

THE HUNGARIAN REGULATION ON THE EMISSION TRADING SYSTEM

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Abstract

Nowadays the role of the environmental protection is increasingly becoming one of the main topics in the politics. During the last decades several emission trading systems were established around the world. The study analyses the importance of the Paris Climate Conference, the development of the most significant systems and the current situation on the field of the emission trading system. The study highlights also the problems relating to the emission trading systems. The second part of the study deals with the Hungarian emission trading system. It introduces the legislative framework and the sanction system.

Keywords: *environmental protection, emission trading system, cap and trade system, greenhouse gases, Hungarian regulation on the emission trading system*

1. Introduction

The issues connecting to environmental protection and global warming are the most significant challenges of the 21st century. The decision-makers are dealing with those challenges both at international and national level. In this paper the authors focus on the legal aspects of the emission trading systems and intend to introduce both the European Union's and the Hungarian regulations on the emission trading system. The subject of the paper is mainly the introduction of the emission trading systems. These systems play a very important role in the fight against climate change. The European Union is at the forefront in this fight and its system provided as an example for the world. Hungary is a Member State of the EU, so the Hungarian regulation on the emission system forms an integral part of the European Union's emission trading system. Therefore the examination

of the EU's regulation is essential in order to be able to analyse the Hungarian regulation. The emission trading systems were analysed by many other authors too, but this paper endeavours to introduce the EU's, the Hungarian system and the other emission trading systems around the world.

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2. The European Union's Regulation

In the framework of the European Climate Change Program the Commission has developed its own regulation for the EU's own trading system. The legal basis of the system is the Directive 2003/87/EC, which came into force on 1 January 2005. This system is the world's biggest cap and trade system, it covers 12.000 businesses and consists of the following elements: authorisation of emission, follow up for

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emission, monitoring, national allocation, report about emission, calibration, national registry and the supervision of the system.

The businesses belonging to the system are allowed to do their activity in case if they have greenhouse gas permit. According to the abovementioned Directive the Member States have the right to lay down the merits of the allowance units. The national units were allocated between sectors.

The operators shall have an account at the national registry and this registry contains the registration of the obtaining, transfer and cancellation of the emission units. The operators are entitled to sell their units freely¹.

Before the adopting of the Directive there were several professional debate about the greenhouse gas emission allowance trading scheme of the Community. The consultation has started on the grounds of the Green Paper, which contains the main elements of the system. The European Climate Change Plan also deals with this problem. The Council recognised the importance of the trading and the fact, that a trading system should be introduced in the Community, but the Sixth Community Environment Action Programme ordered to set up the emission trading scheme till 2005².

According to the Directive the Member States have to define the annual top emission of the industries, which are subjects of the Directive. The emission allocation is divided between the polluters. The national allocation plan should contain the maximum amount of the overall emissions and the distribution of the emission units. The polluters have to transmit emission units to

the state and they are entitled to sell the remaining units freely. In case if they did not use their whole units, they can sell it in the EU or they can reserve it.

The basis of the system is the emission unit, which is a marketable financial assets and it enables to emit one tonne of carbon dioxide within a specified time limit³.

The Directive includes the following requirements:

- the emission unit entitles the polluter to emit one tonne of carbon dioxide
- it is valid for a specified period of time
- it can be used only as a compensation after the emission
- it can be sold to everybody
- it is a financial asset
- the mutual recognition of the emission unit between the Member States

According to the Directive the Member States have to establish the registry system, which is public and it registers the sales of the units and the owners.

The system includes sanction for the breach of the rules. If an operator does not fulfill its obligations, than it has to pay a fine and in case of a repeated breach the Environmental Protection Agency has the right to limit, suspend or withdrawn the permission. Furthermore if the polluter does not fulfill its obligation to notify or register, the polluter can sell its emission units till it will fulfill its obligation.

Three phases can be distinguish since the operation of the cap-and trade system:⁴

Phase 1: 2005-2007:

The phase one was a three years long pilot period aiming to prepare for phase two, when the EU ETS would need to

¹ Fodor László: A kibocsátási egységek kereskedelmi rendszerének bevezetése Magyarországon: Sectio Juridica et Politica, Tomus XXV/ 1. Miskolc, 2007 p. 293-296.

² The Sixth Community Environment Action Programme confirmed a 8 % cut during the period of 2008 and 2020.

³ Ludwig Krämer: Az Európai Unió környezetjoga, Dialóg-Campus Kiadó, Budapest- Pécs, 2012. p. 5-65.

⁴ EU ETS 2005-2012 http://ec.europa.eu/clima/policies/ets/pre2013/index_en.htm (5.1.2016.)

function effectively to help ensure the EU and Member States met their Kyoto Protocol emission targets. During these years the infrastructure of the trading system was established. It is important to emphasize that during the phase one the system was based on conceptions, because of the lack of factual informations.

Phase 2: 2008-2012:

In 2008 the EFTA States joined the EU's system and the scope of the system was widened through the inclusion of nitrous oxide emissions from the production of nitric acid. The penalty for the exceedings was increased to 100€ per tonne. During this phase several auctions were held by the Member States. The phase two coincided with the first commitment period of the Kyoto Protocol. The global financial crisis had impact on the emission trading too, because it led to larger and growing surplus and affected the price of the carbon heavily.

Phase 3: 2013-2020⁵

Because of the financial crisis short- and long-term measures were introduced by the European Commission. The reason of these measures was that the financial crisis affected the emission trading scheme worst than expected. The surplus build-up slowed down from 2014 and the long term aim of the phase three is to achieve that the number of the emission units should not decline significantly. The short term aim is to stabilize the operation of the carbon market. As a short-term measure the Commission postponed the auctioning of 900 million allowances until 2019-2020.

The auction volume is reduced by

- 400 million allowances in 2014
- 300 million in 2015
- 200 million in 2016.

As a long term solution a market stability reserve will be introduced and its aim to address the market imbalance. The system will be operated from 1. January 2019. The postponed 900 million allowances will be disposed in the Market stability reserve and if the surplus will reach a certain threshold, than these surplus will be transferred automatically to this system. An other aim of the reserve is to achieve a faster reduction of the annual emissions cap.

Phase 4: 2021-2030⁶

The European Commission presented in July 2015 a legislative proposal to revise the EU emissions trading system for the period after 2020. To be able to achieve the EU's target: the 40 % cut in the emission, from 2020 the EU has to reduce its emission annually by 2.2 % (currently this rate is 1.74 %). The proposal contains a more predictable, robust and fair rules to address the risk of carbon leakage⁷. According to the expectations 6.3 billion allowances will be allocated for free to companies over the period 2021-2030. The proposal contains several support mechanisms, targeting to help the industry and the power sectors meet the innovation and investment challenges of the transition to a low-carbon economy. Two new funds will be established:

- Innovation Fund – extending existing support for the demonstration of innovative technologies to breakthrough innovation in industry

⁵ http://ec.europa.eu/clima/policies/ets/reform/index_en.htm (5.1.2016.).

⁶ http://ec.europa.eu/clima/policies/ets/revision/index_en.htm (7.1.2016.).

⁷ Carbon leakage is the term often used to describe the situation that may occur if, for reasons of costs related to climate policies, businesses were to transfer production to other countries which have laxer constraints on greenhouse gas emissions.

- Modernisation Fund – facilitating investments in modernising the power sector and wider energy systems and boosting energy efficiency in 10 lower-income Member States

3. The impact of the EU's regulation

It has been a decade since the European Union started its own emission trading scheme. The EU's system provided an example for the world and several other countries developed its own trading system on the basis of the EU's system. At present there are several cap-and trade systems and the level of the CO₂ emission is increasingly reduced. The following examples will show what kind of effect played the EU's cap-and trade system around the world.

Switzerland introduced its cap-and trade system in 2008, in the first 5 years the accession to the system was voluntary and the accession was an alternative option instead of paying taxes for carbon dioxide. But from 1 January 2013 the accession to the system is compulsory for the energy-intensive industries and the medium size companies have the opportunity to join the system. For the period between 2013-2020 the participants are released from the obligation to pay taxes relating to the emission. Currently Switzerland conducts negotiations with the EU about the possible connection between the two systems⁸.

The first emission trading scheme in China was established in 2013 in Shenzhen city. This city is the first special economic zone in China. Between 2013-2015 this emission trading system had 635 participants. In 2012 (before the system was established) the first law was adopted

relating to the emission trading. After this several emission trading systems were established in different cities for example in 2013 in Beijing and in Shanghai.

In North-America the first regional initiative for limiting greenhouse gas emissions began in 2007 and as a result of this the first emission trading scheme⁹ was established. From 2015 the aim of the system is to reduce the emission with annually 2,5 %, and from 2018 with 10%.

In California the emission trading system came into effect in 2013 and currently the second trading period takes place (2015-2017). The system contributes that the state could achieve 80% emission cut between 1990-2050.

It is clear from the aforementioned examples and dates that the EU and its 28 Member States and the 3 EFTA States are at the forefront in this field and they have a decade of benefits in this field compared to other countries around the world.

4. The Paris Climate Conference

The COP 21, also known as the 2015 Paris Climate Conference took place between the 30 November and 11 December 2015 in Paris. The aim of the UN's negotiations was to achieve a legally binding and universal agreement on climate, with the aim of keeping global warming below 2 C and to discuss economical, financial and environmental protection aspects. The 195 countries adopted the first-ever universal, legally binding global climate deal and accepted full responsibility to limit global warming to well below 2 C and to limit the increase to 1.5 C because this would significantly reduce risks and the impacts of climate change. The agreement will enter

⁸ The basis of the negotiations is that the Swiss system is based on the EU's cap-and trade system and a substantial part of the Swiss system was established so that it can fit to the EU's system.

⁹ The system operates in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island and in Vermont.

into force in 2020¹⁰. In order to achieve this aim from 2023 the countries come together every 5 years to review the set goals. The Paris Climate Deal contains a long term goal, namely from 2050 the CO₂ emissions need to get to zero, with other words the long term goal of the deal is to achieve carbon neutrality.¹¹ Towards to achieve these set goals it is obvious that there is need for a huge amount of money. The developed countries will continue to support the developing countries to reduce their emissions and to this the developed countries intend to mobilise USD 100 billion per year until 2025. The Paris Climate Deal opens a new chapter in the use of renewable energy. According to the concept from 2050 the renewable energy sources will cover the energy demand of the humanity¹².

It is clear, that the Climate deal will influence the emissions trading scheme too, but there are no informations according to that connection yet.

5. Problems relating to the emission trading schemes

The developed emission trading systems raise several regulatory problems. The formation of the system got several critics worldwide and the literature discovered other problems too. One of these problems is the allocation of the rights. From the point of view of the operating of the system it makes no difference how the rights will be allocated but the allocation is a very important thing for the participants. Each participant is interested in getting as many rights as they can get. Hereby they can reduce their costs and get more incomes from the selling of the rights. The developing countries can get resources and

these plus incomes can be spent to develop the country.

The theory distinguished ten allocation principles¹³:

- The horizontal allocation allocates the pollution rights in order to achieve that the net costs of the pollution reduction should be equal to GDP ratio between the countries.

- The vertical allocation allocates the pollution right in a progressive way, namely the net pollution costs should be directly proportional to the GDP per capita indicators.

- The principle of the ability to pay allocates the gross costs on the ground of GDP indicators.

- According to the principle of sovereignty the rights should be allocated on the ground of the amount of emission.

- The egalitarian principle allocates the pollution rights between the countries on the ground of the ratio of population.

- According to the market principle the pollution rights should be auctioned and those will receive the rights, who pays the most for them.

- The allocation of the pollution rights should depend on political agreements according to the consensual principle.

- According to the compensation principle the countries, which suffered economical losses after the allocation should get compensation.

- The Rawls's principle means the maximization of the net advantages of the poorest countries.

- An environmental protectional aspect emphasizes the protection of the environment and according to this it limits the allocation of the pollution rights.

An other problem is the question of the complementarity and the compulsory

¹⁰ http://ec.europa.eu/clima/policies/international/negotiations/paris/index_en.htm (20. 1.2016)

¹¹ <http://www.carbonbrief.org/explainer-the-long-term-goal-of-the-paris-climate-deal> (5. 1.2016.)

¹² http://europapont.blog.hu/2015/12/16/parizsi_klimacsucs (5. 1.2016.)

¹³ Adam Rose: Equiti considerations of tradeable carbon emission entitlements, UNCTAD 1992. In.: Kiss (2005.): p.188.

membership. The system does not cover the low-value and diffuse polluters (transportation, households, services). If the system applies wide-ranging exemptions and reductions in that case the system won't be effective. It is important to apply the system in wider-range. It is clear, that the emission trading system is a supplement to the system of energy taxation.

The influence of the climate change can be effective if the greenhouse gas emission reduces continually. To achieve this annually fewer and fewer rights will be allocated and this effects the market of pollution rights significantly¹⁴.

A lot of criticism was voiced concerning the income from the sale of the pollutin rights. Besides of the free allocation of rights the rest will be sold on auctions and this will result income. But the decreasing tax revenues could reduce the money for environmental protection programs.

An other question is the use of proceeds. The total proceeds of the sale of the pollution rights won't be used for environmental purposes. According the system a theoretical question arised, namely the Ambient Permit System (APS) or the Emission Permit System (EPS) should be established. The APS allocates the rights according to the receiving compartment, and the system is based on complex norms and geographical conditions. The EPS operates easier and it allocates the rights on the basis of emission sources. But this system could cause that on a smaller territory a more serious pollution can come into being while the average contamination will not change¹⁵.

Despite of the problems the literature set up the criterias for the optimal functioning of the emission trading systems. According to this the market needs for the optimal functioning a sufficient number of sellers and buyers and adequate regulations. The significant difference between cost benchmarks of reduction of pollution means problems in connection with the emission trading systems but hopefully the aforementioned Paris Climate Deal will contribute in order to solve this problem¹⁶.

6. The Hungarian regulation

The Act XV. of 2005 on the the greenhouse gas emission allowance trading scheme and the relating regulations were framed on the basis of the EU regulation¹⁷. Currently the Act CCXVII. of 2012¹⁸ regulates the emission trading system in Hungary, it came into force on 31 December 2012 and there is the Decree No. 410 of 2012 (XII. 28.) Korm. of the Government, which contains rules for the implementation of the aforementioned Act. The preamble of the Act emphasizes that the aim of the Act is to mitigate the climate change by reducing the emission of the greengouse gases and in order to achieve this aim Hungary takes part in the emission trading system of the EU. The subject of the Act is the greenhouse gas emission and the Act considers not only the CO₂ as greenhouse gas.

The operators can carry out activities, affecting the environment, if they get greenhouse gas emission permit from the

¹⁴ Kiss Károly: Zöld gazdaságpolitika, BKÁE, Budapest, 2005. p.195-196.

¹⁵ Kerekes Sándor: A környezetgazdaságtan alapjai, Budapest, 1998. www.mek.niif.hu (7. 11. 2015.) p. 103.

¹⁶ Nagy Zoltán: Környezeti adózás szabályozása a környezetpolitika rendszerében, Miskolci Egyetem, Miskolc, 2013. p.73-78.

¹⁷ Act No. XV. of 2005.Decree No. 213/2006. (X. 27.) Korm.

Fodor László: A kibocsátási egységek kereskedelmi rendszerének bevezetése Magyarországon: Sectio Juridica et Politica, Tomus XXV/ 1. Miskolc, 2007. p. 293-292.

¹⁸ Act No. CCXVII of 2012 on the participation in the scheme for greenhouse gas emission allowance trading within the Community and in the implementation of the Effort Sharing Decision.

Environmental Protection Agency¹⁹. The aim of the proceeding is to check whether the pollutant emission can be traced or not. The operator has to trace its own emission and report about it. The speciality of the permission is that it does not determine emission limit. It creates obligations for the operators to transfer back emission allowances on the basis of the amount of the annual emission.

Between 2008 and 2012 the datas of the permission served as a basis for the National Allocation Plan and Allocation List. The National Allocation Plan was the basis of the allocation of the emission allowances and the Government sets out the allocation list for trading periods²⁰.

According to the measures currently in force the National Implementation Measures contains the amount of the annually free emission allowances. The draft about that is created by the Minister and submitted for approval to the European Commission. The Measures will be published by the Government after the approval²¹. The National Allocation Table is created by the Minister on the basis of the National Implementation Measures and submitted for approval to the European Commission. After the approval of the Commission the Minister takes care about the crediting of the allowances on the operators' registry²². The Act contains further provisions for the new entrants. It defines how the new entrants can get free allowances. The new entrants have the opportunity to submit an application to the Minister in order to get free allowances. It is very important and according to the provisions of the aforementioned Act this application should be submitted after 1 year

initial operation. The application will be transmitted by the Minister to the European Commission and the Minister will decide on the basis of the Commission decision.

The emission allowance comes into being through the registration in the National Registry. The allowance is a marketable financial assets and the owner of the allowance is the Hungarian State. The National Registry is a public registry, it contains data about the allocation of allowances, trading, return and deletion of the allowances.

The owner of the allowance is the Hungarian State, but the right of the asset management belongs to the Minister responsible for energy policy. The allocation of the allowances can be free of charge and onerous. According to the Act 95 % of the allowances have been allocated free of charge during the first and second trading periods. This allocation means transfer and this means that the owner of the allowance will be the operator.

Currently there is the third trading period in Hungary and according to the Act the half of income of the sales of the allowances should be invested in measures dealing with reduction of greenhouse gas emission²³.

The operators have to return emission units to the Hungarian State on the basis of their annual emission. If the operator can not return the adequate emission unit the Act contains sanctions for this case. There are three main areas of the sanctions:

- penalty payment
- in case of repeated breach of the terms, the Authority can limit or suspend the operator's functioning

¹⁹ In Hungary this is the Országos Környezetvédelmi és Természetvédelmi Főfelügyelőség.

²⁰ Nagy Zoltán: Környezeti adózás szabályozása a környezetpolitika rendszerében, Miskolci Egyetem, Miskolc, 2013. p. 70-73.

²¹ under ss. 4 of s. 15 of Act CCXVII. of 2012.

²² under ss. 5 of s. 15 of Act CCXVII. of 2012.

²³ under ss. 1 of s. 26 of Act CCXVII. of 2012.

– or at least the Authority can withdraw the licence

After the returning the remaining emission units can be sold in the area of the European Economic Area.

7. Conclusion

The measures currently in force in Hungary are complied with the EU's Regulation. On 1 January 2012 the third trading period has began in the European Union and it has brought a number of changes. The emission trading system is centralised and there is a coherent regulatory environment at EU level concerning the system. From 4 May 2013 the Decision No 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions, Decision No 406/2009/EC of the European Parliament and of the Council on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 are in force. The 389/2013/EU Regulation allows the simplification of the national regulation²⁴.

Currently several implementing measures are regulated at government regulation level. Its relevance is that this

government regulation could insure a coherent regulation on this field.

According to an impact assessment of 2013 it is clear that the new Act brings several administrative burden and obligations of notify for the operators. According to the EU ETS Directive the Member States are obligated to sell their allowances not allocated free of charge on auction. The amount of tradeable allowances on auction are specified by the Commission. The amount of allowances free of charge are reduced annually and therefore the amount of transferable allowances are increased. Since the amount of greenhouse gas units will grow, this would mean a certain and continuous income for the central State budget. The impact assessment highlights that the competitiveness of a country can be deteriorated or improved by the emission trading system and this factor will be influenced by the quotas' market price. Furthermore the currently regulation influences the reduction of the greenhouse gas emission and this is a definitely positive environmental impact. Hungary is part of the EU ETS system and so Hungary contributes to achieve the EU's climate policy.

Currently the EU has its third trading period. The phase 4 will begin from 2021 and the Paris Climate Deal will enter into force in 2020, so the outcomes of the future will give several opportunity for further research in this field.

References

- Act No. CCXVII of 2012 on the participation in the scheme for greenhouse gas emission allowance trading within the Community and in the implementation of the Effort Sharing Decision;
- Act No. XV. of 2005;
- Adam Rose: Equiti considerations of tradeable carbon emission entitlements, UNCTAD 1992. In.: Kiss (2005.): p.188;
- Decree No. 213/2006. (X. 27.) Korm;

²⁴ <http://www.parlament.hu/irom39/12973/12973.pdf> (18.12.2015.).

- EU ETS 2005-2012 http://ec.europa.eu/clima/policies/ets/pre2013/index_en.htm (5.1.2016.);
- Fodor László: A kibocsátási egységek kereskedelmi rendszerének bevezetése Magyarországon: Sectio Juridica et Politica, Tomus XXV/ 1. Miskolc, 2007 p. 293-296;
- Fodor László: A kibocsátási egységek kereskedelmi rendszerének bevezetése Magyarországon: Sectio Juridica et Politica, Tomus XXV/ 1. Miskolc, 2007. p. 293-292;
- http://ec.europa.eu/clima/policies/ets/reform/index_en.htm (5.1.2016.);
- http://ec.europa.eu/clima/policies/ets/revision/index_en.htm (7.1.2016.);
- http://ec.europa.eu/clima/policies/international/negotiations/paris/index_en.htm (20. 1.2016);
- http://europapont.blog.hu/2015/12/16/parizsi_klimacsucs (5. 1.2016.);
- <http://www.carbonbrief.org/explainer-the-long-term-goal-of-the-paris-climate-deal> (5. 1.2016.);
- <http://www.parlament.hu/irom39/12973/12973.pdf> (18.12.2015.);
- Kerekes Sándor: A környezetgazdaságtan alapjai, Budapest, 1998. www.mek.niif.hu (7. 11. 2015.) p. 102;
- Kiss Károly: Zöld gazdaságpolitika, BKÁE, Budapest, 2005. p. 181-197;
- Ludwig Krämer: Az Európai Unió környezetjoga, Dialóg-Campus Kiadó, Budapest-Pécs, 2012. p. 5-65;
- Nagy Zoltán: Környezeti adózás szabályozása a környezetpolitika rendszerében, Miskolci Egyetem, Miskolc, 2013. p.73-78;