Kai Schlegelmilch and Maike Bunse
ECOLOGICAL TAX REFORM AND EMISSIONS TRADING – CAN THEY WORK TOGETHER?

Alexanderplatz 6, 10178 Berlin, Germany
Phone: +49 (0) 3018-305-3664, Fax: + 49 (0) 3018-305-2349, E-mail: kai.schlegelmilch@bmu.bund.de
M: Bunse, Wuppertal Institute for Climate, Environment and Energy
Döppersberg 19, 42103 Wuppertal, Germany, E-mail: maike.bunse@wupperinst.org

Overview
Industrialised countries are using more natural resources than the earth can provide in the long run. Fossil energies are scarce and limited. At the same time the emission of greenhouse gases into the atmosphere, causing climate change, is increasing. A promising way of tackling these global challenges is the implementation of economic instruments that increase the price of conventional energy and give incentives for economising and rationalising the use of energy and switching over to renewable energies.

One important economic instrument of such a manner is the German Eco Tax in the context of the Ecological Tax Reform (ETR), introduced in 1999 and further developed until 2003. The ETR increases the taxes on energy and at the same time lowers non-wage labour costs in order to stimulate employment. The European Emissions Trading Scheme (EU ETS), started in the beginning of 2005, introduced another important economic instrument to tackle climate change. Energy-intensive industry and utilities have to have allowances for CO₂-emissions. For compliance with reduction targets either reducing own emissions or buying allowances on the market is necessary.

As both instruments address industry, a discussion emerged on how this ‘double burden’ for industry could be removed. Suggestions ranged from generous exemptions for industry either in the system of the Ecological Tax Reform or the Emissions Trading to a complete disposal of the Eco Tax.

This paper will show that the Ecological Tax Reform and the Emissions Trading Scheme are not causing a double burden for industry, that they are complementary instruments and that both can work purposefully side by side.

Methods
In a detailed analysis the essential elements of the Emissions Trading and the Eco Tax will be compared. This includes an in-depth study of targets, design, sectoral economic, social and ecological effects, administrational expenses, financial streams and social acceptance.

Results
The Eco Tax aims to change the use of fossil fuels and to reduce non-wage labour costs and thus create jobs, whereas the EU ETS’ target is to support EU member states in achieving their emissions reduction commitments under the Kyoto Protocol agreement.

In the run of the Ecological Tax Reform the mineral oil tax and the electricity tax were successively increased every year until 2003. The tax revenue is returned to the taxpayers by using the money to lower retirement benefit deductions. To prevent German industry from competitive disadvantages and for ecological and social reasons there are some reduced rates and exemptions, especially for the manufacturing sector. The EU ETS concentrates on the reduction of CO₂-emissions in the power generating sector and the energy-intensive industry. The initial issuance of allowances was allocated free of charge for participating companies and there are some exemptions in reduction requirements, containing special regulation for ‘early action’, newcomers and replacements.
The Ecological Tax Reform is not only linked with ecological but first of all with fiscal interests of the government – this is very likely the major reason why the ETR continues to exist also after the recent change of government. The Eco Tax has a broad tax basis, namely the energy use in companies, trade, transport and households. Financial streams of the EU ETS are to be found only between the participants of the carbon market.

Besides, the electricity tax is collected from the final provider of electricity, whereas the emissions trading directly affects the power plants, thus there are two different stakeholders. However, a theoretical ideal way to absolutely exclude any double regulation would be to earmark the electricity generated in power plants which are obliged to own allowances, e.g. on a parallel paper that would accompany the physical flow of electricity and which the final provider of electricity could then use to deduct a certain amount from his electricity tax burden. Administrative costs might still be substantial.

**Conclusions**

The Ecological Tax Reform does not only pursue an environmental agenda but is linked to the relief of labour costs and constitutes an important source of revenue for the government, whereas the EU ETS is mainly used to achieve climate political goals. The burden of the Eco Tax is broad and includes industry, transport, trade and households. Participants of the EU ETS are only the power generation sector and energy-intensive industry. The former is hardly subject of the Eco Tax and the latter only with very much reduced rates. Furthermore, even if emission reductions are due to incentives provided by the ETR they allow companies to now sell the superfluous allowances and thus benefit from the incentives of the ETR and in addition of the market opportunity of the ETS.

Hence, there is no reason for substantial changes or even abolishment of either instrument. Concluding, the question of this paper can be answered by confirming that Ecological Tax Reform and Emissions Trading can work very well together.

**References**


