

# ENVIRONMENTAL TAX REFORM IN THE CZECH REPUBLIC

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## 1. Introduction

The principle of environmental tax reform is becoming well known not only in theory but also in practice. It consists in implementation of excise duties for scarce goods damaging the environment (in practice mostly on solid fuels, electricity, mineral fuels). Because the environmental tax reform is based on fiscal neutrality, the increased tax burden is compensated through lowering of direct labour taxes or social security contributions.

The concept of the environmental tax reform has been adopted in practice first in the first part of 1990s by Sweden, Denmark, Norway, Finland and the Netherlands and in the second part of 1990s by United Kingdom and Germany. Later they were followed by some other countries, including those from Central and Eastern Europe. For more details about introducing environmental tax reform in Europe see EEA (1996), Speck (2007), COMETR (2007), DRESNER et al 2006), DUHA (2008). Introducing the environmental tax reform in the Czech Republic is discussed in this paper. The special focus is put on its historical consequences and its impacts on the current development. For this reason it is being discussed together with other economic tools of environmental policy, namely environmental charges. It also presents results of the qualitative research conducted within the project „Resource productivity, environmental tax reform and sustainable growth in Europe“ (PETRe) supported by the Anglo – German Foundation.

## 2. Facts of environmental taxes and environmental tax reform in the Czech Republic

Using economic instruments of environmental policy has had a long tradition in the Czech Republic. Pollution charges have been gradually introduced since the 1960s. Air emission charges were levied first in 1967. Charges for effluent wastewater into surface waters were instituted in 1979. Both internalization of external economic damage from environmental degradation and the trial-and-error idea were considered as theoretical bases for setting the rates of the charges. However, in the centrally planned economy they could play only a less important role in the decision-making process of the key economic subjects.

The current system of the environmental policy instruments was introduced in the early 1990s during the process of establishing the new national environmental policy and legislation. The system of environmental charges consists of air emission charges, sewage charges, water pollution charges, charges on municipal waste, charges on solid waste disposal, water extraction charges, charges for dispossession of agricultural and forest land, and mining charges.

Environmental taxes started to be discussed in the first half of the 1990s. It was within the process of transition to a market economy, when the changes to the entire tax system provided space for introducing new kind of taxes. The act on public finance reform, which entered into force in 1993, provided a concrete scope for environmental taxes introduction – a specific paragraph was introduced to the tax act, but was not used in practice.

The latter half of the 1990s was characterized by the intellectual shift from environmental taxes to environmental tax reform. The concept of the environmental taxes started to be perceived in a context of labour taxation lowering. This stage of the environmental tax reform preparation in the Czech Republic is connected with first calculation studies of potential environmental tax reform impacts. In those days, environmental tax reform became – with a certain degree of generalization – regarded as a really strong instrument in the environmental field especially among politicians and experts, namely those from the Ministry of the Environment. From the theoretical point of view, this period of the environmental tax reform debate was mostly based on the idea of the Pigouvian taxation and internalization of externalities, but the potential for revenue generation was also discussed.

The practical concepts (i.e. concrete policy drafts) on the environmental tax reform were developed several times since the year 2000. It mostly did not pass the political process and no one was implemented in practice. Only the Public Finance Reform in 2006 has introduced a significant increase in excise duty rates on motor fuels (e.g., 0.42 - 0.49 Euro/l for petrol, 0.14 Euro/l for diesel oil, and 0.12 Euro/l for LPG) and simultaneously a decrease in income tax from 31% to 24%.

The latest events on environmental tax reform implementation in the Czech Republic have been driven by the EC Directive No. 2003/96, because the exemption for the Czech Republic expired at the end of 2007. This was the main reason for the necessity to implement it at least at its minimal rates since January 1, 2008. This implementation is called “Phase I of environmental tax reform”. Phase II is currently being prepared and is supposed to be introduced since 2010. Phase III is planned to be introduced since 2012.

According to the Phase I, solid fossil fuels are charged 0.3 Euro/GJ. This will trigger a rise in the price of solid fuels for households by approximately 10%. Natural gas is taxed by 1.1 Euro/MWh. Electricity is taxed by 1 Euro/MWh, which is supposed to cause approximately 1% increase in the household electricity prices. Electricity generated from renewable sources is exempted from the taxation. There are several other exceptions from the taxing: household heating with natural gas, district heating, if the heat is generated from combined heat and power technology, power and heat from renewable energy sources, methane and nitrogen fuel cells, compressed natural gas in vehicles, electricity used in rail and traffic, and coal used for production of electricity.

Originally, the Czech environmental tax reform introduced in January 2008 aimed to be revenue-neutral as the social security contributions should have been lowered. It was planned that the government would decide in mid 2008 on how much lower the social contribution should be in connection to the environmental taxes revenues.

However, the fiscal neutrality was declared by the government to be implemented already in the environmental taxes introduction phase, when the income tax was lowered and VAT was increased by the same law and at the same time that the environmental taxes were introduced. In the second stage, the overall social contribution paid by employers and employees has been 1.5% lower since 2009, which causes a decrease in the governmental revenues of CZK 11 billion. The overall revenues from the 2008 environmental taxes are less than CZK 3 billion.

### 3. Results of the qualitative research

The methodology of the qualitative research was used for the analysis of the environmental tax reform preparation and implementation in the Czech Republic. The aim of the study was to come up with the explanation of the behaviour of the particular stakeholders in the environmental taxes and environmental tax reform agenda. Thus the study simultaneously focused on various aspects of environmental tax reform besides the identification of the practical barriers and obstacles to environmental tax reform implementation in the Czech Republic.

The questionnaires were designed for semi-structured interviews with open questions and it was progressively amended, based on the previous interviews. Interviews were conducted with a total of 25 subjects. Six of them were government representatives; six were representatives of key relevant businesses; other six were from SME, three were NGOs representatives; one was a representative of labour unions; and two were academic consultants. Some of the key stakeholders were interviewed several times in longer time horizon and thus in different political constancy and different environmental tax reform implementation stages, so that the mental shift could be reflected in the research results.

The environmental tax reform is being introduced in the Czech Republic within the long historic tradition of application of economic and other environmental policy tools. In particular, the pollution charges and subsidies from the State Environmental Fund have to be taken into account in this respect.

The principle of the real environmental tax reform is virtually not known to the Czech stakeholders. The exceptions are those who take part in its preparation. The NGO Hnutí Duha is virtually the only one to publicly promote the real vision of the environmental tax reform: among other things, they have developed a comprehensible booklet distributed among the expert public, in which its suggestions for an environmental tax reform go way beyond the official materials developed by the relevant ministries (DUHA 2008). Virtually all stakeholders (including the state administration) thus continue to understand the environmental tax reform as introduction of (additional) environmental taxes or charges with the purpose of obtaining additional revenues to fund environmental improvement measures. That idea has wider support by most stakeholders than recycling the revenues in the form of reduced tax burden on labour. Even after they learnt about the double dividend hypothesis during the interviews, the respondents largely failed to identify with it. Instead, they were considering various models for recycling the environmental taxes revenues to promote environmental protection. Some stakeholders understand the point of the environmental tax reform to be an attempt to motivate the affected entities (taxpayers) to conserve energies, but that understanding is rather rare.

The key to understand the position of the state administration is the issue of differential distribution of revenues from pollution charges and from environmental taxes. The charge revenues go in part to the State Environmental Fund (SEF) under the jurisdiction of the MoE, intended to fund environmental protection projects, while environmental tax revenues go to the state budget under the Ministry of Finance. This fact is crucial for understanding the acting of the MoE, which is in charge of the environmental tax reform development and design.

The threat of the SEF losing incomes results in the MoE shifting from the initially declared support to the environmental tax reform towards advocating the previous system of charges going to the SEF, used among other things to co-fund EU environmental protection projects.

These facts provide a nearly perfect explanation for the design of the currently partly implemented Phase II, where the initially planned transformation of air emission charges into environmental (carbon) taxes was totally abandoned. The MoE policy, currently referred to as Phase II, concentrates on two areas that are the main sources of air quality problems in the Czech Republic. These are the preparation of the new Air Protection Act (Czech Republic exceeds standards of the NO<sub>x</sub>, SO<sub>2</sub>, VOC, particulates on the majority of its territory and for this reason propose increase of the emission charges e.g. for NO<sub>x</sub> nearly 100 times), and a mix of instruments aimed at regulation in transportation. Phase II does not include augmented taxes for fossil fuel use. The greenhouse gas area is largely understood in a way that it covers major polluters with EU ETS and expects an incentive from the EU for minor ones (amended Regulation 2003/96EC, where the MoE expects higher charges). Not increasing the CO<sub>2</sub> emission tax rate in MoE's own initiative is one of the few areas where there is an agreement in interests with the other stakeholders concerning the environmental tax reform.

The focus of Phase II on local priorities in air protection in the Czech Republic receives more understanding among businesses (than merely charging CO<sub>2</sub>); environmental groups see it as insufficient. Generally, stakeholders interviewed show scepticism towards the MoE policy and lack of trust in the environmental taxes revenues being recycled in the form of reduced other taxes (despite the fact that this has essentially happened). It is clear from these expressed opinions that the entities do not perceive the introduction of new environmental taxes and reduced income tax (along with higher VAT) as a tax-neutral change. The same very probably also applies to the second stage of the recycling – the reduced social contribution by 1.5% as of January 2009. These findings confirm our previous findings: the stakeholders' generally very low level of information about the MoE intentions and implemented measures, or a generally inadequate communication of the environmental tax reform to the stakeholders. Generally speaking, the MoE policy aimed at the country's environmental problems is perceived better than its policy aimed at regulation of greenhouse gas emissions.

The term environmental tax reform itself seems inadequate for the understanding of the concept; there was a problem with the term ‘environmental tax reform’ as such, as it does not quite capture the essence of the changes in the Czech Republic.

Businesses frequently mentioned benchmarking – let ones who pollute less pay less – and the necessity to consider innovation cycles (in the power industry particularly). It shows that businesses are well aware of the potential impacts of the environmental tax reform on themselves. At the same time, the interviews show that sectors most affected by the environmental tax reform (in case exemptions are cancelled, e.g. power industry and metallurgy) have a relative low proportion of labour costs to energy consumption, so that the environmental tax reform would not be cost-neutral to them. It also shows that the industry rather accepts administrative tools, which do not take resources away from the companies, thus making room for generating cash reserves for future innovation.

Based on the findings, we can also say that there is room in the Czech Republic for developing voluntary agreements on environmental protection, where industries offer to implement innovations leading to improved energy balance and thus reduced pollution in return for less tax/charge burden. As part of the interviews, the businesses discussed various tax suspension concepts in the event of innovation, tax distribution to state-run funds for subsequent corporate investment, etc. These concepts are currently partially applied in the amended Air Protection Act, whereby companies may report tax allowances if they invest in the environment. The MoE is not against discussion leading to voluntary agreements on environmental protection.

It has also been shown that the low environmental taxes practically does not stimulate businesses to environmental innovation, or at least not so in the short run. Based on the survey, we can formulate a hypothesis that if the environmental tax reform has a potential to affect the regulated entities in a desirable way, then it is via expectations of charges being increased rather than the existing charges as such (“soft effects”). The businesses said that their big uncertainty about future prices of energy sources leads to the temporizing of the costly innovations.

The various stakeholders also showed concerns about the competitiveness of the European economy burdened – in the international context – with excessive environmental regulation.

An environmental tax reform imposed from outside (the EU) contributes to the death (subduing) of original ideas developed in the Czech Republic in the 1990s. It is a question with no reliable answers whether the Czech environmental tax reform would have been introduced in a more ambitious form or not at all. The fact remains that for stakeholders who do not want an environmental tax reform, the existing environmental tax reform with next-to-zero charges is as argument against further MoE ambitions in the environmental tax reform field. Theoretically, it does not prevent more ambitious designs, but the analysis of positions of the various key stakeholders shows that the existing environmental tax reform is a strong counter-argument for the opponents. The environmental tax reform, arriving from the EU (and concerning exclusively CO<sub>2</sub>) thus essentially precludes the comprehensive environmental policy that has been developing so far.

#### **4. Conclusions**

To sum up the findings about the Czech environmental tax reform, it can be said that its concept is not very well known even to its principal stakeholders. The reason is the little promotion: the absence of explanatory campaigns.

The support to dealing only with existing local environmental problems and the opposition to introducing an environmental tax reform aimed at combating climate change connected with consistent revenue recycling points at a certain short-sightedness, cause probably largely by the lack of awareness of the risks as well as advantages of the environmental tax reform approach where the revenues are fully recycled. It is here that foreign experience in terms of evaluating the environmental tax reform impacts on economies and environment may play a key role in the promotion and implementation of the Czech environmental tax reform.

And also, further increases of the CO<sub>2</sub> tax rates in the Czech Republic should be preceded by a quantification of its impacts on the Czech economy using e.g. CGE or the E3ME model, or other techniques.

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