Seminar organised by

ecoCONSULTING
energy and environment, prague

FORSCHUNGSSTELLE
FÜR UMWELTPOLITIK
Environmental Policy
Research Centre
Freie Universität Berlin

with support of

**DEUTSCHE BUNDES-
STIFUNG UMWELT**

Bundesministerium
für Umwelt, Naturschutz
und Reaktorsicherheit

**Ministry of the
Environment of
the Czech Republic**

The Czech – German Initiative on Environmental Tax Reform in the Czech Republic:
A cycle of workshops 2003-2006

Seminar

Attitudes of Czech and German State Administration to the Environmental Tax Reform

24 April 2003, 9:00–16:00

Ministry of the Environment of the Czech Republic
Vršovická 65, Praha 10
Room 900, groundfloor

In cooperation withtThe Charles University Environmental Center in Prague

Seminar programme

Thursday, 24 April, 2003	
$9^{00} – 9^{10}$	Project "The Czech-German Initiative on ETR in the Czech Republic**"** - Goals of the workshops and ETR preparation in the Czech Republic ***RNDr. Martin Bursík**, Ecoconsulting, s.r.o, Czech Republic* ***PD Dr. Lutz Mez**, Freie Universität Berlin, Germany*
$9^{10} – 9^{20}$	ETR in the Czech Republic - Position of the Ministry to the ETR ***Pavel Labounek**, Deputy of the Minister, Ministry of the Environment, Czech Republic*
$9^{20} – 9^{50}$	EU Energy Taxation: The Recent political agreement and its impacts on EU and Accession countries ***Kai Schlegelmilch**, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany*
$9^{50} – 10^{10}$	**Discussion**
$10^{10} – 10^{55}$	ETR and Finance Presentation by ***Helmut Jansen,** German Federal Ministry of Finance, Germany,* presented by Kai Schlegelmilch Co-presentation and reaction from the Czech Ministry of Finance ***Martin Jareš,** Ministry of Finance, Czech Republic*
$10^{55} – 11^{10}$	**Discussion**
$11^{10} – 11^{30}$	**Health break**
$11^{30} – 12^{30}$	ETR and Environment The Ecological Tax Reform in Germany – Pro and Cons from the environmental point of view ***Ingrid Hanhoff,** FederalEnvironmental Agency, Germany* ***Bettina Meyer,** Ministry for the Environment, Nature Conservation and Agriculture of Schleswig-Holstein, Germany* Statement from the Ministry's point of view ***Tomaš Chmelík,** Ministry of the Environment, Czech Republic*
$12^{30} – 12^{45}$	**Discussion**
$12^{45} – 13^{30}$	**Lunch**
$13^{30} – 14^{15}$	ETR and Employment & Economy The Ecological Tax Reform from the perspective of the Ministry of Economy and Labour ***Wolfgang Hass,** Federal Ministry of Economy and Labour, Germany* Statement from the Ministry's point of view ***Bedřich Nový,** Ministry of Labour and Social Affairs*
$14^{15} – 14^{30}$	**Discussion**
$14^{30} – 15^{00}$	**Conclusions for the policy of the Czech Republic**

Translation will be provided.

Kai Schlegelmilch*
Berlin/Germany

The Ecological Tax Reform in Germany and the EU Energy Taxation

History, Rationale, Design, Experiences, Impacts and Prospects

24/25th April 2003, Prague/Czech Republic
1. Workshop of the D/CZ cooperation on ETR

*Though views expressed here represent government positions in general, they are made on a personal capacity.

History of ETR in Germany I

- 1978: idea was born i.a. by Prof. Binswanger/CH
- 1980ies: single env. NGOs (BUND/FoE), politicians, parties and other stakeholders became interested (e.g. Prof. Ernst von Weizsäcker)
- 1988: A study by UPI, Heidelberg „proofed“ total substitution of conventional taxes through ecotaxes – 1. Round of debate triggered by radical approach)
- 1990: Social Democrats and Greens had parts in their programmes (in favour of environment and labour), but unification distracted from this instrument

History of ETR in Germany II

1994: Greenpeace commissioned a comprehensive ETR-study to DIW, Berlin: Double dividend is possible, FÖS/GBG – a lobby group for ETR was founded.

- 1994/5 2. Round of intensive debates took place amongst all stakeholders and publically in which basically all parties where in favour of it
- 1998 Greens decision to increase fuel price to 5 DEM/liter (=2,56 €/l) shocked people, but caused 3. Round of debate
- 1998 ETR became an important issue in the election campaign
- 1999 ETR was introduced when red-green government came into power

Greenhouse Gas Targets of Germany

- Internationally Binding Reduction of 6 Kyoto Greenhouse Gases:
- Target (1990-2008/12): -21%
- Achieved (1990-2000): -18,7%

- National Voluntary Reduction of CO_2-Emissions
- Target (1990-2005): - 25%
- Achieved (1990-2000) -15,3%

→ National Climate Protection Programme comprising many measures for all sectors to achieve targets

History of ETR on EU-level

1992: CO2-/energy tax: from 3 USD up to 10 USD/barrel in 1993-2000, on top of existing energy taxation, revenue neutral, special rates for energy-intensive industries, dependant on similar measures in other OECD-members - environmental rationale for tax proposal

1995: CO2-/energy tax proposal made more flexible in terms of timing and rates.

1997: extension of existing mineral oil minimum tax rates (since 1993) to all energy products and increase in three steps (1998-2002). Harmonisation of tax levels as rationale

2001: CO2-/energy tax proposal from 1992/5 officially withdrawn by the EU-Commission

2003: Intensive negotiations on the 1997-proposal under the last Presidencies came to a political agreement on 20th March 2003 – it now enters into force on 1.1.2004

ETR in Germany - Experiences (I)

- Coincidence with
  a) a drastic increase of world oil prices and strengthening of USD;
  b) a decrease of electricity prices due to liberalisation
- Use of revenues for non-environmental purposes is neither really understood nor appreciated
- Though business is treated generously, opposition continues due to pretended non-agreement with principles.
- Equity concerns of population are very dominant
- Protests in autumn 2000 made government stand firm on the continuation – revenue-raising function turned out to be crucial.
- However, a single heating cost grant for low-income households and a tax level playing field for all commuters was provided.

ETR in Germany - Experiences (II)

- In 2000 transport fuel sales decreased by 1.1%, in 2001 by another 1.5% and in 2002 by additional 1.3% - for the first time in three subsequent years against an upward trend
- The demand for car pooling increased by 25% in the first half year of 2000.
- The number of passengers in the public transport system increased in 1999 for the first time (+0.4%), additional 0.8% in 2000, another 0.8% in 2001 and again +0.5% in 2002 – against a downward trend.
- Macroeconomic Study:
  Job increase predicted of up to 250,000 until 2003, due to reduced labour costs, but also due to increased investment in energy savings.
  CO2-emissions and energy consumption will be reduced by 2-3% until 2003

ETR–Campaign by the German Environment Ministry 2000-01 (I)

Posters and advertisements (in Berlin): 4 images: What are the benefits of the ecotax (see http://www.bmu.de → Climate Policy/downloads)

Postcards for a competition about the best ecotax-justification (Winner: More candlelight dinners – I will switch off the light for dinner to save energy) – price: three-day trip on an organic farm

ETR–Campaign by the German Environment Ministry 2000-01 (II)

Flyer „The ETR“ (3rd edition in 2003)

Advertisement of the flyer

Cinema/video-spot „Save fuel / Climate Protection“
– it won the Global Media Award in Gold

since August 2001 in entire D in 640 cinemas from December 2001 also in Turkish translation on TV (turkish channel) and available in English

Internet-Supply

Press Releases, Background information, Advertisement-images (also as download), cinemaspot, ETR-calculator, Links, many presentations at conferences/workshops

Requirements for the Design of ETR

1. Strong and societally attractive and fiscally motivated alliance (e.g. job creation)

2. Small, predictable steps for several years which are fixed in the law from the very beginning.
A single increase every few years and the abolition of environmentally harmful subsidies becomes more attractive after the ‘autumn 2000‘-experiences.

3. Revenue neutrality - including tax expenditures for the environment – tends to be less urgent as the double dividend approach is not always understood

4. First environmental impacts should already be reached in a short term (due to public expectations)

5. Take equity and competitiveness concerns into account

Requirement for the Promotion of an ETR

- ETR should be part of a fiscal policy package and communicated as an important element, not as a stand-alone tax measure.
- Tax expenditures for the environment should be communicated as environmental promotion programmes and as a way of revenue spending
- Environmental impacts should be examined and communicated broadly as a major success.
- Winners should be identified and asked to support ETR publically and demonstrate the benefits it brings in terms of innovation, job creation
- Use those elements to form an acceptance buildings/information/image campaign on ETR

Contact:

kai.schlegelmilch@bmu.bund.de

Tel.: +49-1888-305-2452

Fax: +49-1888-305-2349

http://www.bmu.de

http://www.bmu.de/oekologische-steuer-und-finanzreform
(information in D, E, FR, ESP)

THANK YOU VERY MUCH FOR YOUR ATTENTION!

The Ecological Tax Reform in Germany – Pros und Cons from the Environmental Point of View

Consideration of an ecologically reasonable design of tax rate and tax differentiation

Ingrid Hanhoff

Federal Environmental Agency, Germany

Important aspects from the environmental point of view are …

… the tax design (tax rates and their differentiation) and the fixing of further tax increases

➔ presentation by Ingrid Hanhoff

… the design of tax exemptions due to economic, social and/or ecological reasons

➔ presentation by Bettina Meyer

Pros:

- Germany already has an Ecological Tax Reform (ETR).
- It must be evaluated as a step in the right direction.
- Four years after the introduction of the ETR there are clear indications for postive ecological effects.
- ➔ Nevertheless, some details could and should be improved !

Environmental effects of the ETR in Germany

- Several leading economic research institutes have confirmed that the ecological tax reform will lead to the desired ecological effects.
- The German Institute for Economic Research (DIW) estimates, that the CO_2-emissions can be reduced by 2-3 % by 2005.
- The ETR combined with the particularly sharp increase in crude oil prices and the US dollar exchange rate in 2000 as well as the resulting public discussion, have already led to an increased awareness of energy-saving behaviour. In particular in the transport sector there are clear indications of a trend reversal.

Indications of a trend reversal in the transport sector

- ➔ Fuel consumption fell for the first time in three successive years (2000-2002) as compared to the most constant increase in the past,
- ➔ the sale of three- as well as five-litre consuming cars are booming and the development of a one-litre car has progressed,
- ➔ the number of environmentally sound gas-powered cars has increased to about 13 000,
- ➔ the number of passengers travelling by public transport or making use of car-sharing agencies increase,
- ➔ transportation performance in rail transport increased by 7.9 % in 2000 contrary to declining trends.
- ➔ tax reductions for sulphur-reduced and subsequently –free motor fuels has induced a total switch to sulphur-free motor fuel by mineral suppliers.

Further comments to the previous transparency

- fuel consumption of roads traffic decreased by 2.8 % in 2000 compared to the previous year; a further reduction of 1.0 % was measured in 2001 and a additional decline by 2.3 % in 2002 (with petrol by -4.4 % 2000, -3.0 in 2001 and -3.3 % in 2002 and diesel fuel by -0.7 % in 2000, +1.4 in 2001 and –0.8 % in 2002 each compared to the previous year).

➔ ➢ one-litre car - a prototype was presented to the public in April 2000,

➔ ➢ a representative survey of the Gesellschaft für Konsumforschung prove, that high motor fuel prices boost the buying of fuel saving cars. This has been confirmed by 63 % of the German car drivers.

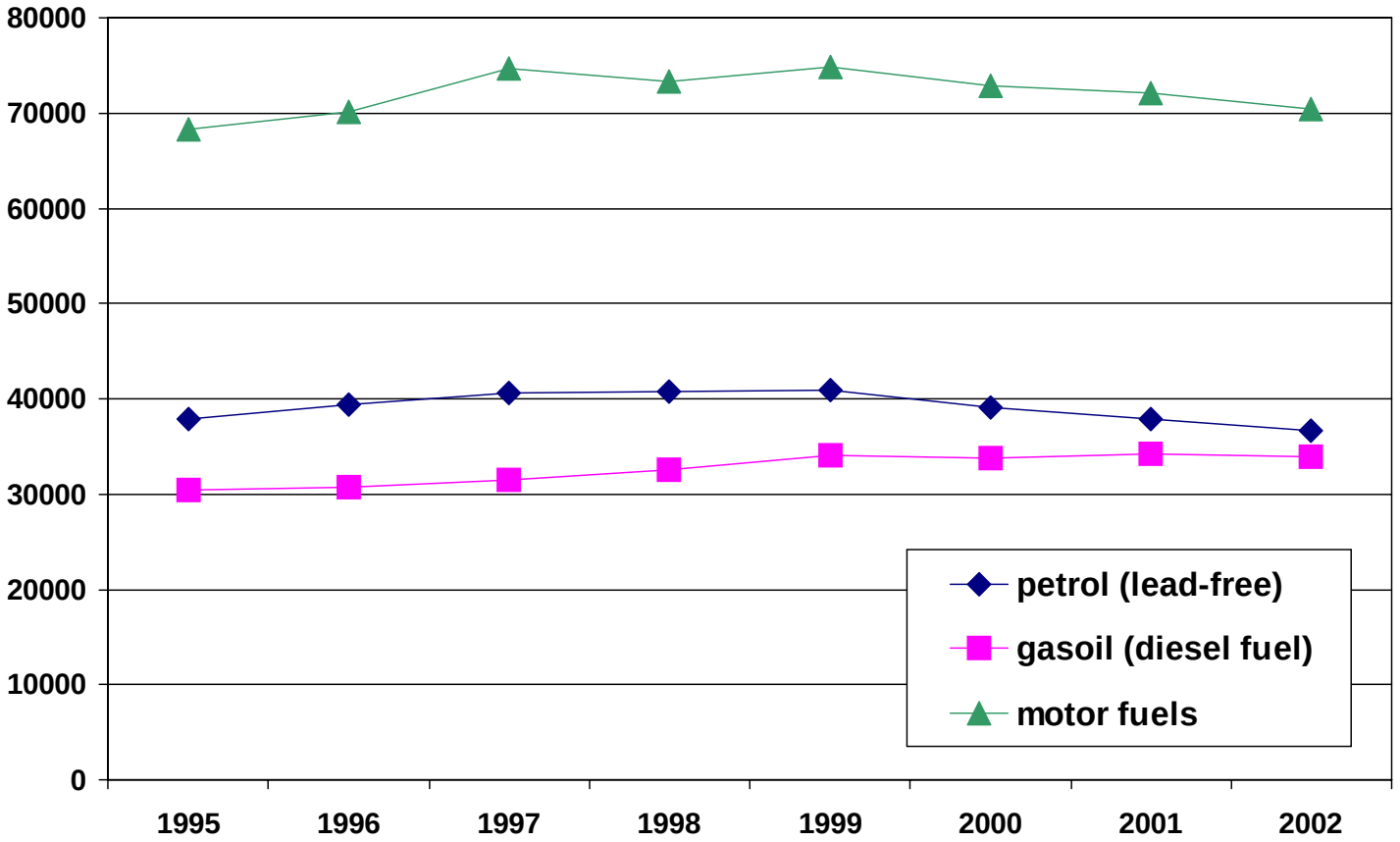
➔ ➢ Gas-powered cars increase - this is as much due to tax concessions for the use of natural gas as to the commitment of the gas industry to setting up a national wide filling station system by 2006.

➔ ➢ Number of rail passengers increase by 2% in 2000 as well as passengers using local
public transport – after downward trend up to 1998, a 0.4 % increase was identified in 1999, 0.8 % in 2000 and a further 0.8 in 2001

➔ ➢ This weekend, a newspaper published that there is a further increase in the use of car-sharing services by 20 percent in 2002. However, this is due to the – controversially discussed – new price system of the German Bundesbahn.

Taxation of Mineral Oil

Source: Federal Statistical Office 2003,
(**Data given for 1 million litre)**



Guiding ideas for the further presentation:

- ➔ Environmental relevance of tax design
- ➔ Criteria for the determination of the rate of taxation, tax differentiation and further tax increases
- ➔ Present situation in Germany
- ➔ Necessary improvements from the environmental point of view

Environmental relevance of tax design

- ➔ The level of taxation
  a) leads to an economical and rational use of energy and
  b) causes that renewable energy becomes an economical alternative to fossil energy sources,
- ➔ the tax differentiation – the tax rates of the single fossil energy sources – influences the choice of fossil energy sources,
- ➔ the fixing of further tax increases affects the adaptive behaviour of consumers and companies.

Basis of taxation, tax differentiation and level of taxation

- Basis of taxation: An ecological taxation should target all fossil energy sources.
- Tax differentiation: It should reflect the related environmental impact caused by each of the fossil energy sources.
- Level of taxation: Energy taxation has to fulfil different functions: a traditional fiscal function as *excise duty* and an added new function as an *environmental or green tax* (internalisation of external costs and environmental steering).

Criteria for the determination of tax differentiation due to related environmental impact

To reflect the environmental and especially the climate impact of different energy sources in a transparent way, two criteria are supportive:

- the *relevance of CO_2-emissions* of the energy source – as an indicator for climate impact
- the *energy content* of the energy source – as an approximately indicator for all other environmental impacts and resource use.

These criteria should be considered one half each when determine the tax rates of the different energy sources and thus the tax differentiation.

Additionally, a further – temporary – differentiation due to environmental aspects could be target-oriented to encourage the use of environmental sound alternative of an energy source, i.e. of sulphur-reduced or -free motor fuels.

Criteria for the determination of the level of taxation

- The external costs of energy sources – based on the climate and environmental impact – should constitute the minimum rate of taxation of each fossil energy sources.

- Additional components of taxation could be necessary and/or useful, which increase the level of taxation:
  - due to fiscal reasons an additional *excise duty component* and
  - due to environmental reasons – especially to bring about an steering effect – an additional *green tax component*.

Further explanation to the previous transparency :

Minimum rate of taxation:

The minimum tax rate is justified *first*, by the fact that the known estimations of external costs for the different energy sources must be deemed to be minimum size, because not all related environmental effects are considered and/or the underlying cost base are rather conservative and *second*, from the environmental point of view, the taxation of fossil energy sources should be – at minimum – cover the external costs.

Additional components:

The additional component which control the level of taxation should take place for each fossil energy source in the same way, so that no 'ecological bias' is induced which influences the choice of fossil energy sources. However, a tax rate differentiation between different markets – like motor fuels and heating fuels – can be reasonable.

Criteria for fixing further tax increases

- The fixing of further tax increases should occur
- - predictable in the long run,
- - reliable and
- - in moderate steps.
- **Advantages:**
- For consumers: social, unreasonable hardship can be avoided, because tax increases can
  be compensated by small, energy saving attitude changes in short term and by considering energy saving aspects in their buying decisions in long term.
- For companies: They get a reliable business environment for their research and development efforts as well as for their investment decisions.

Tax design within the German ETR – present situation

- Tax rates are fixed for a couple – not all – of energy sources (on petrol and diesel fuel,
  light heating oil, heavy heating oil, natural gas as well as on electricity).
- the tax rates on motor fuels and electricity have been fixed in advance for five steps
  (from 1999 to 2003) and each tax increase is moderate (3.07 ct per litre on motor fuels
  and 0.256 ct per kilowatt-hour on electricity).
- additionally a one-off increase on heavy heating oil of 0.256 ct pro kilogram on January 2000 (up to 1.789 ct/kg) and a further increase up to 2.50 ct pro kg on January this year,
- the tax differentiation (after the fifth step of taxation) – only – partly reflect the environ-mental impact of the fossil energy sources involved.

Necessary progress from the environmental point of view

- Further, moderate tax increases should be fixed for the long run
- as soon as possible.
- All fossil energy sources should be included in the ETR, especially coal.
- Tax differentiation should closely be orientated at the climate and environmental impact; especially the tax rate of heavy heating oil should be adapted. Futhermore, a differen-tiation due to the sulphur-content should be introduced.
- Renewable energy sources should be excluded from electricity taxation and the current double taxation of gas and heating oil by mineral and electricity tax should be abolished. In the long run, taxation should only take place as an input taxation, i.e. all primary energy sources should be subject to a tax related to their energy content and CO_2-emissions.
- Regarding the taxation of motor fuels, the granted tax concessions of diesel fuel should be reduced stepwise.

Tax differentiation after the fifth step of ETR (Jan. 2003)

Energy source	**Tax rate after the 5. step of ETR**	**Recommended tax rate related to energy content and CO_2 relevance**
Natural gas	0.55 ct / KWh	0.565 ct / KWh
Heating oil, light	**6.135 ct / litre**	**6.135 ct / litre**
Heating oil, heavy	2.500 ct / kg	7.353 ct / kg
Mineral coal	-	0.705 ct / kWh
Brown coal	-	0.728 ct / kWh
Electricity	2.05 ct / kWh_{el}	1.638 ct / kWh_{el}

Germany:“Ecotax“ in practice

Helmut Jansen

Federal Ministry of Finance

Energy taxation by the „Ecotax“

Step 1 (1st April 1999)

Increasing of the mineral oil tax rates on

- motor fuels,
- heating oil,
- natural gas (for heating) and
- liquid petroleum gas >LPG< (for heating)

Introduction of the electricity tax

Energy taxation by the „Ecotax“

Steps 2 to 5

(1st January 2000, 2001, 2002 and 2003)

Increasing of the

- mineral oil tax rates on motor fuels
- electricity tax rate

Energy taxation by the „Ecotax“

Exemptions and rate reductions for

- Producing sector
- Agricultural and forestry sector
- Combined heat and power plants
- Gas and steam power plants
- Biofuels
- Natural gas and LPG used as propellant
- Agricultural diesel
- Local public transport
- Night storage heaters

Energy taxation by the „Ecotax“

Latest development: Modification of step 5

Increasing of the mineral oil tax rates on

- natural gas and LPG for heating
- heavy fuel oil

Melting of exemptions and rate reductions

Part of excise duty system

„Ecotax“

Mineral oil and electricity tax, considerable laid down by european law - e.g.:

- Council directive 92/12/EEC on the general arrangements for products subject to excise duty and on the holding, movement and monitoring of such products
- Council directive 92/81/EEC on the harmonization of the structure of excise duties on mineral oils -

and in near future by Energy Tax Directive

On the one hand...

Easy and efficient tax collecting system with effective steering and distribution effects:

- Burden of the consumption or use of certain goods
- Fiscal charge shall affect the consumer
- For reasons of usefulness and administrative expenses limitation excise duties are raised at the manufacturer or the trade (= few taxpayers)
- Taxpayers have the possibility to shift the tax on to the consumer
- Thereby oil, gas and electricity prices increase
- Incentive for energy saving

On the other hand...

Exemptions and rate reductions =

- Higher administrative expenses
- Demands for further subsidies
- Weakening of steering effects
- Uneven distribution effects
- International subsidy race

The German Customs Administration

Revenue for EC (2002):

- Customs duties	€ bn.	2.9

National revenue (2002):

- Excise duties	€ bn.	65.6
- Import turnover tax	€ bn.	32.7

Total revenue (2002): € bn. 101.2

The German Customs Administration

Revenue of excise duties (2002):

- Mineral oil tax	€ bn. 42.2
- Electricity tax	€ bn. 5.1

Revenue of „Ecotax“:

1999	€ bn. 4.3
2000	€ bn. 8.8
2001	€ bn. 11.8
2002	€ bn. 14.6
2003	€ bn. 18.8

The German Customs Administration

Personnel (31/12/2002): 35.144

for „Ecotax“: 275 (0,78 %)

= administrative costs of € m. 18 (2002)

(0,12 % of „Ecotax“-revenue)

Result

The ecological tax reform
is effective
environmental protection -

easy and economically sound

The Ecological Tax Reform in Germany – Pro and Cons from the environmental point of view

Part II: Tax Provisions

Bettina Meyer

Ministry for the Environment,
Nature Conservation and Agriculture
of Schleswig-Holstein

Mercatorstr. 1-3
D - 24106 Kiel

Fon: xx49/ 431/ 988 - 7217
Fax: - 7239
E-Mail: bettina.meyer@munl.landsh.de

Kiel, April 2003

Overview

A. Ecologically / socially motivated tax provisions in the German ETR

B. Provisions for energy intensive industries

1. Provisions for energy intensive industries are necessary
2. Total tax exemption for energy intensive industries is not necessary, but counterproductive
3. The realised system of tax exemptions in Germany
4. Pros and Cons

C. Future reform of tax provisions for energy intensive industries

1. Marginal improvements of the current system
2. Changing the system of tax provisions
3. Emission trading for energy intensive industries, ecotaxes for all other sectors
4. Emission trading for all sectors, no further steps of ecotaxes

D. Concluding remarks

A. Ecologically / socially motivated tax provisions in the German ETR

Ministerium für Umwelt,
Naturschutz und Landwirtschaft
des Landes Schleswig-Holstein

- **Eco-taxes on electricity and motor fuels for public transport are only 50 % of the regular rates (only valid for increased taxes, not for taxes existing before 1999).**
- **Biofuels are exempted from taxation until 2008, and the use of natural gas as a propellant is taxed 80 % lower compared to petrol.**
- **Diesel (gas oil) used as a propellant in the agricultural sector is taxed at reduced rates (this is not justified by ecological reasons, but by avoiding disadvantages in competition)**
- **Electricity from renewable sources is exempted from the tax, if the producer uses it himself or if it comes from a network or an electric line that is exclusively fed by renewable sources.**
- **Combined heat and power plants with an average utilisation rate above 70 % will receive a *full* rebate of all energy taxes levied on their inputs.**
- **Power plants with an efficiency rate (defined as best possible share of electricity in primary energy use) of at least 57.5 % will also receive a *full* rebate of all energy taxes levied on their inputs.**
- **Small power plants (less than 2 MWel) are not subject to electricity tax, if if the producer uses electricity himself.**
- **For social reasons, up to 2002, electricity for night-storage heaters installed before April 1999 was taxed at half of the regular rate, between 2003 and 2006 at 60% of the regular rate. In 2007 the regular rate for electricity will apply.**

B. Provisions for energy intensive industries

1. **Provisions for energy intensive industries are necessary because of the potential negative effects on the economy and the prevention of “carbon leakage”**

2. **Total tax exemption for energy intensive industries is not necessary, but counterproductive because of three reasons:**

   ecological: incentives to lower energy consumption / emissions decrease

   fiscal and economic reasons: the possible decrease of direct taxes or social security contributions is lower, thus also positive effects on the labour market are lower

   distributional: shifting tax burden to private households

B.3. The realised system of tax provisions for business in Germany

	1999 – 2002	2003
Threshold, up to which full tax rates have to be paid	512 Euro (both in mineral oil and electricity tax)	512 Euro (both in mineral oil and electricity tax)
Reduction of tax rates	reduction by 80% remaining tax level: 20%	reduction by 40% remaining tax level: 60%
Additional tax rebates, when remaining eco-tax burden exceeds the decrease of social security contributions rate of rebate of net burden	Only the ecotax payments which exceeded the savings of social security contributions by more than twenty percent were refunded 100 %	95 % of ecotax payments which exceed the savings of social security contributions percent were refunded. 95%

B.4. Pros and cons of tax provisions

- **Tax provisions for industry are effective in the sense of avoiding disadvantages for competitiveness of energy intensive firms by unilateral high energy cost.**
- **The tax provisions for firms are quite complicated and cause high administrative efforts both for firms and tax administration.**
- **The marginal tax burden and thus the incentive to save energy is very low for firms, which fulfil the criteria for a tax rebate**
- **By restructuring a firm in an energy-intensive and a labour-intensive daughter the possible tax rebate increases. This is a counterproductive incentive to avoid or lower energy tax burden.**
- **As pension insurance rates increased because of factors which have nothing to do with ETR (e.g. demographical factors, unemployment), also the tax rebates for energy intensive firms increase.**

C. Future Reform of Tax Provisions

Any future reform of ETR and its tax provisions has to be made suitable to the setting, some important points are:

- **EU enlargement**
- **Reform of the European institutions and voting rules**
- **Emission trading is expected to start in 2005**
- **Energy tax directive will come into force in 2004**
- **Guidelines of state-aids for environment / subsidy control of the European Commission**
- **Notification of provisions in the framework of the German ETR by the European Commission**
- **Decision of the European Court of Justice on the Austrian provisions for energy intensive industries**
- **Expected decisions of the German Federal Constitutional Court concerning the legal actions against the German ETR**

Four strategies for the reform of tax provisions for energy intensive firms:

1. Marginal improvements of the current system of tax provisions

2. Changing the model of tax provisions
   - provisions dependant of actual energy intensity
   - tax-free amounts of energy consumption with respect to products or processes
   - definition of specific tax reduction rates for energy intensive sectors

3. Emission trading for energy intensive industries,
   (further increases of) ecotaxes for all other sectors

4. Emission trading for all sectors,
   no further steps of ecotaxes

D. Concluding remarks

- **There is a lot of well-argued and justified critics on the German system of tax provisions – but a substantially better concept is not in sight.**
- **The most promising strategy is strategy 3: ET for energy intensive installations, ETR for all other fossile energy uses.**
- **Germany has to decide what to do with existing ecotaxes and provisions for industry.**
- **For accession countries it may be a good strategy to introduce ET for energy intensive installations as prescribed in the draft directive on ET and to introduce respectively increase ecotaxes for all other sectors without provisions for business.**
- **All EU countries have to answer the question how to tax electricity, because the use of fossile fuels to produce electricity falls under ET.**

The Ecological Tax Reform from the perspective of the Federal Ministry of Economics and Labour

Prague Workshop

24 th of April 2003

Wolfgang Hass

Federal Ministry of Economics and Labour

Philosophy of the eco tax

- The eco tax started in 1999 and reached it's 5th step in 2003. The eco tax has two targets.
- Serve the environment by encouraging energy savings and efficient energy use and promoting renewable energies.
- Give incentives for creating new jobs by reducing the non-wage costs.

  (using the revenue of the eco-tax to reduce the pension contributions for employers and employees)

What are the results of the eco tax?

- According to studies the eco-tax will reduce the CO_2 emission by 2 – 3 % until 2010

  That is an important contribution to reach our Kyoto target.

  The eco tax gives also special incentives by tax exemptions for the use of combined heat and power plants and contributes to programmes for renewable energies.

- Reduction of pension contributions from 20,3 % in 1998 to 19,5 % in 2003;

  development 1999 – 2003 see table 1.

  According to the above mentioned studies the eco tax creates 250.000 new jobs.

Table 1

Table 1

Tax revenue	
	total
1999	4,3 Mrd. Euro
2000	8,8 Mrd. Euro
2001	11,5 Mrd. Euro
2002	14,3 Mrd. Euro
2003	18,3 Mrd. Euro

Reduction in pension insurance contributions		
	eco tax %	real %
1999	0,8	0,8
2000	1,0	1,0
2001	1,3	1,2
2002	1,5	1,2
2003	1,7	0,8

Quelle: BMF 2002 (1999-2001:Ist-Werte; 2002 und 2003 Prognose)

Problems of international competition

- The general effects of the eco tax on economy, environment and the energy sector are important issues for the Federal Ministry of Economics and Labour (BMWA)

- But there is special and very important task for the BMWA:

  When introducing a new national energy eco tax we have to look carefully on the impacts of international competition.

The European Situation

- First priority is to look at the situation in the European Union. We have to realise that the harmonisation of energy taxes is still lacking.

  The commission of the EU was presenting three proposals for directives since 1993 without finding consensus. ECOFIN in March 2003 was brought a brake through. Adoption of the directive means increasing the existing, harmonised mineral oil taxes and introducing new taxes for gas, coal and electricity. But the harmonisation concept with minimum rates for the different energy products will be lacking even after adoption of the directive. But the directive will give an important framework for instance for tax exemptions.

Table 2 shows the comparison of the proposed EU taxes with the existing German energy taxes.

Table 2a

Minimum levels of taxation applicable to motor fuels

	German tax rate at 01/03	Eco tax	EU minimum levels of taxation 1/1/2002	EU minimum levels of taxation at 1/1/2004	EU minimum levels of taxation at 1/1/2010
Petrol (unlaeded)[1)] (Euro per 1000 l)	654,50	150,00	287,00	359,00	359,00
Petrol (unleaded)[2)] (Euro per 1000 l)	669,80	150,00	287,00	359,00	359,00
Gas oil [1)] (Euro per 1000 l)	470,40	150,00	245,00	302,00	330,00
Gas oil [2)] (Euro per 1000 l)	485,70	150,00	245,00	302,00	330,00
Kerosene (Euro per 1000 l)	654,50	150,00	0	302,00	330,00
LPG (Euro per 1000 kg)	161,00	37,78	0	125,00	125,00
Natural gas (Euro per Gigajoule)	3,44	0,79	0	2,60	2,60

[1)] sulphur content maximum 10mg/kg

[2)] sulphur content more than 10mg/kg

Table 2b

Minimum level of taxation applicable to heating fuels and electricity				Business	Non business
	German tax rate at 01/03	Eco tax	EU minimum levels of taxation 1/1/2002	EU minimum levels of taxation at 1/1/2004	EU minimum levels of taxation at 1/1/2004
Gas oil (Euro per 1000 l)	**61,35**	**20,45**	**18,00**	**21,00**	**21,00**
Heavy fuel oil (Euro per 1000 kg)	**17,89**	**0**	**13,00**	**15,00**	**15,00**
Kerosene (Euro per 1000 l)	**0**	**0**	**0**	**0**	**0**
LPG (Euro per 1000 kg)	**38,34**	**0**	**0**	**0**	**0**
Natural gas (Euro per Gigajoule)	**1,53**	**1,02**	**0**	**0,15**	**0,30**
Coal and Coke (Euro per Gigajoule)	**0**	**0**	**0**	**0,15**	**0,30**
Electricity (Euro per MWh)	**20,50**	**20,50**	**0**	**0,50**	**1,00**

Impacts on the eco tax system

- The German energy taxes are exceeding the existing and the proposed EU taxes. We have also to take into account the situation in the East European countries.

We therefore still need exemptions from the eco tax for German business, especially for energy intensive industries.

- The eco tax contains reduced rates for the manufacturing industry and for agriculture/forestry for electricity, heating oil and gas.

Table 3 gives an overview about the tax rates for all energy products and Table 4 shows the reduce rates.

Table 3

National eco tax 1999 – 2003										
	Unleaded petrol		Gas oil		Heating oil		Natural gas		Electicity	
	Cent/l		Cent/l		Cent/l		Cent/kWh		Cent/kWh	
	eco tax	total	eco tax	total	eco tax	total	eco tax	total	eco tax	total
1998	0	50,10	0	31,70	0	4,09	0	0,19	0	0
1999	3,07	53,17	3,07	34,77	2,05	6,14	0,16	0,35	1,02	1,02
2000	6,14	56,24	6,14	37,84	2,05	6,14	0,16	0,35	1,28	1,28
2001	9,20	59,31	9,20	40,90	2,05	6,14	0,16	0,35	1,53	1,53
2002	12,27	62,38	12,27	43,97	2,05	6,14	0,16	0,35	1,79	1,79
2003	15,34	65,45	15,34	47,04	2,05	6,14	0,37	0,55	2,05	2,05

Table 4

Specials (2002)										
	Petrol		Gas oil		Heating oil		Natural gas		Electricty	
	prefer-ential %	eco tax Cent/l	prefer-ential %	eco tax Cent/l	prefer-ential %	eco tax Cent/l	prefer-ential %	eco tax Cent/ kWh	prefer-ential %	eco tax Cent/ kWh
industry/ manufacturing	-	-	-	-	80	0,41	80	0,032	80	0,36
agriculture	-	-	-	-	80	0,41	80	0,032	80	0,36
power generation	-	-	-	-	100	0	100	0,000	100	0
train traffic	-	-	-	-	-	-	-	-	50	0,9
public transport	50	9	50	9	-	-	-	-	50	0,9

Specials (2003)										
	Petrol		Gas oil		Heating oil		Natural gas		Electricty	
	prefer-ential %	eco tax Cent/l	prefer-ential %	eco tax Cent/l	prefer-ential %	eco tax Cent/l	prefer-ential %	eco tax Cent/ kWh	prefer-ential %	eco tax Cent/ kWh
industry/ manufacturing	-	-	-	-	40	1,2	40	0,220	40	1,23
agriculture	-	-	-	-	40	1,2	40	0,220	40	1,23
power generation	-	-	-	-	100	0	100	0,000	100	0
train traffic	-	-	-	-	-	-	-	-	50	1,0
public transport	50	9	50	9	-	-	-	-	50	1,0

- **For energy intensive industries we have in addition to the reduced rates a special tax cap, that was also modified in 2003.**

  It is designed as follows.

- **The special tax cap (“Spitzenausgleich”) shall limit the burden of energy intensive companies. If the eco tax for gas, heating oil and electricity exceeds the relief on pension insurance contributions, 95 % of the excess tax will be reimbursed.**

  The system was modified in 2003. Until last year 100 % of the excess tax was reimbursed. In the old system the maximum tax burden (fuels are not included) had been 20 % of the relief of the pension contributions, now it is 5 % of the eco tax.

Conclusions for Industry

- All in all the new system got worse for the industry. For a company in the aluminium sector for instance it may result an increase of the tax burden from 200.000 € to 1,5 Mio €.

And for example in the machinery sector that is less energy-intensive and therefore the relief from the reduction of the pension contributions is exceeding the eco tax, but the increased tax rates from 20 % to 60 % leads to an

increasing overall burden for the enterprises.

- **When we discussed the modifications last year, the BMWA pointed out that we have to take into account the agreement between Government and Business on climate protection. This agreement contains promises of Government in the field of taxation while the business sector is promising CO_2 reductions until 2012.**

- **In the end I think we have found a compromise that should satisfy all parties.**

- **The eco tax gives incentives to the environment and to the labour market. Even the modified system brings net benefits for labour intensive sectors comparing with 1998. But it is clear that especially in the time of increasing energy prices there are many complains by industry and the private sector about the eco tax.**