support to the Chornobyl Nuclear Power Plant (ChNPP) has been suspended due to the poor delivery of the on-going projects. Resolution of these pending issues is conditioning the future of cooperation with the ChNPP.

In contrast, the assistance to the Regulatory Authority of Ukraine has been strengthened with a view to support the process of transfer of the EU nuclear safety legislation to Ukraine.

By the end of 2014 the eastern and western halves of the Chornobyl New Safe Confinement (NSC) were at full height, following successful jackings. The west arch had been slid back to allow survey work to take place on alignment of the two halves in advance of sealing them together. Over 23,000 tonnes of steel structures have now been installed. Internal and external cladding work is ongoing. The project is now scheduled for completion by the end of 2017. However, a new funding gap of €615 million has been identified in 2014. The EBRD has committed a further €350 million in additional financing for the completion of the project, the balance of the funding gap is due to be raised during a pledging event to take place in London on 29 April 2015.

The progress with the Interim Spent Fuel Storage Facility (ISF2) on the site of the ChNPP funded by the Nuclear Safety account remained slow. Amendment 10 to the contract, signed in October 2014, re-set the project in terms of cost and schedule and provided a clear roadmap for the project completion. Site works commenced after mobilization of the General contractor. However, the delays of over one year and probable cost increases give cause for concern.

Due to the illegal annexation of Crimea and Sevastopol by Russia in March 2014, Ukraine authorities lost control over its nuclear facilities at the Sevastopol National University of nuclear energy and industry. In December, the State Nuclear Regulatory Inspectorate of Ukraine (SNRIU) has therefore asked the IAEA to request Russia to bear responsibility for all nuclear facilities in Crimea.

## **2. ROAD MAP ON THE INTEGRATION OF ELECTRICITY AND GAS MARKETS**

Ukraine made only limited progress on the transposition and implementation of the Energy Community acquis in the course of 2014 and this progress concerned mainly preparatory steps<sup>7</sup>.

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<sup>7</sup> See the Annual Implementation report by the Secretariat of the Energy Community, dated 1 August 2014 (<https://www.energy-community.org/pls/portal/docs/3356393.PDF>)

In 2014, the country remained largely incompliant with the electricity and gas acquis and there is an urgent need to accelerate transposition and implementation process of the 3<sup>rd</sup> EU Legislative Energy Package. The independence of the Energy Regulator continues to be a major issue in this respect. The liquidation of the two regulatory bodies (for energy and public utilities) by order of the President of Ukraine in August, coupled with dismissal of the Commissioners in office, was not in line with the relevant provisions of the EU *acquis*.

At the end of 2014 the activities with the view of implementation of the Energy Community legal framework in the gas sector intensified. They resulted in approval by the Cabinet of Ministers of Ukraine of the draft law "On Natural Gas Market" agreed with the Secretariat of Energy Community on 4 February 2015 with subsequent adoption by Ukrainian Parliament on 9 April 2015.

In this context, there is an urgent need for the adoption of new legislation to ensure that the newly created National Commission for State Regulation of Energy and Public Utilities of Ukraine (NCSREPUU) has the complete set of regulatory powers and objectives as foreseen in the 3<sup>rd</sup> EU Legislative Energy Package.

The NCSREPUU jointly with the Energy Community Secretariat experts have developed the draft law of Ukraine "On the State Regulation in the Energy Sector". The draft law was approved at a meeting of the Cabinet of Ministers of Ukraine on 25 March 2015.

As regards cooperation between Ukrainian authorities, the Energy Community Secretariat and the European Commission, good progress was noted in 2014, as shown in particular by the intensive exchange of information as well as joint drafting of the law of Ukraine "On Natural Gas Market", which meets the requirements of the EU legislation and in particular the "3<sup>rd</sup> Energy Package".

In February 2014, the Ministry of Energy and Coal Industry of Ukraine and the Energy Community Secretariat signed a Memorandum on their Implementation Partnership. By signing the Memorandum, Ukraine confirmed its commitment to transpose into and fully implement Energy Community legislation into the national legal framework. In addition, Ukraine and the Secretariat have agreed to set up an effective implementation mechanism, including the establishment of working groups for amending and drafting legislation to transpose the Energy Community law.

On 17 September 2014, the Cabinet of Ministers of Ukraine decided (Resolution No. 864-p) to amend the action plan about the implementation of commitments taken in the framework of the Energy Community Treaty<sup>8</sup>. The revised document includes: (i) implementation timeline for 3<sup>rd</sup> Energy Package, (ii) requirement on the update of Security of Supply statement as foreseen by article 29 of the EnCT, (iii) deadline for development of emission reduction plan as required by Directive 2001/80/EC on large combustion plants, (iv) development of secondary legislation to implement the law of Ukraine "About state aid", (v) development of a Social action plan in accordance with

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<sup>8</sup> An action plan was adopted on 3 August 2011 by Resolution No.733 and revised on 23 October 2013, by Resolution No.833

the Memorandum of Understanding on social issues in the framework of Energy Community as well as foresees (vi) establishment of the multi-stakeholder working group comprising representatives of executive authorities, non-state actors, including business as well as representatives of Energy Community Secretariat to ensure effective development, implementation and monitoring of the commitments taken in the framework of EnCT. On 28 October 2014, the Minister for Energy and Coal Industry of Ukraine signed an order "About creation of multi-stakeholder working group for development, implementation and monitoring of implementation of reforms in accordance with commitments in the Energy Community Treaty".

As regard the electricity sector, the law of Ukraine "About the principles of electricity market operation" came into effect on 1 January 2014. The law was adopted in October 2013. The main purpose of the law is to liberalise the wholesale electricity market in Ukraine. Although the law is generally considered as a positive step forward, it does not sufficiently transpose the relevant EU acquis. In practice, the electricity market remains over-regulated and over-subsidised. In February, the Ministry of Energy and Coal Industry of Ukraine established a working group as well as approved an action plan on the implementation of the Electricity Market law. On 23 September 2014, the Cabinet of Ministers of Ukraine established a Coordination Centre to ensure implementation of new electricity market model foreseen by the law of Ukraine "About the principles of electricity market operation".

In response to a worsening situation regarding electricity generation due to loading problems of certain coal fired power plants supplied with coal, specifically anthracite coal from the area held by illegal armed groups in the east of Ukraine, the Government adopted a number of emergency measures for the electricity market as of August 2014. This emergency situation has also contributed to the slowing down of the urgently needed reforms towards market liberalisation.

The privatisation of electricity generation assets continued in 2014. In November, 25% of state shares in power supply company Zakarpattiaoblenergo were sold. In parallel, the State Property Fund of Ukraine has postponed a number of privatisation auctions for minority stakes in thermal power generating companies Centrenergo (10%), Donbasenergo (25%) and DTEK-Dniproenergo (25%). The auctions were scheduled to be held on domestic stock exchanges in December. New auction dates have not been announced, due to the Government's wish to wait for improvements in the investment environment in Ukraine to attract more international investors. The privatisation process must be conducted in line with Ukraine's international commitments in the area of competition, transparency and market opening.

In 2014, progress was made with the implementation of a feasibility study on the synchronous interconnection of Ukrainian and Moldovan power systems to ENTSO-E Continental European Power System<sup>9</sup>. The feasibility study is being conducted by a consortium of European Transmission system operators and will result in a comprehensive analysis of the existing technical, organisational and legal obstacles for interconnection of Ukraine and Moldova with the European electricity grid, as well as a

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<sup>9</sup> This feasibility study is financed in the framework of the "Joint Operational Programme Romania-Ukraine-Republic of Moldova 2007-2013" signed in 2013 by the Government of Ukraine, Moldova and Romania.

roadmap and a timeline for their solution. The study is to be completed by the end of 2015.

As a Candidate country for the Extractive Industries Transparency Initiative (EITI)<sup>10</sup> Ukraine has launched the implementation of the EITI process. In February 2014, a workshop on the EITI Standard was organised. In addition, workshops focusing on revision of the EITI implementation work plan for 2015 and communications strategy, and information exchange took place in September and November 2014. In the course of the year, several meetings of the Multi-stakeholder group (MSG) have been arranged. In December 2014, the final work plan was revised and approved by the MSG. In spite of the good progress achieved so far, some issues are still outstanding. In particular,

- the EITI national secretariat has yet to be established;
- the structure and the scope of the first EITI report has yet to be defined.

The deadline for the submission of the first EITI report is October 2015.

In 2014, important progress was made with respect to the transparency in gas sector in Ukraine, with the weekly publication of the gas storage levels<sup>11</sup> and daily reporting on the volume of natural gas transported through the gas transportation system (GTS) of Ukraine by PJSC UkrTransgas<sup>12</sup>. In addition, starting 21 November 2014, and further to the earlier decision of the General Assembly of the European Network of Transmission Systems Operators for Gas (ENTSO-G) in 2013 to grant PJSC "Ukrtransgaz" the status of observer in the context of Ukraine's membership of the Energy Community, PJSC "Ukrtransgaz" has been publishing daily gas transmission data on the ENTSO-G transparency platform<sup>13</sup>.

### **3. ROAD MAP ON THE SECURITY OF ENERGY SUPPLIES AND THE TRANSIT OF HYDROCARBONS**

On 1 and 15 December 2014 the European Investments Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) and the Ukrainian Government signed the loan agreements of €150 million each to upgrade key sections of the Urengoy-Pomary-Uzhgorod pipeline, which is a Project of Energy Community Interest (PECI).

The signature of the loan agreements together with the launch of the European Commission-World Bank Trust Fund on the reform of the NJSC "Naftogaz of Ukraine" are a significant step forward in ensuring that the Ukrainian gas transmission system remains a reliable transportation route.

A High-Level Roundtable on the Investment Opportunities in Ukraine's Gas Infrastructure System, jointly organised by the Ministry of Energy and Coal Industry of Ukraine and the European Commission took place on 3 October 2014 in Brussels and provided a useful opportunity for the Ukrainian Government to present their reform plans in the gas sector to European and international companies.

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<sup>10</sup> <http://eiti.org/>

<sup>11</sup> <https://transparency.gie.eu/>

<sup>12</sup> <http://utg.ua/utg/business-info/live.html>

<sup>13</sup> <https://transparency.entsog.eu/>

Discussions during the high-level round-table focused on the prospects of further improving the investment climate in the current crisis and on the need to resolve the gas dispute with Russia in the near future. Participants highlighted the importance of maintaining the momentum for reform, as well as transparency in the restructuring of NJSC "Naftogaz of Ukraine". Both the International Financial Institutions as well as the Energy Community Secretariat re-confirmed their readiness to support the reform process in the Ukrainian gas sector.

Good progress has been achieved in recent years with the signature of a number of production sharing agreements (PSA), designed to reduce the country's dependence on energy imports in the longer term<sup>14</sup>. Unfortunately, the implementation of several PSAs was complicated by the political events and security situation in Ukraine, viz., including the illegal annexation of Crimea and Sevastopol as well as the conflict in the Donbas region. As a result, several activities have been put on hold and some PSAs cancelled.

Facilitated by the European Commission, operators of the gas transporting system of Ukraine, "Ukrtransgaz" and the Slovak transit pipeline operator "Eustream" signed a Memorandum on reverse supplies of natural gas. The signing ceremony took place on 28 April 2014, in Bratislava in the presence of the President of the European Commission Jose Manuel Barroso, the Minister of Energy and Coal Industry of Ukraine Yuriy Prodan, and the Chairman of NJSC "Naftogaz of Ukraine" Board Andrii Kobolev. The signature of the memorandum allowed gas deliveries to start from 1 September 2014.

The official inauguration of the "Vojany" pipeline (Veľké Kapušany) took place on 2 September 2014 and flow from Slovakia to Ukraine by Vojany – Uzhhorod pipeline reached 31 mcm/day by the end of the year whereas the flows from Poland and Hungary were in the range of 4 mcm/day, until Hungary suspended reverse flows temporarily at the end of September 2014.

In line with the European Strategy on Energy Security dated 28 May 2014, Ukraine participated in the stress test on gas supplies<sup>15</sup> during July and August 2014 in the event of suspension of gas supply from Russia, and submitted the relevant national report to the European Commission and the Energy Community Secretariat. On 23 September 2014, the 12<sup>th</sup> Energy Community Ministerial Council meeting took place in Kyiv where the results of the stress tests were discussed among Contracting Parties. The European Commission published the report on the stress tests on 16 October 2014, which included specific recommendation for Ukraine<sup>16</sup>.

In November 2014, in Brussels, Ukrtransgaz and EU transmission system operators from Slovakia, Hungary and Poland took the first steps towards negotiations on direct interconnection agreements. They are in particular needed in order to enable Ukrtransgaz to carry out the activities of a fully-fledged transmission system operator, including receiving shipper codes from Gazprom, in line with the provisions of the 3<sup>rd</sup> Energy Package, which were also set out in the Energy Community Ministers Council's resolution of 23 September 2014.

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<sup>14</sup> Including with Shell, Chevron, and the consortium Eni-Electricite de France.

<sup>15</sup> The European Commission launched the Stress Tests in July 2014 as called for in its European Energy Security Strategy of 28 May 2014

<sup>16</sup> <https://ec.europa.eu/energy/en/news/stress-tests-cooperation-key-coping-potential-gas-disruption>

The European Commission actively supports the negotiations as the interconnection agreements are needed in order to achieve the operational setup between gas transmission system operators at the EU-Ukraine border allowing for virtual reverse flow whereby gas is actually not physically transported in the reverse direction, but the gas flow requested in the reverse flow is subtracted from the gas flowing in the forward flow direction ensuring a closer integration of the Ukrainian gas market in the spirit of enhanced regional cooperation as set out in the European Union's plan on building an Energy Union.

It was agreed that the signature and the execution of an interconnection agreement at the Hungarian-Ukrainian border would serve as a pilot for other interconnection agreements.

#### **4. ROAD MAP ON THE COAL SECTOR**

During 2014, the need to reform the coal sector, including through the implementation of the "Master Plan for the Development of the Ukrainian Coal Industry" elaborated in 2011 under the EU supported "Coal Sector Policy Support Programme" became even more apparent due to a projected rise in subsidies for the sector. At the same time, the armed conflict in the main mining area of the country, the Donbas region, had serious consequences for the sector. These included: interruptions of productions in most mines in the affected area, risk of mine flooding as result of electricity outages, difficulties to transport the coal produced across frontlines and contact lines and difficulties to pay miners. As a result, coal production in Ukraine decreased by 17% in 2014 and power plants in the government controlled areas faced a serious shortage of coal, in particular anthracite coal, by the end of the year. As a consequence, coal had to be imported from overseas, including Russia, although deliveries from Russia were mostly halted after October 2014 for unknown reasons.

In June 2014, the Ministry presented a draft Concept on the reforms of the coal sector for the period 2014 – 2018 with the main goal of creating a non-loss making, highly efficient sector.

The Concept is based on the following measures to be taken to achieve this objective:

- Revision of functions and tasks of the management body and change of the public sector's enterprises management structure;
- Reduction in burden on the state budget, through the re-distribution and reduction of state subsidies to coal mines;
- Privatisation of the public sector coal industry and attraction of private investments;
- Liquidation or maintenance of unprofitable mines;
- Tackling the social issues linked to redundancy of personnel.

In December 2014 the Cabinet of Ministers of Ukraine approved the Action Plan for the Reform of the Coal Sector. The AP foresees that 37 mines would be privatised, 24 mines be maintained and 32 unprofitable mines be closed during the period 2015 – 2019.

With respect to Ukraine's membership of the Extractive Industries Transparency Initiative (EITI), the coal and iron ore sectors will be included in the Ukraine's second report as of 2016.

Two projects under the EU's Thematic Programme for Environment and sustainable management of Natural Resources including Energy (ENRTP) continued and were successfully completed in 2014:

- The project "Demonstration, dissemination and deployment of Clean Coal Technologies (CCT) and Carbon Capture and Storage (CCS) in Ukraine" assessed the potential for the development of clean coal technologies in Ukraine and prepared an inventory of large carbon dioxide emissions sources as well as possible sinks linked to them. In June 2014 a team of Ukrainian experts from the Coal Energy Technology Institute visited the power plant "Kozience" (Poland) to examine the use of co-firing technology of straw pellets with coal. The project's results were presented at two international conferences organised in October 2013 and May 2014 (final conference). The final report was submitted in September 2014.
- The project "Low carbon technologies for industrial regions of Ukraine" focused mainly on Carbon Capture and Storage (CCS) technologies and an inventory of potential CCS sites in Ukraine. The final conference of this project was held in October 2013 with good media coverage. The final report was submitted in March 2014.

Progress was made in preparing the National Emission Reduction Plan (NERP) as per Directive 2001/80/EC on large combustion plants under the Energy Community Treaty. On 23 September 2014, Ukraine presented to the Energy Community Ministerial Council the first draft of this document in response to the Ministerial Council Decision D/2013/05/MC-EnC of 24 October 2013. The Ministerial Council noted the assessment of the Commission and the Secretariat that the draft Plan required further work, in particular to document the measures foreseen to achieve the necessary emission reductions, either through newly built plants, reconstructions or retrofitting. In this context, the Ministerial Council invited Ukraine to develop a more comprehensive document, broadening the NERP approach by setting out separately the planned measures and the projected yearly emissions from new, opted out and existing plants. This document would become the basis for a national plan ensuring full convergence of all plants towards the emission limit values as defined in Directive 2010/75/EU. Upon request of Ukraine, the European Commission launched a technical assistance project in November to assist the Ministry of Energy and Coal Industry of Ukraine in the preparation of such a Plan.

A working group to coordinate the implementation of measures towards the reduction of pollution and implementation of Directive 2001/80/EC and 2010/75/EC was established on 28 November 2014 by Order No.857 of the Ministry of Energy and Coal Industry of Ukraine. This group comprises of representatives of the state authorities, energy companies and NGOs .

A revised draft Plan was presented to the European Commission in December 2014. Following further amendments, the final draft Plan was considered by the Energy Community Permanent High Level Group at the end of March 2015 which request the final plan to be submitted to the European Commission by the middle of April 2015.

## **5. ROAD MAP ON ENERGY EFFICIENCY AND RENEWABLE ENERGIES**

In October 2014 the Government of Ukraine approved the National Renewable Energy Action Plan till 2020, originally planned for adoption in 2013. The Action Plan foresees a target for energy from renewable energy sources of 11% by 2020, in line with Directive 2009/28/EC. The revised plan increases the role of biomass in achieving this target, compared to hydro which was favoured in previous draft versions. According to the Energy Community Secretariat, Ukraine still has to complete the legislative and regulatory framework in accordance with Directive 2009/28/EC.

In December 2014, the State Agency prepared a new draft law on renewable energies that among others included changes to the feed-in tariffs and abolishes the requirements for Local Content.

At the same time, the Regulator had not adjusted the euro indexed feed-in tariffs for renewables since August 2014 and subsequently reduced feed-in tariffs with reference to emergency measures. This has negatively affected the investment climate in this area and should be redressed as soon as possible.

The draft National Energy Efficiency Action Plan till 2020, which is required by the provisions of the Directive 2006/32/EC, was considered as outdated by the State Agency on Energy Efficiency (SAEE) and currently is under revision. It is expected to be submitted to the Cabinet of Ministers for approval in spring 2015.

In November 2014 the Cabinet of Ministers of Ukraine (CMU) approved a roadmap to the implementation of the EU acquis in line with the Ukraine's commitments in the context of the Energy Community Treaty which includes a time-table for the implementation for measures foreseen by Directive 2006/32/EC.

A draft law on energy efficiency in buildings was prepared in 2014 and submitted to the Parliament of Ukraine. The SAEE is currently revising the draft law in close cooperation with the Parliament, Government institutions, and independent experts from the donors and NGOs. This law shall implement the provisions of the Directive 2010/31/EU as required by the Energy Community Treaty, the deadline for which was September 2012.

Various drafts laws on the efficient use of energy resources (to transpose the key provisions on end-use efficiency and energy services, energy management, energy audits, eco labelling, etc.) were drafted and submitted for consultations to stakeholders. Draft laws have been elaborated and introduced to the Parliament on introduction of new investment opportunities, on protection of rights and legal interests of entrepreneurs for carrying out full scale energy modernisation (ESCO mechanisms).

As regards compliance with Directive 2010/30/EU on eco-labelling, Ukraine has made some progress by preparing several relevant technical regulations, such as on TVs,

lamps, air-conditioners, dishwashers, however, none of them were actually approved during 2014.

In autumn 2014 the SAEE elaborated various schemes aiming at reducing gas consumption in the country. To date, only one such scheme was approved and is in operation. Under this scheme the grants (of up to 20% of total costs) are provided to the individual house owners who wish to replace their gas boilers for non-gas ones. UAH 50 million were allocated to the Fund established for this purpose from the government budget, in the framework of the EU funded sector budget support programme in the field of energy efficiency and renewable energy.

Other schemes targeting local district heating companies and multi-family buildings are under preparation. Moreover, in December 2014 the SAEE established a working group to develop a Fund for energy efficiency measures in apartment blocks, to be presented during the donor conference in the 1<sup>st</sup> half of 2015. The Fund is foreseen to be replenished through a revolving mechanism.

According to Naftogaz Ukraine, the residential and public sectors consumed 19% less gas in December 2014 compared to December 2013. However, the industries and companies exceeded the limits by approximately 26%.

In May 2014, the retail natural gas tariffs for the population were increased by 50-62% (depending on volumes and types of consumption) and heat tariffs for the population were increased on average by 40.5%.

In 2015, National Commission for State Regulation of Energy and Public Utilities of Ukraine (NCSREPUU) decided to increase energy prices for final individual consumers as of 01.04.2015:

for natural gas – by 285%;

for electricity – by 45%;

for heating – by 71%.

## **6. COMMISSION SUPPORT**

### a) Budget support.

Under the ENPI Ukraine Annual Action Programme 2008, an energy sector support programme worth €70 million (€63 million budget support and €7 million complementary support) was established to support the Government reforms addressing energy efficiency and the use of renewable energy sources. The financing agreement for this programme was signed in November 2009 and the fixed tranche of € 31 million was disbursed in September 2011. The payment of the first variable tranche was requested in September 2011 and was put on hold as well as the payment of the second variable tranche, which was requested in 28 February 2013. Since progress was observed in the field of public finance management during 2013, the European Commission authorised on 11 November 2013 the disbursement of €10 million and €5.6 million respectively for the two tranches (out of €16 million maximum each). In 2014 the budget support operation was closed and any remaining funds decommitted.

Under the ENPI Ukraine Annual Action Programme 2012, the first disbursement deadlines under the Financing Agreement, signed on 20 December 2013 by the EU and the Government of Ukraine, for a €45 million budget support operation on "Continued support for the implementation of Ukraine's energy strategy" expired at the end of 2014. The disbursement of the first variable tranche is conditional upon adoption of the Strategy and an Action Plan on its implementation. Due to the on-going Energy Strategy revision process, the programme will be jointly reviewed and, possibly, re-launched in 2015, following negotiations with the government.

b) Technical assistance.

In 2014, the National Commission for State Energy and Public Utilities Regulation of Ukraine received technical assistance in the area of electricity market reform. This assistance covered five technical areas, i.e.:

(1) participation of hydro-electric power plants on electricity competitive market, (2) unbundling of activities on electricity distribution and supply, (3) transmission and distribution losses and tariffs for transmission and distribution, (4) electricity end-user regulated prices (tariffs) in liberalized market, and (5) allocation of electricity cross border capacity. The project was successfully completed in December.

In 2014, preparations for a new Twinning project with the National Commission for State Energy and Public Utilities Regulation of Ukraine on electricity market reforms and for a technical assistance project for the Ministry of Energy and Coal Industry of Ukraine to assist in the process of energy sector reform in line with Ukraine's commitments in the Energy Community Treaty and Association Agreement continued with relevant tender procedures launched. Both projects are expected to be launched in the second semester of 2015.

In 2014 the technical assistance project to the State Agency for Energy Efficiency (SAEE), designed for building the capacity of the staff of the SAEE, completed its activities in December 2014. The project implemented an MBA programme for the employees of the SAEE along with various training sessions and study tours in the field of energy efficiency and renewable energy along with the assistance in such fields as standards, awareness raising, revision of the national action plan on energy efficiency, etc.

The EBRD-managed E5P<sup>17</sup> Fund, a facility based on a blending mechanism targeting energy efficiency and environmental projects in Ukrainian municipalities, developed a significant number of new projects in the sector, reflecting the genuine interest of the local authorities to invest in energy efficiency projects. By December 2014, 10 projects for a total investment of over EUR 180 million were approved, of which E5P grants account for approximately 20%.

Ukraine also continued to receive assistance through regional technical cooperation for energy, the INOGATE programme, which provides technical assistance to the eleven countries of the Baku Initiative.

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<sup>17</sup> The Eastern European Energy Efficiency and Environment Partnership was launched within the framework of the Eastern Partnership at a conference in Stockholm on 26<sup>th</sup> November 2009

Ukraine is also an active participant in the Covenant of Mayors<sup>18</sup> (CoM) launched by the European Commission and which involves local and regional authorities voluntarily committing to increasing energy efficiency and using renewable energy sources in their territories. By their commitment, Covenant signatories aim to meet and exceed the European Union's 20% CO2 reduction objective by 2020. In 2011, the Covenant of Mayors was extended to the Eastern Partnership countries and Central Asia. The Covenant now has offices in Brussels, Lviv in Ukraine and Tbilisi in Georgia.

34 municipalities signed CoM in 2014 in Ukraine, and as of December 2014, 88 Ukrainian municipalities joined the CoM, making over half out of 152 signatories of EaP countries. 75 Ukrainian municipalities are active CoM participants and 13 municipalities have their signatory status suspended mainly due to the delays in the preparation of Sustainable Energy Action Plans (SEAPs). 10 of the active and 3 of the suspended municipalities are in Donbas and in Crimea; CoM activities have been suspended in these areas at the moment.

Mr Groysman, Minister of Regional Development, Construction and Utilities of Ukraine signed an agreement on taking the responsibilities of Country National Coordinator with the European Commission in April 2014. 5 Oblast Councils or Administrations signed up to the status of Covenant Territorial coordinators.

In 2014, call for proposals of "Regional Programme in the Neighbourhood for Sustainable Urban Demonstration Projects - Eastern part" (SUDeP)" resulted in 11 projects on energy efficiency and renewable energy resources awarded to 11 small and medium Ukrainian cities-signatories of CoM. Projects aimed at implementing the cities' Sustainable Energy Action Plans.

Signed on:

28 April 2015

For the Commission



Maroš Šefčovič  
Vice-President for Energy  
Union

For Ukraine



Volodymyr Demchyshyn  
Minister of Energy and Coal Industry

<sup>18</sup> [http://www.covenantofmayors.eu/about/covenant-of-mayors\\_en.html](http://www.covenantofmayors.eu/about/covenant-of-mayors_en.html).