







Conference on Assessing The Impacts Of Environmental Regulation By Macroeconomic Models

Focused on assessment of economic and environmental impact involved by environmental tax reform in the Czech Republic

Charles University Prague, 23-24 November 2009

MODEDR Project

Modelling of Environmental Tax Reform Impacts: Second Phase of the ETR

- Funded by the Czech Ministry of the Environment during Nov 2007 to Dec 2010
- Research team
 - ✓ Charles University Prague, Environment Center
 - ✓ University of Economics Prague, Institute of Environmental and Economic Policy
 - ✓ Metroeconomica, UK
 - ✓ Cambridge Econometrics, UK
- Project objectives
 - ✓ to evaluate current regulation in AQ and climate change policy and provide suggestions on revision of instrument.
 - ✓ to develop and apply models to predict impacts of regulation

MODEDR Its models and quantitative approaches

- AC/CC ex ante and ex post quantification of administration and transaction costs [ieep]
- DASMOD a micro-simulation model to predict effects on distribution and equity [Charles]
- CGE computable general equilibrium model of Czech economy [Metroeconomica with Charles]
- E3ME macro-econometric model of Czech economy linked with the EU [Cambridge Econometrics with Charles & ieep]
- MESSAGE PE optimization model of energy sector [Charles]
- ExternE quantification of the external costs of airborne pollution and climate change impacts incl. a review on MAC [Charles]

Conference objectives, but not only...

to present quantitative approaches to assess the effects due to environmental regulation

 specifically, focus on macroeconomic models that are recently under development and/or have been used to assess economic and environmental impacts due to air quality regulation and climate change mitigation for the Czech Republic

to assess the impacts possibly involved –just recently discussed–intervention in the Czech Republic — environmental tax reform

to **learn** about advantages and limitations of presented models and draw suggestion for **further model demands**

Conference keynote speakers and round-table panelists

Thomas Sterner, University of Gothenburg, Sweden; President of the EAERE Association

Denise Van Regemorter, Catholic University of Louvain, Belgium; IPTS, EU JRC, Seville

Markus Blesl, Universität Stuttgart, Institute of Energy Economics and Rational Use of Energy

Olga Kiulia, Metroeconomica; ETH Zürich, Swiss Federal Institute of Technology

Anil Markandya, Metroeconomica; University of Bath, UK; Basque Centre for Climate Change Bilbao, Spain Chair: Bedřich Moldan, CUEC and Senate of the Czech Parliament

Anil Markandya
Thomas Sterner

Martin Bursík, Czech Green Party
Tomáš Khorel, Ministry of Industry and
Trade, Deputy Minister Advisor
Aleš Kuták, Deputy Minister, Czech
Ministry of the Environment
Jan Mládek, Czech Social Democratic
Party

Day 1 – Monday, 23rd November 2009

I. Introduction on Regulatory Framework (9:00-12:40)

Opening Welcome (Bedřich Moldan & Milan Ščasný)

Policy Context: Proposals on Environmental Tax Reform, Energy and Emission Taxation in the Czech Republic (Petr Holub)

Importance of modelling in environmental policy and decision-making (Anil Markandya)

Efficient Environmental Regulation And Its Impacts (Thomas Sterner)

Economic Rationale for Regulation: Environmental Externalities, Abatement Costs And MBI (Vojtěch Máca, Jan Melichar, Milan Ščasný)

II. Assessing the Impacts at Macro Level (13:40-16:00)

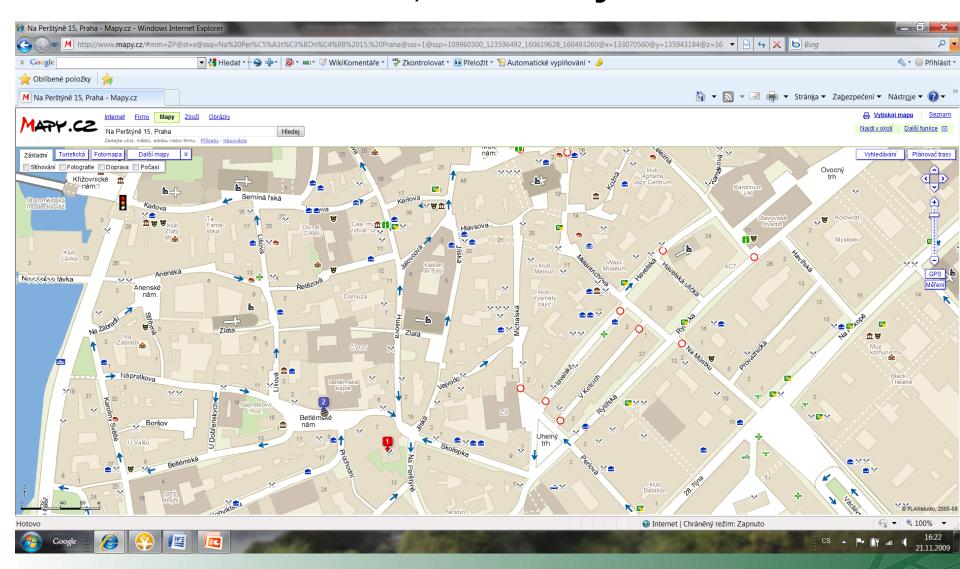
Modelling Impacts of Energy And Environmental Policies for the EU and the Czech Republic by CGE GEM-E3 Model (*Denise van Regemorter*)

Economic and Environmental Impacts Assessed by CGE Model (Olga Kiulia) and by Macro-econometric Model E3ME for the Czech Republic (Milan Ščasný & Vítězslav Píša)

Round-Table Discussion (16:00-17:15)

Dinner and Wine Tasting in MONARCH Winery (18:00 on)

Monarch Wine bar, Na Perštýně 15



Day 2 – Monday, 24th November 2009

III. Partial Equilibrium And Input-Output Analysis Modelling (9:00-12:30)

Assessing the Impacts by Pan-European TIMES Model (Markus Blesl)

Energy Supply-Side Optimisation Model MESSAGE (Jiří Balajka; Lukaš Rečka)

EFOM/ENV - Energy Flow Optimisation Model for the Czech Republic (Jiří Spitz)

Sectoral And Overall Economic Effects of CO₂ Allowance Auction in the CZE (Lubomír Lízal)

Linking Input-Output Model With Material Flow Analysis (Jan Weinzettel, Jan Kovanda)

IV. Macro Structural Models developed in MODEDR (13:30-16:30)

Development of CGE Model of the Czech Economy (Olga Kiulia)

Ancillary Effects of Carbon Taxation: Czech Application of E3ME Model (Vítězslav Píša, Milan Ščasný)

V. Final Discussion

Enjoy these two days

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