

## Energy Policy Talks

### Theme Paper – 22 March 2016

#### “The future for Energy Efficiency in Ukraine – Moving towards better Governance”

##### Addressing the Problem

Ukraine is one of the most energy-intensive countries in the World largely because of its high concentration of energy-intensive sectors, inefficient industrial processes and old equipment, inefficient district heating systems and poor quality building stock. Savings are estimated to be 27 Mtoe per year (about one quarter of Total Primary Energy Supply)<sup>1</sup>.

The draft Updated Energy Strategy to 2030 proposes a reduction of energy intensity of 30%-35% by 2030 and foresees an increase in energy consumption. The National Targeted Economic Programme on Energy Efficiency and Development of the Sphere of Energy Production from Renewable Energy Sources and Alternative Fuels for 2010-2015, approved in April 2011, contains a five-year investment programme which include regular assessment mechanisms developed for 15 sector branches, 27 regional levels and 56 public institutions. A National Energy Efficiency Action Plan (NEEAP) has already been finalized. However, it was developed with a restrictive scope in line with the old repealed 2006 Energy Services Directive which addressed only end-use Energy Efficiency<sup>2</sup>.

**It is important to note that the first motivation for Ukraine to implement Energy Efficiency measures is because the measures are an important and intrinsic part of the ongoing market electricity and gas reforms.**

Of course, as a member of the Energy Community, Ukraine has also taken on board the requirements of the Energy Efficiency Directive when the Directive became part of the Energy Community acquis in October 2015. A draft Law on the Energy Performance of Buildings is under preparation and to be discussed with all stakeholders. A new energy efficiency law is also being drafted, which would bring the existing Law on Energy Savings, adopted in 1994, in line with the *Energy Community acquis*<sup>3</sup>. In addition, other Directives – such as the Eco-Design Directive - which are not of the *Energy Community acquis* – also should be transposed and implemented within the legal terms of the wider Association Agreement between Ukraine and the EU.

##### Establishment of Energy Efficiency Governance

To capture Energy Savings requires, among others, a proper system of measurement to be put in place (such as accurate metering) and knowledgeable specialists (such as energy auditors

<sup>1</sup> IEA (2012), Ukraine 2012. Energy Policies Beyond IEA Countries. OECD/IEA: Paris.

<sup>2</sup> IEA (2015), Eastern Europe, Caucasus and Central Asia Energy Policies Beyond IEA Countries. OECD/IEA: Paris.

<sup>3</sup> Energy Community Secretariat, *Energy Community Country Brief Spotlight on Ukraine*. April, 2015.

and energy managers) able to identify, assess and recommend actions to achieve savings. By its very nature, energy efficiency measures impact across a very wide range of areas – covering building, industry, transport operations, energy efficiency in transmission/distribution, high-efficiency generation of electricity and heat, etc. Due to such multiple and diverse environments where energy efficiency measures can be applied successfully requires a strong and structured institutional framework, with very clear rules and correct incentives for those involved bodies – so that there is an economically sound attribution of “who does what?”. Above all, it is necessary that a center of responsibility takes a leading role to oversee and implement a governance system that applies to all the areas of the Directive.

Improving governance in energy efficiency could mean addressing:

- a) development and implementation of new or revised primary and secondary legislation and accompanying non-legislative implementing measures (information campaigns, training programmes, Energy Efficiency fund(s), etc);
- b) institutional arrangements (clarification of responsibilities, structures within and between relevant ministries and other governmental bodies);
- c) coordination (setting targets/ planning/ monitoring of implementation/ reporting via National Energy Efficiency Action Plan, coordination with donors).

The key areas or issues, which the Energy Efficiency Directive requires to consider:

### **Buildings and the Public Sector role**

There is a need for Ukraine to set a long term strategy for investment in renovation of residential and commercial buildings (art.4)<sup>4</sup>. Central Government will need to ensure that at least 1% of total floor area of their buildings are renovated each year to meet national energy performance requirements (or take other cost effective measures with an equivalent effect).

There has to be an inventory made of all Central Government buildings. Measures are also required to encourage local and regional authorities as well as other public bodies to take similar action (art.5). The Public Sector is also given a strong catalytic role in creating an Energy Efficiency market through procurement of energy efficient products and buildings with high energy-efficiency performance (art. 6).

Energy efficiency criteria must therefore be put into the rules for public procurement. It also requires that relevant legislation on Energy labelling and Ecodesign is put in place while market surveillance authority may need to increase their know-how and capacities to support market development. Law on energy efficiency in buildings needs to be adopted with necessary secondary acts and relevant accompanying measures (e.g. to ensure availability and quality of experts to issue energy certificates, check air-conditioning installations, etc).

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<sup>4</sup> The Energy Efficiency Directive puts no end-date.

## **Finance, funding and where to place obligations for achieving Energy Efficiency**

One of the key measures of the Energy Efficiency Directive expected to deliver most of the energy savings are energy efficiency obligations schemes (art.7). Under an Obligation scheme, energy companies (e.g. retailers or gas, electricity, district heating and fuel transport) could be required to achieve annually at least 0.7% of energy savings among energy end-users. The scheme would require an independent verification and measurement of energy savings (via prescribed methods e.g. metering) Financial penalties would apply if savings are not achieved. In many EU countries the obligations are placed on Distribution or Supply Companies to achieve energy savings. This will not always be the best option in a situation where the unbundling process is still ongoing and/or governance mechanisms are missing allowing for misaligned incentives. However, the Directive allows alternative measures on condition that they would reach an equivalent or higher effect. The most typical alternative measure is establishment of an Energy Efficiency Fund (art.20) The availability of sufficient financial resources to make savings (*to spend money to save more money*) is an important step.

## **The need for accurate Metering and Billing**

There is a need to accurately measure consumption of energy (and to produce accurate billing) which, in turn, will allow for more appropriate incentives to be set for energy efficiency savings. There is a need for a law as well as guidelines to local actors (e.g. managers of housing communities, local authorities, local district heating companies, etc) on accurate and fair accounting of energy consumption (especially heating and water) and ensuring the end-users get easy access to information about own consumption and related costs (art. 9, 10, 11). Apart from the law, there is a need for measures, which will help with raising awareness, training, guidelines for heat cost allocation as well as incentives to install meters and measures to help with the financing of the installation of meters and related energy efficiency improvements (heat substations, pipe lagging, installation of thermostatic valves, etc).

## **Opening the market for Energy audits and Energy management**

The important questions are how to check on the quality of energy audits and how to increase the quantity of auditors and energy managers quickly. There is a need to increase trainings in the skills needed and to open up opportunities for service providers so that energy auditing is not restricted to a limited number of bodies. This perhaps needs to be reflected in the Energy Efficiency Legislation (that is still being developed) (art. 8). There is also a need to empower local authorities to carry out energy management, local energy planning and perhaps some advice activities to citizens and businesses on their territories (Art.5). The latter may have a strong link to the ongoing decentralization reform.

## **Who should be the main responsible body for greater energy-efficiency in heating and cooling – such as cogeneration and district heating?**

Ukraine needs to identify the potential for high-efficiency cogeneration and efficient district heating and cooling and to analyse the costs and benefits of the opportunities that may exist

based on a country-wide cost benefit analysis. The Directive does not specify who should be responsible for overseeing and for conducting the cost-benefit analysis but requires that such a body is appointed. A common sense solution would be to assign the task of carrying out the analysis to the operators of installations, while competent authorities need to be assigned responsibility for providing the common methodology, assumptions and timeframes. (art. 14).

### **Who is responsible for improving energy efficiency in Energy transformation, transmission and distribution?**

Gas and electricity infrastructure in Ukraine has a substantial potential for higher energy efficiency that needs to be implemented (art.15). Here, there are a number of requirements that promotes more efficiency, and incentives in transmission and distribution tariffs that are detrimental to the overall efficiency – including energy efficiency – of electricity generation, transmission, distribution and supply. NEURC (the Regulator) plays a role here in that it must have *proper regard* to energy efficiency when implementing any measure to develop and improve the networks. Incentives can be given to DSOs and TSOs to develop efficient programmes consistent with the Third Energy package. NEURC should also remove any incentives in tariffs that are detrimental to efficiency or which inhibit the participation of demand response in the new balancing market and ancillary services procurement (which are part of the new market design and rules currently being written). There needs to be an assessment of energy efficiency potentials of both gas and electricity infrastructures and concrete measures to be identified. Priority access to the grid and dispatching is encouraged for high-efficiency CHP.

### **Raising awareness**

The issue of raising awareness refers to both campaigns for small energy consumers (art.12) - which includes households and small-medium enterprises (SMEs) - and information and training (art.17). It should normally be implemented both at a central and local level. Measures should include information and training to change behaviour such as through financial incentives, access to finance, taking low-cost and no-cost measures, projects that show by example as well as workplace activities. The availability, transparency and targeting of information needs to be substantially improved towards different stakeholders. These include provision of information to banks and other financial institutions on possibilities of participating in the financing of energy efficiency improvement measures, to market operators to advise energy consumers on energy efficiency and to use information, awareness-raising and training initiatives to inform citizens of the benefits and practicalities of taking energy efficiency improvement measures (art. 17).

### **Removing other and financial barriers to Energy Efficiency**

Here, there is a need for measures to remove any remaining regulatory and non-regulatory barriers to energy efficiency (art.19). These barriers refer to split incentives to owners and tenants of buildings (where the costs and benefits of making energy efficiency savings fall on different parties) and to accounting, legal and regulatory rules and administrative practices such as public purchasing and annual budgeting which may deter local authorities from

making better energy efficiency investments. An example being that if a municipality save costs (for example, 100,000 UAH) by implementing energy efficiency, then in the following budgetary programme, its budget may be reduced by the same amount by the Ministry responsible. Possible measures to remove these barriers can include creating the right incentives, amending the legal regulations, adopting guidelines as well as further education or training programmes.

An important aspect of sustaining energy efficiency is the accreditation and certification of competences that requires the regulation of professional fields of activity (such as engineers, architects, surveyors, installers, plumbers). It also requires an interaction with universities and training providers, and can see the development of new stakeholders as association of energy efficiency service providers (art. 16-17).

The Energy Efficiency Directive may need to be implemented through the adoption of a number of primary and secondary legislation across several fields. One of the main policy instruments for planning, monitoring and reporting remains the National Energy Efficiency Action Plan (NEEAP), which implies allocation of responsibilities and governance processes among governmental bodies. Such definition of the responsibilities and tasks will also help potential donors to identify areas in which they might provide additional assistance.

This gives rise to our questions that will guide the discussion:

- 1. What are the main provisions included in the Energy Efficiency Directive to be implemented in the short, medium and long run? What are the areas that need to be addressed urgent now (in 2016) to boost the reforms in Ukraine and develop the market for energy efficiency?**
- 2. It is necessary to identify a clear set of responsibilities and functions among the main institutions and later with the market players. Who and what role can different ministries, energy agencies, public administrations, professionals, energy providers, banks, municipalities play in implementing energy efficiency policies? What role should Energy Efficiency agencies (central and regional/local) play in policy formation and programme implementation? How could the coordination in Energy Efficiency Policy in Ukraine be improved?**
- 3. What are the steps to be taken by Government to co-ordinate horizontally across different Ministries and vertically with municipalities or local government in order to guarantee an effective and aligned governance system for Energy Efficiency? What mechanisms would be more effective: Inter-Ministerial committee or Working Group? Reinforcement of Energy Efficiency institutions? Provision of penalties? And/or the launching of common specific projects?**