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**THE EMISSION ALLOWANCE TRADING
IN EUROPEAN UNION**

SUMMARY

The reason of the below summary is a new economic area, market. The emission regulation of greenhouse gases causing global warming is a question having world-wide environmental and economic impact. The European Union established a closed trade system which concerns almost 12,000 polluting undertakings on the continent directly. It does affect their production, strategy, social responsibility but also influences the rest of the society by the emerging costs. The present paper is examining the emission allowances of greenhouse gases, their role with regards the economic policy and environmental matters, with special attention to the trade system established in the European Union.

INTRODUCTION

The question of the climate change is a global problem, which effects' occur globally, irrespective of the emission of the greenhouse gases; therefore the management of the problem is only possible by global cooperation.

This was the reason for the conclusion of the United Nation Framework Convention on Climate Change ratified by almost every country of the world, which emphasises the responsibility of the respective member states with regard to the management of the problem. It was declared at the Rio Conference that "human activities

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have been substantially increasing the atmospheric concentrations of greenhouse gases, that these increases enhance the natural greenhouse effect, and that this will result on average in an additional warming of the Earth's surface and atmosphere and may adversely affect natural ecosystems and humankind”¹.

It is a principle of the Framework Convention that the developed countries are primarily responsible for the past emissions therefore they have to take a significant role in the reduction too. The protection of the climate system is possible through fairness and joint responsibility differentiated on the basis of the respective countries' population.

In the Kyoto Protocol coming into force on the 16 February, 2005 – adopted in December 1997 – the developed countries accepted an emission reduction of 5.2% on average for the period of 2008–2012 compared to the 1990 level. The Protocol is relating four gases (CO₂, CH₄, N₂O and SF₆) and further two gas categories. The gases are calculated to a common amount based upon their contribution to the global warming.

The former president of the World Bank, Sir Nicholas Stern was the first who stated in his report to the government of the United Kingdom, that the global warming has overwhelmingly negative effect on the economic life in the long run, including the GDP.² According to Stern a rise of five-six Celsius degrees is probable in the coming hundred years. The long-term financial effects of natural disasters and of health problems occurring as a consequence of the climate change are invaluable.

The so called ‘Kyoto mechanisms’: the emission allowance trading, joint implementation and the clean development mechanisms came into the front. The basic idea for all three mechanisms is that the environmental interventions, the reduction of emissions have to be accomplished where the greatest result is to be expected through a relatively minimal expenditure.

EU ETS

The greenhouse gas emission allowance trading scheme of the European Union³ (ETS) is a significant element for fighting the climate change. The Union started an emission trading scheme voluntary on an international level but obligatory for the member states reaching beyond the Kyoto aims. This is the first international CO₂-emission trading system of the world. Nearly 12,000 establishments belong under its effect (combustion installations, mineral oil refineries, coke ovens, steel-, and ironworks, as well as cement-, glass-, lime-, brick-, potter's craft, cellulose- and paper-mills), which are all together responsible for almost one-half of Europe's CO₂-emission.⁴

¹ United Nation Framework Convention on Climate Change (1992), page 1.

² Stern (2006).

³ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC.

⁴ Source: Internet: www.europa.eu/rapid/pressReleasesAction.do?reference

The Kyoto mechanisms were strongly criticised by the environmental activists for a long time, while on the other hand several countries and undertakings were trying to thin down the system of the Union with the other two mechanisms from the very beginning.

To understand the reasons thereof it has to be firstly surveyed what the Joint Implementation (JI), and the Clean Development Mechanism (CDM) do mean.

In the case of the JI a polluting enterprise invests into a project in another country, which results the reduction of the emission, and part of this reduction will be 'acquired' by it and can be managed on its own right. The condition of the realisation of the JI project is the additionality, therefore to prove that the investment would not have come into existence by self-effort.

The accounted JI credits may be used for the fulfilment of own obligations, but may also be subjected to market trading too. The projects implemented after 2000 are already allowed to be taken into this system, while the generation and charge of the JI credits is only possible after 2008.

The CDM gives the possibility for industrial countries to acquire emission allowances by executing emission-reducing projects in developing countries. As well as in the case of JI an industrial country 'A' (or one of its enterprises) may invest into a project resulting emission reduction in country 'B', which country belongs to the group of developing countries, and therefore is not bound by the controlled pollution emission under the Kyoto Protocol. The emission allowances are in this case called CER ('certified emissions reductions') or CDM credits. The allowances generated by the CDM projects are creditable since 2000, and will be accountable in the first period starting in 2008.

The project-based investments (JI and CDM) are – unlike the emission trading – not founded on the distribution of emission allowances, but are calculating the emission-reduction based upon the already implemented projects. Hence the number of emission allowances is resulting by the difference of the baseline (namely the benchmark) and the effective emission values. By the determination of the baseline emission value the effect of the emission-reduction project is not taken into account.

The opponents of the CDM project argue that such an acquisition of emission allowances could also result that the "economically potent countries could maintain their unsustainable energy-consumption practice"¹. Countries in a better position or those polluting may easily get hold of the emission quota of the developing countries at a small expense without executing grave developments.

As the Kyoto, as well as the EU emission allowance trading (also called as emission trading, quota trading) system grants great flexibility for the participating countries how to achieve their undertaken obligations. Only the framework conditions are laid down for the parties and member states, and within these they may freely select as their own competence the most applicable elements of the national emission allowance trading system.

¹ Beliczay-Szabó(2003)

ESTABLISHMENT OF THE NATIONAL TRADING SCHEMES

The basic principle of the national trading schemes is the definition of the 'cap'. The emission cap is prescribed for the enterprises in the sectors obliged to emission-reduction and if the undertakings exceed this cap or do not reach it, then they may trade with the missing or excessive amount on the national market – hence the expression cap and trade system.

The emission allowances are costless in the probationary period – which will expire at the end of this year – while its 95% was to be transferred free of charge, while the remaining amount was open for auctions offered by the state authorities.

The Hungarian State distributed 97.5% of the quotas free of charge (preserving 2.5% for the new members), while the half of the remaining quotas was marketed the last year, and this March. This year's return was over one million euro, through the accepted bids of the auction participants the CO₂ quota was 0.88 euro.

The quantity of the allowances distributed in the probationary period were not harmonised for the Kyoto undertakings were only concerning the period between 2008 and 2012 and do not include obligations with regard to the 'way there'. Nevertheless a joint distribution process upon which the allowance distributions are to be in compliance with the Kyoto undertakings, hence the enterprises have to observe their emissions already before 2008.

The member states had to develop an allocation plan, to be approved by the European Commission. The plans include the total quantity of the quota to be distributed and the method of distribution. Thereby the member states limit the CO₂ emission in the energy and industrial sectors to create a deficit, thus making possible the establishment of an operative market and to make the emission-reduction possible.

After the initial quota allocation anyone may participate in the trade, so every natural and legal person may acquire the quota, while the principles of the free movement of goods and capital are to be taken into consideration.

In Hungary the executive decree No. 272/2004 was the first subjecting the regulation of greenhouse gases. The Parliament adopted in 2005 the 2005/XV Act on the trade of the greenhouse gases' emission units which was complemented by the executive decree (No. 143/2005) on the rules of implementation. Two further relevant regulations from 2006 are the executive decree No. 109/2006 on the detailed rules of disposition of the greenhouse gases' emission units belonging to the Hungarian State Treasury as well as the executive decree No. 66/2006 on the promulgation of the National Distribution Plan and of the National Distribution List for the 2005–2007 period about the trade of the greenhouse gases' emission units and about the detailed rules of disposition of the emission units.

THE EXPENSES OF THE IMPLEMENTATION OF THE KYOTO OBJECTIVES

Before examining how much it does it come to through this system to implement the Kyoto objectives it is worth to observe how it would have been possible to get emission units for the polluting entities!

It is common sense that the overall plant costs just like the social costs on a macroeconomic level are both greatly influenced by the methods used for the initial distribution of emission allowances. Basically three principal distribution method is known¹:

- auction,
- grandfathering (distribution of the allowances free of charge) and
- updating (this is cost-free too, but the quantity of the acquired allowances may depend on the performance of the undertaking).

The updating does not encourage for the reduction of the emission, for a higher performance results more emission units, while the grandfathering gives the possibility for the enterprises to lobby for the favourable quantity. These do not occur during a public auction. The social impact is also clearly determinable since if the emission allowances are distributed through an auction to the polluting entities, then other taxes and incidental expenses may be reduced from this income.

The reason for the allowances for basically being distributed free of charge is the definition of the 'cap' for by that it can be assured that an undertaking reaching its goals – polluting less – does not have to pay, and may even realise return while for exceeding the emission quota the price elaborated by the market is to be paid. It is nevertheless important to highlight that during the creation of the system it was inevitable to regulate the distribution, for the business decisions would have been greatly influenced if the respective member states would have laid down diverse conditions.

Numerous studies are concerning why the EU ETS system is the most feasible on a gross social level.²

The Kyoto objectives implemented through the European Climate Change Programme may be achieved by a yearly expense of 2.9–3.7 billion euros which is less than the 0.1% of the EU's GDP. Without the emission trade system these rates could reach even 6.8 billion euros. The distribution of costs is depending on what decisions are brought in the distribution plans, together with the other provisions which do relate to the supervision of the system. The system also protects the economic competitiveness of the Union, for any other alternative measurement would result higher expenses than indispensable towards the undertakings. If the governments do not use the trade system to facilitate the correspondence, they have to implement more expensive measurements in other sectors and regions.

Investigating the expenditures it is important to indicate that the so called 'connective directive'³ further decreases the costs while protecting the enterprises. This Directive – as the title also indicates – connects the flexible mechanism of the Kyoto Protocol – the JI and the CDM – with the EU emission trade system.

It is the ever urgent duty of the national legislative to abolish the uncertainties in the related regulations, normative whereas the Hungarian enterprises would have more alternatives to correspond to the obligations of the emission trade system.

¹ Beliczay-Szabó (2003).

² Source: Internet, www.europa.eu.int/comm/environnement/climat/emission/pdf/dir_101en.pdf

³ Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms.

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