



Expected impacts of the first fase of
the environmental tax reform as
proposed in the Czech republic with
effect from 2008 on



The applied approach

- There is a continuous effort to improve decision-making process through a systematical assessment of impacts of new legislative proposals in the Czech republic known as Regulatory Impact Assessment
- Though we are standing right on the beginning, the system is already recognised by the major stakeholders and is often called for during the legislative procedure
- for these reasons we tried to follow RIA guideline as closely as possible



Identification of the interested parties

- enterprises
- households
- public administration



The nature of main influences

- increase in tax burden due to new excise taxes levied on energy products
- increase of net disposable income through a mix of measures such as decrease in income tax rate, social security payments or increase in social transfers to specific groups of inhabitants who are not involved in any sort of working activity. Increase in social transfers is necessary in order to ensure that no group is newly taxed without receiving some sort of compensation



Impacts on enterprises I

- there could be expected big differences in impacts on various types of businesses according to the structure of their expenses
- most seriously affected will be energy demanding production with low value-added and low proportion of labour costs in overall costs



Impacts on enterprises II

- on the other hand, we expect positive influence on some types of businesses which would be net gainers from decrease in labour costs exceeding new excise taxes, such as transport, sector of services, construction, public administration and SME in general (especially retailers and traders)



Impacts on enterprises III

- reaction of businesses to new costs could be of double nature – they can pass on new tax cost fully on their customers and/or final consumers or they will be forced to lower their profit margins connected with their production
- actual reaction will depend on the scale of competition in a particular industry – in more competitive industries with low transport costs and less importance of brand marking will be the pressure of foreign competition much higher than in strictly localised businesses (retailers and the like)



Impacts on households I

- households are expected to be influenced by the two ways – direct increase in their cost of living (tax paid on their account by providers of energy services) and indirect increase in consumer prices due to the inclusion of new taxes into production costs
- we assessed only direct influences because impacts of the second order are of rather speculative nature and for small changes in taxes are within limits of statistical error



Impacts on households II

- direct increase in prices for households is expected for basic fuels as follows:

	Percentage increase in consumer prices (including change in VAT levied on energy products)
solid fuels	10%
gaseous fuels	5%
electricity	1-2%



Impacts on households II

- there are proposed some exemptions from taxation for ecological reasons – gaseous fuels used in households and for central heating, and energy produced from renewables
- in addition to that, Ministry of Industry is pressing to exempt energy intensive production such as metallurgy and mineralogy from taxation for competitive reasons, but according to our calculations the impact on the financial situation of these industries is not significant enough to justify such generous exemptions; this matter is currently solved at ministerial level



Impacts on households III

- according to our findings the impact on different income types of households (salary receivers, pensioners, self-employed and farmers) and on households divided into ten groups according to the level of their income are similar in percentage terms because there is a positive relation between the amount of energy consumed and the income level of a household (i.e., the higher the income of a household is, the more energy is consumed)



Impacts on households IV

- average impact is expected to vary around 3% increase in household expenses on electricity and other energy products
- higher impacts on the cost of living are expected in the case of pensioners, because they often live alone in larger flats or houses and have lower incomes, which means that percentage increase in their annual expenses is little higher than in the case of other population groups



Impacts on households V

- average additional expense on new taxes is expected to be around 34 Kč (1 €) per month per person
- compared to households' net disposable incomes, that means increase of about 0.4% in overall consumer spending attributable to the increase in energy prices



Quantification of tax receipts

- the estimated tax receipts from enterprises and households are in the following table

	with exemption for energy demanding processes in mil Kc (€)	without exemption for energy demanding processes in mil Kc (€)	with exemption for energy demanding processes (as percentage of GDP)	without exemption for energy demanding processes (as percentage of GDP)
Enterprises	3 734 (133)	5 724 (204)	0.117%	0.179%
Households	796 (28)	796 (28)	0.025%	0.025%



Special treatment of energy intensive industries

- impact on energy intensive industries (NACE 26+27) was assessed by comparing additional cost caused by the new taxes to the current costs of these industries in terms of effects on their earnings (EBIT) and total costs
- financial impact is expected to be most significant in production of ferrous materials (1% increase in total costs) in terms of cost affecting and tile production (nearly 20% decrease in earnings) in terms of the impact on earnings (but tile production is rather specific by low profit margin). Impact on earnings is expected to be around 11% in production of ferrous materials



Benefits of proposed tax reform I

- basic motivation for shift from income taxes to energy taxes is to encourage energy savings, that means to burn less fossil fuels in the outcome
- with the mean estimate of price elasticity for energy products of -0.5 the expected decrease in total energy consumption is around 1-2%



Benefits of proposed tax reform II

- decrease in labour cost will encourage creation of new jobs and improve employment rate
- among other benefits are noteworthy the following – lower imports of fossil energy (mainly natural gas for use in industry), lower emissions of polluting substances as a consequence of relative price advantage of exempted sources of energy (renewables, natural gas) and thus their broader usage



Recommendations for the next phase of the environmental tax reform in CR (from 2010 on)

- assess impacts from the beginning of preparation
- add more transparency in the whole process through public consultations
- improve communication with media
- any increase in taxing should be conditioned by the adequate decrease in other payments by taxpayers and the way of this decrease should be known in advance in order to ensure that environmental tax reform is not abused only for increase in tax collection



Thank you for your attention.

Luděk Pur

Ministry of Environment

Department of Sustainable Energetics
and Transport

Ludek_Pur@env.cz