Cap and trade policy economics essay

The aim of this paper is to take a deeper look into the functioning of the European Unions emission trading system with the emphasis on economic and political facts and by analizing major problematic issues linked to it. The paper's research question is focusing on the possible ways of amelioration of effectiveness of the European Union's present-day emission trading system. So that " Which areas of the European Union's emission trading system are appearing to be the most problematic and hindering ones?". In this paper I am attempting to review both basic facts and problematic issues in order to conclude in a reasonable overview.

1. 2. Introduction

Today the European Union is one of the most environmental conscious actors on the international stage. By it's cap-and-trade policy, which has reached serious CO_2 and greenhouse gas emission reductions in most of the member states throughout the previous years, it has risen to be one of the most successful emission regulators. In both Phase I (January 2005-December 2007) and Phase II (January 2008 – December 2012) there have been serious carbon emission reductions in the European Union's area. In Phase I. only on the lower prise of 40 euros per tonne of carbon gases, and in Phase II. on the higher price of 100 euros per tonne.[1]By giving a price to carbon emissions (tCO_2e) the governments since the Kyoto Protocol (1997) are able to check their emissions and air pollution even on the balance sheet. Nonetheless, giving a price to emissions is also helping to give air pollution a kind of " value" and also interest in the reduction of it.

Nevertheless, there are still major unsolved and doubted issues on today's Phase II.'s effectiveness and on the future success of Phase III. being launched in the very beginning of 2013. These doubts are created by serious problems within the European Union's cap-and-trade policy, and the problems are mostly depending on wrong economic models and practices used, moreover on the lack of monitoring of the emission trading market. Basically it is the European Commission, monitoring all emission credit trading processes is attempting to ensure all member states, that all transfers are legal and that there are no abuses on the European carbon trading markets.

1. 3. Arguements on the Europen Union's carbon trading scheme

As having a classical cap-and-trade system, the European Union is basically focusing on the reduction of CO2 and greenhouse gas emissions. Most likely by its cap-and trade policy now affecting about 45% of CO2 and less than 40% of greenhouse gas emissions of the European Union. Within the CAT transportation, agriculture and public services are not included, yet. And most possibly will not be included in the near future.[2]The system of carbon trading is quite simple. Installations are receiving emission credits -where 1 credit is equal to 1 metric-tone of CO2 – from their member state's government. If the installations run out of their emission credits, they can purchase it from other governments of companies. On the contrary, if they have more emission credits than as much they need, they can sell their credits for other installations. By buying emission credits, the installations are trying to reduce their ecological footprint, however this is only a theoretical reduction and not a real one. The stock exchange of carbon credits is a system where these credits can be sold privately or on the international market on a market price. By giving a market price to carbon credits, the sellings and buyings can appear on the balance sheet. Right now it is highly critisised that the European Union's emission trading system gives a price to CO2 and greenhouse gases making it a simple matter of economic interest instead of giving to it an environmental emphasis.[3]

The European Union's energy policy is now focusing on the major issues of climate change, global warning and higher energy prices. Its objective is to eliminate CO2 and greenhouse gas emissions in order to reduce the possibility of temperature rise above 2 C.[4]However, this aim of reducing the possibility of temperature rise seems more or less an impossible mission as the European Union is not the only polluter of air in the world. China and the United States of America mean a very serious threatment of emissions – the USA haven't even ratified the Kyoto Protocol in 1997 – and so the reduction of European CO2 and greenhouse gas emissions seems more to be like " pouring water into a leaky bucket", making it very difficult for the European Union to work for a cleaner environment.

Looking further, by the Action Plan, the European Union is now willing to eliminate even more its emissions. The objective is to reduce today's greenhouse gas emissions by 30 % by 2020 throughout its new strategy within the Energy Policy.[5]After the crisis of 2008 in my opinion such serious and enormous objectives can be reached on a very hard way or cannot be reached at all, as right now the economic development is much more important for the member states than the cut of further emissions.

The European Union has a " tradition" using economic instruments to treat external costs as inner ones in order to prepare the market to answer with limited costs. So, in the future the emission trading system of the European Union remains a crucial part within the Energy Policy as it is highly contributing to stimulate chnages in the usage and generation of energy.[6]As a single economic explanation, we can state that in general in a small open market[7]firms are looking for the minimalisation of their costs throughout production. In a market like this, emission taxes or other regulations like emission intensity restrictions are forcing firms to pollute by counting and paying the fee per unit or purchase pollution rights. By this practice the government's target of emission can be realizable.[8]

The European Union's green taxation, or so-called Pigou taxation process is the most market-friendly way in order to eliminate the member states' CO2 and greenhouse gas emissions. As I have mentioned it earlier, it is crucial to internalize externalities to solve major market failures. The Pigou tax[9]serves as a main external cost integrated into market prices.[10]

Main advantages of the carbon taxation are:

1. Average price for all member states, helping firms to fix their prices of emission

2. Giving a price for emissions develops low-emission technologies

3. Carbon taxation can seriously eliminate emissions by supporting shift towards greener technologies

Main disadvantages of the carbon taxation are:

1. Carbon taxation makes it difficult to follow emission reductions

2. Carbon taxes can generate high administartive and implementational costs.[11]

It is very important to highlight, that carbon taxation and the selling of carbon credits are not equal. they are both forming an important role within the reduction of emission, however the cap-and-trade system of the European Union is using carbon credits since the Kyoto protocol in 1997. Taxes can be set by the governments and so they can regulate taxes by their preferences and needs and so it is very difficult to get a clear picture of carbon reductions. Nevertheless carbon creditscannot be regulated on such a strick way like taxes and so emission trading is able to become a single market operation.

OECD in its paper, called …… is focusing ont he combination of …..

Combining cap-and-trade policies with other instruments and policy fields could seem as a solution in order to achieve additional serious emission reductions. On the contrary, this would result in increase of emisssions from the other given areas, too. Moreover, within cap-and-trade policy more sources would be availabe for further emissions. So, when a cap-and-trade system comes to life, the combination of this policy with other instruments is useless, as further reductions in the emission of CO2 and greenhouse gases will not occur.[12]

A very well designed cap-and-trade system could solve both environmental and economic problems within the member states of the European Union.

Nevertheless, as a major mistake, those policy makers of the member states combining emission trading policies with other instruments in order to reduce costs and emission, may concentrate too much on today's environmental outcomes, without focusing on future reductions.[13]

It is very important to note, that the European Union had a significant role in the set up of both the Kyoto Protocol and the Rio+20 Conference. At Kyoto, the member states have agreed to cut their emissions with comparing to the 1990 levels by 2012.[14]These are also representing the environmental consciousness of the European Union which is ready to eliminate emissions by signing international environmental treaties. However, sadly in practice the European union's cap-and-trade practice.

State intervention is a major problem.

Basicly those are the governments getting the possibility to mandate end-of-pipe technologies in order to help the reduction of the cost of the emission reduction processes. Nevertheless, this method has a lack of information towards the states, and additionally the intake of new technologies can be super expensive for firms and enterprises. Moreover, many times the state enforces the adaption of low-cost emission technologies even if those are found too pricy by the enterprises. As the price of the shift to the new technologies, it would be more pricy than profitable, the firms are counting competitveness and would deny to use the technologies. However, in this case innovation is found much more important, than competitiveness for the state.[15]

1. 4. Conclusion

„ Unfortunately, the European emissions trading scheme designed to help member states meet their commitments turned out to be a washout."[16]

So far, it is clear that the European Union is exporting Co2 and greenhouse gases and importing land and water. We are consuming much more, than what we have and this results in mass pollution of the entire environment. Most possibly we are already late in order to prevent the effects of climate-change within the European Union, and emission trading policies, especially in this form, where member states can easily trade their emission rights will not be enough effective. There shouldn't be hesitation within the decision making forums about the reform of the European Union's cap-and-trade policy, as in this form it is untenable.

összefoglalás a problémáknak

christina – kritikusan, saját vélemény indoklással