

## THE NATIONAL EMISSION TRADING SCHEME IN UKRAINE AS A MITIGATION TOOL TO COMBAT CLIMATE CHANGE

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The climate change has been identified as one of the major threats the human kind faced over the last decades. For a while, a number of developed countries have combined the efforts of state and private sector, developing the additional mechanisms and instruments for reducing greenhouse gas (GHG) emissions. Although Ukraine is actively using the mechanisms of the Kyoto Protocol to the UN Framework Convention on Climate Change, the national economy still faces a lack of initiatives to attract private sector into the programs aiming at GHG emission reductions.

The recent Ukraine's position at the climate negotiations proved that the country is not ready to take on the stringent GHG emission reduction targets. Even though the country still need a room for increasing emissions resulting from a GDP growth, the most sectors of Ukrainian economy can easily evolve without GHG emission on a rise. At the latest Conference of Parties to the UNFCCC serving as a Meeting of Parties to the Kyoto Protocol, the countries agreed that a global temperature should not increase more than 2° C from the pre-industrial level. This has been reflected in so called Copenhagen Accords, with almost 80 countries associated with it. The target of 2° C will likely be translated into the ambitious commitments to reduce GHG emissions for all countries, which are involved into the climate negotiations, including the large emitters from the developing world. That is why private companies are an important part of a global plan to reduce GHG emissions as the governments cannot rely only on their own. Therefore, the possible future commitments seem to be uneasy to fulfill without well developed national action plans, where the private sector plays a role.

Moreover, a motivation to curb the GHG emissions in the current period remains a serious problem for Ukraine. Having an AAU surplus of approximately 2 billion tCO<sub>2</sub>eq, the country has no need to introduce some additional tools in order to reduce GHG emissions at the national level. Importantly, the lack of ambitious plans to reduce emissions for the next period retains the development of private initiatives. The main question of business sounds like "Ukraine enjoys the huge surplus of AAUs and therefore easily meets its target in the Kyoto period. Why is the country to set any binding targets for industry and energy sector as there is no need to decrease emissions at all?" We will look at this question closely further on, but now focus on the current state of play in Ukraine and other countries, where the private sector is already involved into mitigation actions through the national emission trading schemes (ETS).

In 2008, the National Environmental Investment Agency - the governmental agency being on charge of the Kyoto Protocol and UNFCCC implementation in Ukraine – added the development of national ETS to its annual action plan. The task has not been completed though. The draft law on ETS development has been submitted to the Parliament quite recently and expected to be reviewed over the forthcoming several months. Therefore, the ETS is frequently perceived in Ukraine as one of the most effective tools to achieve the actual emission reductions in the private sector. However, a move from idea to operational system can take another several years.

At the same time, another tool is widely used in Ukraine - charges for pollution. This is very often mentioned by the critics of the ETS to demonstrate that Ukraine has already launched relevant measures for the environment. Certainly, this instrument enjoys a couple of advantages. However, a direct regulation can be deemed as the most effective tool only if the emitters are passive enough to use the market mechanisms. This eliminates an idea of the cost effective emission reductions, when the emitters, having the least marginal abatement costs, implement the mitigation projects and contribute to the aggregated emission reductions in a sector or country. Therefore, the charges do not minimize aggregated costs at the state level, but impose the penalty system to all emitters regardless their technological maturity. This may materialize into the unreasonably high aggregated costs. However, if the county strives to involve the largest emitters, which tend to be more active in using market-based instruments, the emission trading is still one of the most cost-effective solutions for GHG emission reductions.

While Ukraine has only started ETS, the European Union Emission Trading Scheme (EU ETS) is already the first and the largest system of GHG emission trading in the world. Many countries refer to the knowledge and hands on experience of European member states while developing and launching their own national systems. Among them are two mandatory ETS in the North America, as well as Swiss, Australian (trading starts in 2010), and New Zealand ETS. Moreover, the US also plans to introduce a federal trading system, even though its development temporarily delayed due to a number of political and financial reasons. The United States currently operates a Regional Initiative to reduce greenhouse gases (RGGI) launched in January 2009, which covers the private companies in 10 eastern states. Canada surprisingly started trading even earlier than the US in 2007. It is very likely that all major ETS will be consolidated into one a global system within a decade or two.

Since the major emitters in Ukraine are the energy companies, in particularly power plants, and mining industry, with 83% share out of the total emissions (450 MtCO<sub>2</sub>eq in 2007), these sectors shall be certainly covered by the ETS. Taking into account an existing EU ETS model and the GHG emission structure in Ukraine, the future ETS can also cover cement companies as well as glass and paper producers. Alike EU ETS in its 3<sup>rd</sup> phase, Ukraine can go further and involve not only CO<sub>2</sub>, but the other GHG gases as well. Moreover, effective from 2012, the Ukrainian international aviation is to become a part of the EU ETS. This may be the first step towards the market mechanisms implementation.

Looking into the major characteristics and experience of existing ETS, the possible strengths and weaknesses for future Ukrainian ETS are provided below.

**Strengths:** - a strong institutional and legal climate change framework; - understanding at the highest levels of a need to introduce new market mechanisms; - significant potential for emission reductions in industry and energy sector; - relatively low marginal abatement costs; - the large number of potential market players with different technological capabilities; - developed system of monitoring and environmental assessment; - many companies - the largest emitters - have some experience of emissions trading under the Kyoto Protocol (JI); - existing ETS in the region (EU ETS).

**Weaknesses:** - unstable political situation; - weak support by industry and energy sector; - the reluctance of the private sector to spend additional costs in the short run due to a lack of awareness of future benefits and leader's position in the market; - strong industrial and energy lobby, which may delay ETS development; - temporary decline in production output in the key sectors due to a global economic downturn; - many installations in the energy sector are still state-owned; - low tariffs for electricity and heat; - the largest emitters of GHG are often subsidized by the government.

At the same time, there are a number of positive factors that can boost the ETS development in Ukraine. First of all, Ukraine enjoys a sufficiently developed institutional framework. In the most cases, the hands on experience and understanding of market instruments at the highest level could bring forward more private companies to the emission trading scheme. Moreover, the national inventory scheme and reporting to the UNFCCC also serve as a basis for accurate GHG accounting, which is a top requirement for the national ETS. The NEIA and the Ministry of Environment are to be strongly involved into the ETS process, which has already started. Even though the legal basis is not approved yet, a couple of draft laws framing the ETS structure sends a clear signal to the large and some of medium business that the business environment in Ukraine will likely be strongly changed in a couple of years.

In addition to well developed institutional background, Ukraine also owns some practical experience with mechanisms of the Kyoto protocol. The volumes currently traded under joint implementation (JI) are far from what expected to be allocated and traded under the future ETS in Ukraine though. To date, 166 JI projects with the reduction potential of 145 MtCO<sub>2</sub>eq over the Kyoto Protocol period. This corresponds to almost 40% of total projected emissions from Ukraine in 2010. However, only 12 MtCO<sub>2</sub>eq is planned to reduce through JI projects in the sectors that may potentially be covered by the national ETS. This corresponds to only 4% of projected emissions in these sectors in 2010 year.

The lack of mitigation actions at the most large emitters reflects their unwillingness to implement costly energy-efficient technologies, which is another equally important goal of JI mechanism. For the potential ETS installation it would be extremely useful, if the installations have already implemented JI projects. This would give them so much needed experience in a field of the GHG mitigation. However, the companies do not see any motivation to go forward with voluntary projects yet. We can only assume what resistance the companies can show for the mandatory system. Nevertheless, the fact that such large carbon-intensive companies like DTEK, Metinvest, and many others are already involved into the mitigation projects, which are not only Kyoto-related, may mean that their long-term business plans features a possibility of market mechanisms in Ukraine. In that case, the ETS implementation is only matter of time.