

## Розділ 1

### Економіка природокористування і еколого-економічні проблеми

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#### **Environmental Tax Reform in the Czech Republic: Results of a Qualitative Survey in Businesses<sup>2</sup>**

*Environmental charges have a long tradition in the Czech Republic. Environmental tax reform (ETR) is a relatively new challenge for all key players, including businesses. The paper shows how the Czech businesses perceive problems of the ETR implementation. The survey showed that the businesses are informed about the environmental taxes and its impacts, but they are probably not familiar with the idea of the (whole) ETR. Expecting a long-term energy price growth was reflected in the business representatives' responses as more important factor for their decision-making than the ETR.*

*Keywords: environmental charges, environmental tax, environmental tax reform, environmental innovation, environmental management, industry, environmental policy*

#### **Introduction**

Environmental tax reform (ETR) is currently a widely debated topic in the environmental policy area. Its purpose is to reduce the tax burden on relatively less limited goods – human labour – on the one hand, while increasing the taxation of the relatively more limited goods – environmental quality and natural resources. In the Czech Republic, the ETR is a follow-up of a long tradition of charges<sup>3</sup> for environmental degradation. The first such charges were

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<sup>2</sup> This paper presents the results of an international project petrE (Resource Productivity, Environmental Tax Reform and Sustainable Growth in Europe), which is kindly funded by the Anglo-German Foundation (AGF), under which a qualitative research in the Czech businesses was conducted. The methodology used was discussed within the project GACR no. 402/06/0806.

<sup>3</sup> In the Czech system, charges differ from environmental taxes in that their revenues constitute specific environmental protection funds, while revenues from environmental taxes go into the state budget.

introduced in 1967 and 1979 for air and water pollution respectively. The current system of environmental charges consists of air emission charges, sewage charges, water pollution charges, charges for municipal waste, charges for solid waste disposal, water extraction charges, charges for dispossession of agricultural and forest land, and mining charges. The reforms of the 1990s opened room for discussion about the introduction of environmental taxes (ET) in connection to the substantial changes in the tax system. An article of the Tax Act allowing the introduction of environmental taxes was passed in 1993, but it was not exploited in practical policy. The possibility of ETR introduction was debated from the mid 1990s; several proposals were elaborated.

The environmental tax reform has only been implemented thanks to a proposal developed and implemented based on Directive 2003/96/EC, with the exemption for the Czech Republic expiring at the end of 2007. While other pollutants continue to be handled by means of environmental charges (in combination with other tools), the ETR has focused primarily on tackling climate change. The first phase of the ETR as implemented consists in the imposition of a solid fossil fuel tax of EUR 0.3 per GJ of gross calorific value, a natural gas tax of EUR 1.1 per MWh, and an electricity tax of EUR 1 per MWh. The reform establishes several exemptions from the taxation, the most important one being the exemption of coal for electricity generation purposes. It has been ruled that the exact model of utilising the 'recycling' revenues from these taxes will only be decided after learning the actual revenues. The second phase of the ETR is currently in preparation; it should be implemented between 2010 and 2013. The third stage (and last, according to the current design) should be prepared by the end of 2012 and implemented in the period 2014-2017. The situation is similar, yet not identical, in the other CEE countries. Poland, for instance, is to be exempted from Directive 2003/96/EC until 2010.

The objective of the paper is to demonstrate to the reader whether Czech businesses perceive any problems in relation to the ETR and what they are. We also ask how familiar businesses are with the ETR principles and objectives, how informed they are about it, what their ideas of its environmental, economic and social impacts are, how they perceive its stimulative function in terms of environmental innovation, and how they view its options for short-term and long-term integration into the other environmental policy tools. The paper is structured as follows: first a brief introduction is made of the qualitative survey conducted in the Czech Republic in 2007-2008. The principal findings are presented briefly, arranged by the survey goals. A discussion of the possible causes and broader context of the respondents' attitudes follows. The Conclusions section summarises the principal findings.

### ***ETR Survey in the Czech Republic***

In the Czech Republic, more attention has traditionally been paid to projects attempting to quantify the economic and social implications of the various ETR models considered. Their objective has been to improve the decision-making of the public administration, in particular the Ministry of the Environment (see, for instance, Ščasný et al. 2005, Ščasný and Brůha 2007, Beneš et al. 2006, Zimmermannová 2007, Zimmermannová 2008). Our purpose was an attempt to reveal the political-economic and institutional settings of the ETR preparation.

Qualitative survey methods were chosen as the predominant way to answer our questions. Whereas quantitative methods allow nearly exclusively the measurement of the intensity of a certain phenomenon, qualitative survey methods allow the detection of the presence of a certain phenomenon, attitude, etc. (Hendl 2007). In this sense, qualitative survey methods have helped us to reveal the existence of the knowledge, attitudes and opinions of the principal

stakeholders as well as the broader context of the stakeholders' understanding of the ETR. The survey made use of in-depth interviews with key stakeholders. The interviews were conducted by means of a structured questionnaire with open-ended questions. These were recorded, transcribed and analysed. It should be noted that the questions were formulated following a detailed familiarisation with similar surveys conducted abroad (see Dunne and Clinch 2004, Dresner et al. 2006).

Interviews were conducted with a total of 18 subjects. Six of them were government representatives (from ministries responsible for ETR); six were representatives of key relevant businesses (economic chamber, energy, heat and metallurgy); two were non-governmental representatives (organizations playing an important role in ETR preparation); one was a representative of labour unions (taking part in the ETR preparation group); and two were academic consultants taking part in the ETR preparation discussions. The following section presents the principal findings derived from the interviews with the business representatives. The Discussion section then makes use of findings from interviews with the other stakeholders too.

### *The Survey Results*

#### *Understanding of the Environmental Tax Reform and Its Objectives*

The individual buss [=business] representatives did not differ substantially in their understanding of the ETR objectives. They were mostly in accord in believing the chief objective was to stimulate businesses to conserve primary energies. The respondents largely identified themselves with that objective. Only one half of the respondents mentioned environmental protection as one of the objectives; however, it always ranked second. They were critical in the sense that the ET should affect all polluters, i.e., not only industrial businesses and energy providers but also transportation and households, which emit significant volumes of pollutants.

Most of the respondents mentioned the European Union's attempt to reduce the consumption of primary resources with respect to the EU's energy independence. One (buss#2) said, *“Generally speaking, the [ETR] objective should be what all Europe is struggling with – to save primary energies and protect the environment... show people what is harmful... and conversely, what the state promotes... what is more rewarding and better socially...”*

There were concerns whether the curbing of fossil fuels (mainly coal) for combustion might not lead to the growing dependence of the country and the EU as a whole on imports, particularly from Russia (growing need to import natural gas) and a drop in the utilisation of domestic energy sources (buss#4 and buss#6).

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. There was an objection, for instance, that (buss#4) *“you can only reform what you have. As long as you don't have something, you can introduce it... let's call it environmental tax introduction.”* Names better capturing the essence were suggested, such as 'energy excise duty'.

It transpired that the respondents were not very well informed about the factual, comprehensively understood objectives of the ETR theoretical framework, which intends to shift the tax burden from the less limited goods – human labour – to relatively more limited natural goods (applying the double dividend hypothesis). 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 ET revenues to

promote environmental protection. One (buss#3) said, "...the money should be used to achieve an emission reduction, through subsidies or in another way. The money can possibly also be spent on health...". As for environmental problems, the solving of national, regional and local problems perceived directly by people was preferred.

A little surprisingly, some acknowledged a certain importance of the redistribution of the funds by the state (buss#1): "*The money raised through the ETR should go into an environmental fund. If it was going into the State Environmental Fund, my position on the ETR would be different.*" or (buss#3): "...*The state ought to exist and take care of its people...*" One respondent (buss#4) held quite the opposite position, saying that "*an arbiter who decides what is right, with or without recycling the revenue, interferes with the market process – says what is right. I guess the market is the best as it can resolve a great deal of issues. I disagree with any environmental engineering.*"

The respondent (buss#6) was an exception in his position on the way to utilise the tax revenues under the ETR: he positively supported the idea of making labour in businesses cheaper by way of the ET revenues, and was inclined to the utilisation of the revenues for resolving the pension reform difficulties.

As for revenue recycling, the stakeholders interviewed expressed scepticism to the state being really able to return the revenues to businesses in some form. In certain cases, we even felt indignation with the state, which arbitrarily decides which way the energy industry should go.

#### ***Awareness and Communication with Other Stakeholders***

The intention to implement the ETR in the Czech Republic had been known long in advance (see the brief history outlined above). The miscellaneous stakeholders communicated concerning its preparation mainly in periods when a specific political assignment of the ETR was being formulated (*gov#1, gov#2, academic#1*). However, none of the proposals was implemented. The execution was eventually very quick with the deadline for the implementation of the EC Directive drawing near; the Ministry of Finance was appointed to prepare a concrete ETR model for government hearings.

The responses were not uniform in terms of the degree of awareness of the ETR preparation process as well as the communication of the MoE with other stakeholders. Some expressed their satisfaction with the degree of awareness and communication with other stakeholders; contrariwise, others were totally dissatisfied in this respect. The extremes of these positions are shown in the following interview quotations (buss#4): "*...I must say that it is very difficult to collaborate with the MoE; the Ministry's ideas are entirely different from the businesses'. To give you an example, we have had several meetings of the energy group, where Green Party or Ministry people are invited but largely fail to arrive, or they act in an uncommunicative manner. We are capable of dealing openly with all parties, but unfortunately the communication is minimal with the Greens. They are afraid of talking to the point.*" To the contrary, (buss#3) said, "*Some things have begun to change; we have established decent collaboration with the MoE and reasonable voices have been heard. Examples are wind power, biomass issues, etc. ... Materials necessary for qualified decision-making are being developed.*"

As concerns the awareness of experience with the ETR abroad, the interviews showed that the experience played no major role in their decisions. One of the stakeholders interviewed (buss#1) highlighted a conference of their European industry association, where he had first come across the ETR concept after 2000 and had made a very good picture of the likely form

of the future regulation in the Czech Republic, which would only enter into force in 2008. Of course, interviews with the other stakeholders were different, as each of them was working in a narrow group participating in the preparation of various ETR proposals and constantly keeping a close eye on the happenings abroad (*gov#1, academic#1, lab#1*).

#### ***Awareness of Economic and Other Implications***

As concerns the respondents' awareness of the 'inward' implications, i.e., those for the economic performance of the subjects interviewed, it can be said that the respondents know and have calculated the implications of the proposed ETR (or environmental taxes under the reform) and work with them in the political process. As for ex-post impact analyses, it was too early to make any more accurate conclusions at the time of conducting the interviews (spring of 2008), which reflected duly in the responses. Neither was it possible to make any distinction of the impacts of the ETR from other influences, particularly energy price increases (*buss#3*): *"...It is too early. The ET have been in operation for three months. There are industries – textiles, clothes, leather – that experience problems with each extra crown of costs, because they face extremely cheap products from Asia. The profits have gone down by 50 per cent in the glass industry – because of energy price increases, not ET."*

The closer to actual business the respondents were in the hierarchy, the more accurate knowledge of the implications they had. Their positions expressed in their responses to questions concerning economic implications pointed to concerns about the impacts on businesses' profitability and competitiveness. They criticised the short interval between the elaboration of the final draft of the ET rates and their implementation. At the same time, however, they were obviously pleased to have pushed through practically minimal ET rates for the first phase.

As for the respondents' awareness of the impacts on the overall economy, concerns about the disruption of economic competition and impacts on the competitiveness of the national economy and of Europe as a whole were given voice (*buss#4*): *"...if business in Europe is made more difficult with taxes, the world will steamroller us... we see the ETR objectives as a great danger of disrupting economic competition; some things will get higher priority, some things lower, while the priorities will be decided by people who haven't even stated clearly the direction of their reasoning... we think that often this is just taking the money out of taxpayers' pockets rather than trying to deal with issues..."*

#### ***ETR and Long-term Expectations of Businesses***

The business respondents were in accord in that it is not clear from the recent development which way the EU and Czech environmental policy will go (*buss#5*): *"If you try to follow this closely, you must be confused. A year ago the Greens introduced an ETR stricter than needed, and now even themselves begin to hesitate and realise that it might be a scrape. I can own up: I don't know which way it'll all go, and I've been around the field myself."*

A little surprisingly, the stakeholders mentioned the need for a concept of a long-term framework energy and environmental policy. Businesses in the power industry mentioned their need to know the policy development direction for at least 30 years, referring to the innovation cycle and the lifespan of their installed technologies, e.g. (*buss#4*): *"We should have a vision of where to go for the next 40-50 years."* The other sectors gave shorter periods, such as (*buss#6*): *"We need an outlook for 15 or 20 years... Therefore we criticise the Czech state administration and the EU that when operating an installation for 15 years, I cannot have the figures changed every three years during its economic lifetime. We need a long-term"*

*outlook. Long-term strategic plans should be in place.”*

In light of the above, it is no wonder that the Czech Republic's ETR, which should be phased in over three-year cycles according to the government-approved schedule, has not elicited very good response among the stakeholders. The following statement is an extreme position in this respect (buss#6): *“The Czech ETR is a rash project. I'm paying some taxes; phase two comes in three years, phase three in the next three years. Phases two and three are rubbish.”*

The stakeholders interviewed accorded in thinking that the effect of the current ETR does not play a major role in their strategic and investment decisions. They often mentioned the developments in prices of primary energy sources as a more important factor, such as (buss#5): *“The ET rates don't play a major role at the moment. Growing energy prices as such and expected price increases as such are more important signals to businesses.”*

Some of the interviewees mentioned the difficulties of certain sectors (e.g. textile industry) that are on the verge of profitability and any increase in the prices of their inputs poses problems to them (buss#4): *“Take the textile industry. When the conditions got worse, the input prices went up, and the textile industry nearly disappeared from Europe. This is a threat for other commodities too. Further input price increases are a process that razes entire sectors.”*

#### ***ET as Stimulation for Environmental Innovation***

The stakeholders were asked whether increasing energy prices, partly also due to the ETR implementation, may be an important trigger of environmental innovation and businesses' efforts to conserve energy. The responses were not unanimous, and largely corresponded to those to the long-term expectations question. There was an accord in that increasing prices of primary energy sources lead to efforts for introduction of various efficiency measures (thermal insulation in buildings, replacement of burners, etc.). On the other hand, the great uncertainty about the direction of the future developments in primary energy source prices and environmental policy regulation results in the businesses' temporising with long-term and costly innovations. For example, (buss#2) said, *“Unless the development is known at least for ten years in advance, there is no signal to invest more intensively. Of course there will be some investment, but there is no signal as to which way to go... Today we don't even know if fuel is going to be available... we need to know what the rules will be after 2010, so that we can prepare for them.”*

One of the stakeholders highlighted the innovation motivating function of administrative instruments, mainly limits and their tightening. To the contrary, he did not appreciate the motivating function of the ET as they are. The following reflection was made during an interview (buss#4): *“The ET may be motivating for rich companies, who have good prospects... but I'm afraid that the ET impulse may not always be as positive as we expect... Some sectors and industries can afford to project 100 per cent of the input price increase in their product prices, and yet innovation may not be as important to them... The MoE philosophy that the more expensive a thing is the more will be spent on efficiency and innovation may not always be valid.”* Answering the question concerning the innovation stimulation, a representative of the power industry said (buss#1): *“Today, investment in the power industry is so colossal that the ETR with its current rates plays no role at all in the decisions... It will only be about primary energy prices – the prices of fuels.”*

In addition, one of the stakeholders (buss#4) said, *“You ask me about motivation to innovate... profit generation is motivating... let us stick to this type of motivation... My*

*suggestion is that a business that improves its energy efficiency should pay lower taxes... That might be more motivating than imposing a tax on it and forcing it to shut down or relocate abroad."*

#### ***ETR Integration with EP Instruments***

The business representatives gave an opinion that the environmental regulation is not contradictory in principle but that its instruments lack interconnection and integration. Their responses contained broader reflections of the national environmental policy. The business representatives made frequent reference to the issue of emission limits and charges. The emission limits and other administrative instruments were frequently quoted as effective tools. The following quotations are illustrative of this: (a) *"I support a system where a polluter not only pays fees and taxes for polluting the environment – that won't help. Strict limits have to be met."* (buss#5); (b) *"The instruments are not in contradiction. They are in good consonance. First of all the emission limits, and now emission reduction plans for the sources... those are adjusted in a way that forces manufacturers to reduce their emissions."* (buss#1); (c) *"In addition to emission limits, taxes and charges, there is a fourth type of pressure on technological improvement: integrated permits. We have negotiated with regional authorities that each business receives an integrated permit, which is a list of technological and environmental upgrades for eight to ten years in advance, including specific implementation dates. If a business fails [the requirements], it has to deal with the regional authority and problems arrive."* (buss#6)

The responses addressed other environmental policy instruments too, such as support mechanisms motivating businesses into environmental protection. The respondents spoke about financial mechanisms as well as the need for infrastructure building and improvement and investment in education. Voluntary environmental agreements were also mentioned (buss#1): *"A voluntary agreement, backed by some state support mechanisms, seems optimal to me..."*

#### ***Discussion***

Most of the positions revealed among the stakeholders by the qualitative survey were in accordance with our expectations. The low level of awareness of the actual ETR principles and objectives can be explained by two facts. The first is the long period of no real political interest in ETR in the Czech Republic prior to its implementation in 2008. The businesses thus had no need to engage intensively in the reform. Secondly, the quickly implemented very low ET rates, combined with exploiting the majority of exemptions allowed under Directive 2003/96/EC, provokes no pronounced interest in the ETR among the businesses.

As for the environmental stimulating function of the ET, the businesses tended not to trust in this function. That is no wonder. These businesses have spent a long time in an environment of low rates of air pollution charges, which have not changed since the mid 1990s. The rate was not stimulative even then, as it had been reduced in the political process by a factor of forty from the calculated rate based on abatement cost estimates (academic#1).

Any further deepening of environmental regulation causes concerns among businesses. This derives from the fact that the economic competition they face is international while the environmental policy is predominantly national, or regional in cases (EU). The global competition thus essentially poses great limitations on the capacities of national authorities to interfere with environmental protection without exposing their businesses to the risk of reduced competitiveness.

At the same time, however, the survey has shown that the businesses' representatives felt no hostility towards environmental protection. Quite to the contrary, they perceived it as part of their social responsibilities. It became evident, nonetheless, that the business sphere does not wish to be a mere 'passive victim' of environmental regulation, but wants to be actively involved in the environmental policy definition. This might confirm the hypotheses and evidence that good environmental performance may be a competitive advantage for businesses (see for instance Wagner and Schaltegger 2003, Porter and Kramer 2006).

In some cases, businesses have the potential to resolve their contribution to environmental protection in a way that is effective to themselves. In addition to the 'cleaner production' option, whereby businesses can mobilise for more effective solutions in relatively little time (buss#1), they can implement environmental innovations of a higher order of magnitude. Here, the businesses are aware that such innovations require more time and good timing within investment cycles. This explains their calls for long-term strategic planning: at least the setting of long-term goals in environmental management.

In order to encourage their efforts in environmental protection and particularly when paying ET, the businesses implicitly inclined to the idea of using the ET revenues to support their innovation processes. In their views, such support can be organised institutionally in various forms, be it a regime of voluntary agreements or the introduction of subsidy and other schemes.

The business representatives' reflections contained suggestions to establish such a system of ET that would exploit benchmarking for certain technologies. More specifically, businesses that comply to strict emission ceilings would be given the option to either not pay ET at all or pay reduced rates. Such suggestions by the businesses are understandable in cases where a company already complies with the strict BAT requirements, thus having no other option to improve its environmental performance, at least in the short term. In principle, the businesses thus suggested a form of support where money is not extracted from a company for a certain period of time thanks to the tax relief, so that it can save up more for the replacement of technologies in the longer term. In tune with the businesses, we believe that it is possible to consider such regimes, for example under a voluntary environmental agreement regime or an integrated permit (IPPC) regime. The notion of benchmarking has been debated in the Czech Republic in the recent months in connection with a proposal for an amendment of the CO<sub>2</sub> emission trading directive.

### ***Conclusions***

The survey results suggest that the business sphere is not very well informed about the original purpose of the ETR. They do not understand it as a method for shifting the tax burden from labour taxation to nature taxation. Instead, they view it as the introduction of new taxes which should lead to reduced energy consumption and, secondarily, to environmental improvements. They see the environmental stimulating function of the ETR in the recycling of the ET revenues rather than by means of the tax rates.

They view the fiscal function of the ET as an attempt to raise more funds for the state. They are willing to accept that as long as the revenues from these taxes are utilised in resolving the real priorities in environmental protection (PMx air pollution, regional projects, etc.). However, they would be most satisfied if the funds were used to support business innovation, which is subject to certain cycles in which it is effective for the businesses to invest in it.

Questions related to motivation for environmental innovation were largely associated with



the need to respect the relevant time periods for the innovation. The 'big power' stakeholders mentioned the need for a clear strategy in the energy and environmental policies with a horizon of 20-30 years or more. The horizon may be around 10-15 years at least in the processing industries. All the stakeholders said that no such strategy is in place at the moment, which delays innovation in many cases. They made reference to identical experience from abroad. It was perceptible from the interviews that most of the stakeholders knew well the implications of the various ET proposals in their respective industries, while being unaware of the overall implications of the entire ETR.

The businesses view ET and ETR in the broader context of the entire system of environmental policy instruments. They acknowledge the stimulating function of increased energy taxation, which in many cases promotes the seeking for effective efficiency measures. However, they tend to prefer such environmental policy instruments that make sure that they do not pay for their emissions above a certain environmental performance. They prefer such instruments that allow them to save up for the implementation of the above mentioned innovations. Under such instruments they frequently quote administrative emission regulation tools, IPPC as well as voluntary environmental agreements. Concerning economic instruments, they would welcome such concepts under which they would have the option to pay reduced tax and fee rates if performing well environmentally. They would welcome better interconnection among the environmental policy instruments.

Among other conclusions, it should be stressed that the importance of the present-day phenomenon of expecting a long-term energy price growth was reflected in the business representatives' responses. The growth is probably more important a factor for their decision-making than the ETR as it is.

The survey has proven the existence of a number of interesting aspects to the ETR. It will be useful to verify them in another, quantitative survey.

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***List of interviews and their coding:***

Government representatives (from the main ministries responsible for ETR)

- gov#1 (Ministry of the Environment – responsible for EP tools; member of ETR preparation group)
- gov#2 (Ministry of the Environment – member of ETR preparation group)
- gov#3 (Ministry of the Environment – responsible for EP tools)
- gov#4 (Ministry of Finance, dept. of tax policy and analyses – responsible for ETR)
- gov#5 (Ministry of Labour and Social Affairs; social insurance, income policy, – responsible for modelling services)
- gov#6 (Ministry of Industry and Trade; dept. of power industry)

Representatives of key relevant businesses

- buss#1 (large corporate energy plant – director)
- buss#2 (Czech Heating Union)
- buss#3 (Czech Economic Chamber – economist)
- buss#4 (Czech Economic Chamber – ecologist)
- buss#5 (businessman – energy production)
- buss#6 (Czech association of ferrous metallurgy)

Non-governmental representatives (organizations playing an important role in ETR preparation)

- ngo#1 (nation-wide oriented on environmental problems with great influence)
- ngo#2 (professional consulting NGO focusing on energy)

Labour unions (representative taking part in ETR preparation group)

- lab#1 (Labour Unions; macroeconomic modelling; member of ETR preparation group)

Academic consultants taking part in ETR preparation discussions

- academic#1 (applied research institute; member of ETR preparation group)
- academic#2 (economic university)

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**Податкова екологічна реформа в Чеській республіці:**

**результати дослідження на основі вибірових даних по виробничих підприємствах**

*У даній роботі представлені результати міжнародного проекту «petrE» (Продуктивність ресурсів, реформа екологічного податку та стійкий розвиток у країнах Європи), що фінансується англо-німецькою організацією. Відповідно до проекту, були зроблені кількісні і якісні дослідження в комерційній діяльності компанії Чехії.*

*Предметом дослідження є сфера екологічних податків у Чехії. У Чеській республіці екологічні податки мають тривалу історію. Переміщення податкового навантаження з прибуткових податків на природоохоронні потреби широко розповсюджена в країнах західної Європи, хоча для Чеських виробників подібний досвід застосовується вперше. Реформа екологічного податку – це відносно нові перетворення для всіх ключових учасників, включаючи й комерційні компанії.*

*У даній роботі було показано, як чеський бізнес ставить до проблем реалізації реформи екологічного податку. Огляд показує, що бізнес обізнаний з системою екологічних податків та їх впливу, але ймовірно не ознайомлений з ідеєю (повної) реформи екологічного оподаткування. Зокрема дослідження показало, що представники бізнесу не проінформовані про те, що екологічний податки вводяться за рахунок зменшення прибуткових податків (трудових податків). Вважається, що екологічні податки це ще одні додаткові важелі впливу держави з метою поліпшення якості навколишнього природного середовища, зменшення використання енергетичних ресурсів і стимулювання ресурсо- і енергозберігаючих технологій. Збільшення податкові надходження від екологічного оподаткування розглядається підприємствами як чергова дія держави на залучення більшої кількості фінансових ресурсів для своїх потреб. Низька інформованість стейкхолдерів свідчить про неефективну інформаційну кампанію з боку держави при вдосконаленні екологічного законодавства країни.*

*Що стосується розвитку інноваційних ресурсо- та енергозберігаючих технологій то головним фактором, як стверджується в роботі, є створення довгострокової програми розвитку інноваційних технологій на період часу не менше 20-30 років. Для виробничих підприємств мінімально допустимою по часу можна вважати стратегію розвитку на період часу 10-15 років.*

*Проведене дослідження показало, що для стимулювання природоохоронної діяльності і зменшення енергозалежності виробничих підприємств екологічні податки відіграють значну, але не головну роль. Аналіз показав, що більшість виробничих об'єднань цікавляться тенденціями змін цін на нафту, і майбутнє зростання цін на енергетичні ресурси виступає набагато важливішим чинником впровадження нових технологій, ніж вдосконалення системи екологічного оподаткування.*

*Ключові слова: екологічне навантаження, екологічний податок, екологічне управління, промисловість, екологічне політика, реформа.*

*Підготував:*

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