

The Ecological Tax Reform in Germany

or

How to sell tax increases?

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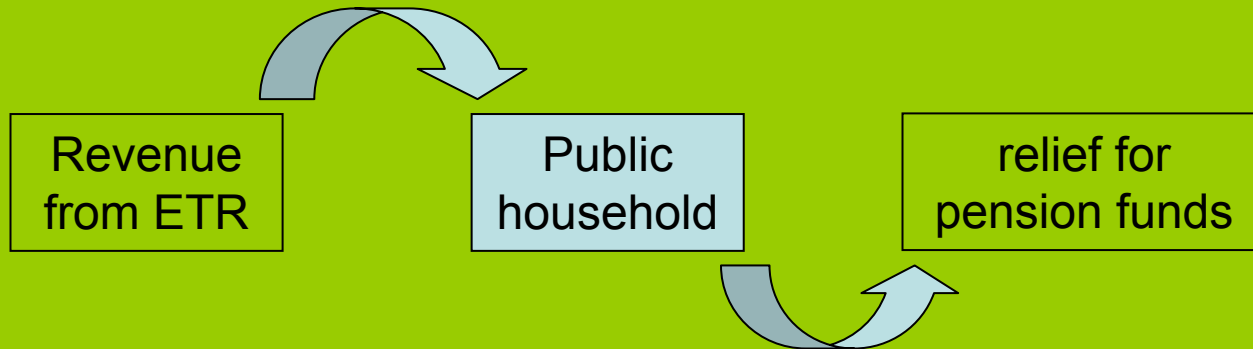
FÖS/GBG – Green Budget Germany

the ecotax

based on the German
advertising campaign

the double dividend-principle of ETR

→ „tax bads – not goods“;



→ steering effect towards
a low-carbon economy

ETR since 1999

Tax Rate Increases

→ **steady increases in 1999-2003:**

- **electricity tax** 1.02 Ct/kWh in 1999
(+0.26 Ct/kWh p.a. between 2000-2003)
- **mineral oil taxes on transport fuels:**
(+3.07 Ct/litre p.a. between 1999-2003)

ETR since 1999

Tax Rate Increases

→ **single increase in 1999 (+2003) only:**

- **tax on natural gas + 0.16 Ct/kWh (+0.2 Ct/l in 2003)**
- **tax on light heating oil: + 2.05 Ct/litre**

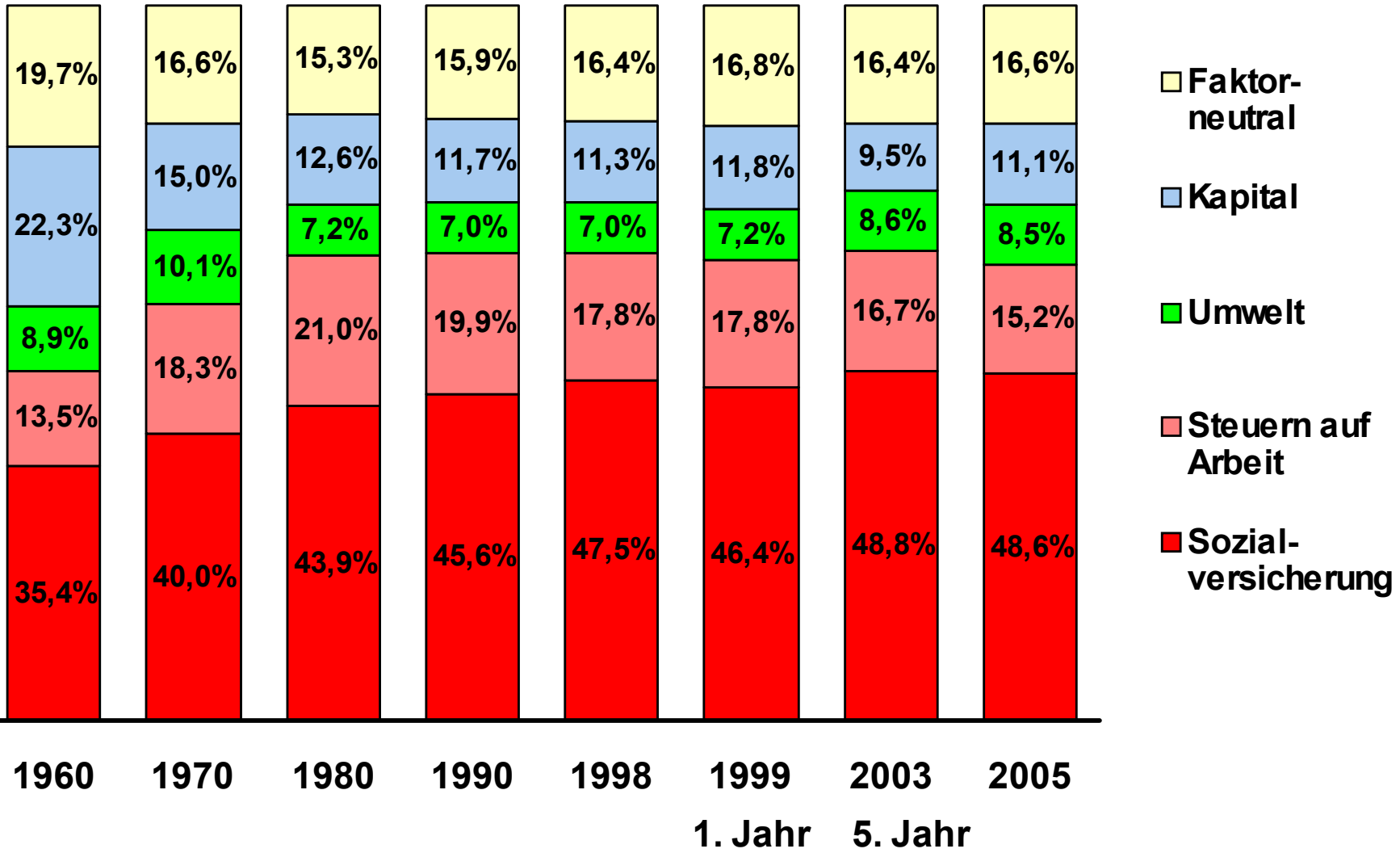
ETR - revenues

→ **ecotax revenues**: 18.0 bn € in 2005
(total energy taxation: 46.9 bn €)

→ to a large extent revenue neutral, but some mn €, partly by tax expenditures, are **spent on**:

- financial support of renewables, building modernisation
- tax concessions e.g. for public/rail transport, biofuels, CHP

Structure of tax system and changes by EFR



Economic and social impacts

- **Role of environmental taxes has been strengthened, but tax shift is only 0.8% of GDP or 1.6% of total tax revenues:
two thirds of total revenues of taxes and social security contributions are still burdened on labour**
- **Social acceptance was initially high; unions supported it; but due to the increase of oil prices it is now mixed**
- **Hence, studies had to be done and campaigns to be initiated...**

Study on the Impacts of the ETR

by DIW and Ecologic

commissioned by the EPA/UBA

Examined impacts on:

1. environmental protection
2. private households
3. businesses
4. employment
5. GDP

1. Environmental protection



Effective climate protection reduces environmental pollution and is profitable

Environmental impacts of the ETR

Effect of the ETR only:

- Overall 2-3% CO₂-emissions (20-25 mio. t) will be reduced by 2010

Environmental impacts of the ETR jointly with the world oil prices:

- Sales of road transport fuel consumption has decreased between 1999 and 2006 by 17% (after five decades of steady growth!)
- Diesel sales stabilised, while gasoline sales decreased substantially

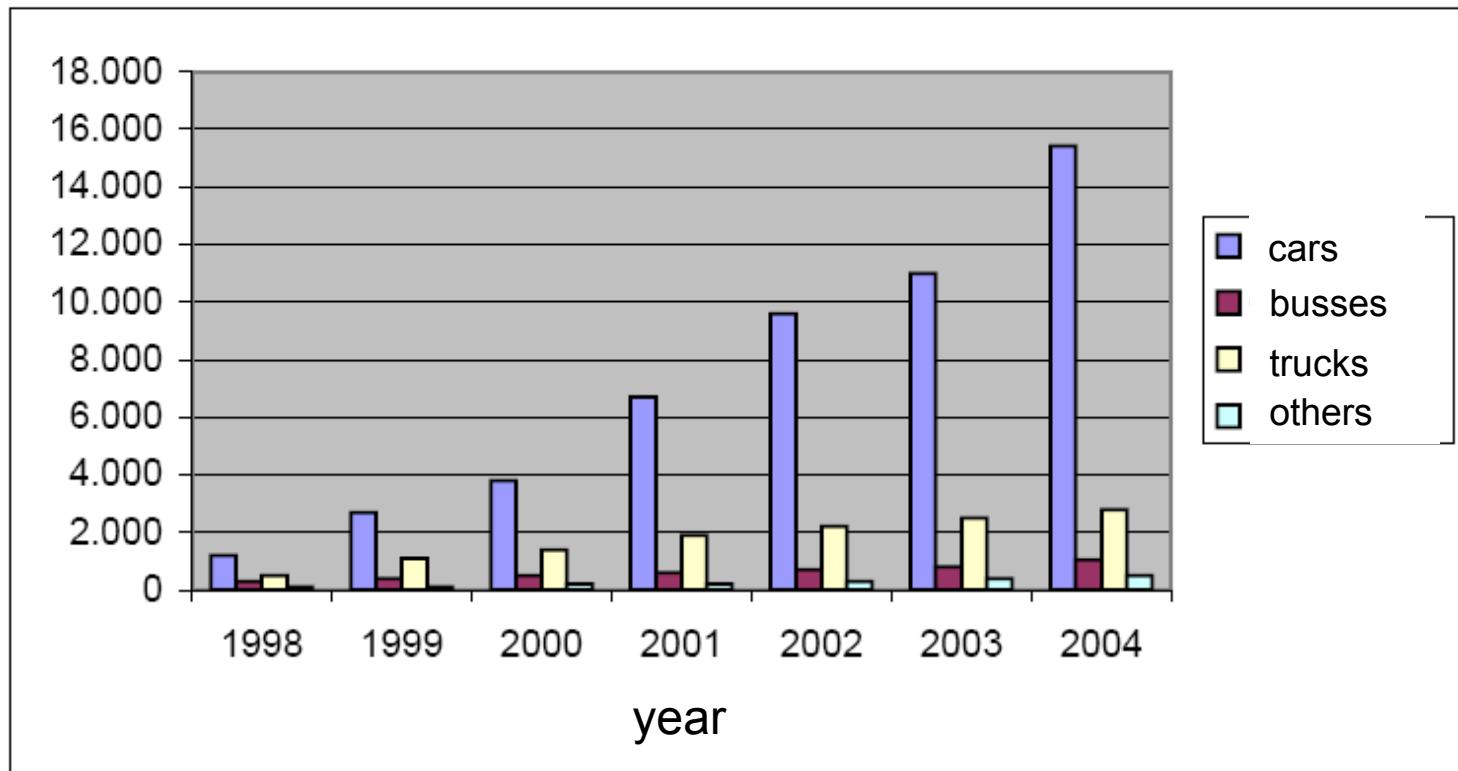
Environmental impacts of the ETR

- Number of passengers using public transport is increasing – after decades of decrease – since 1999 and are about 7-8% higher in 2006.**
- Number of members of CarSharing-Organisations is increasing almost yearly since 1999 with two-digit percentage numbers.**
- The manufacturers of solarthermal plants for water heating have similar growth rates – supported not only by the higher heating taxes, but also by a funding programme providing grants, which is financed by the eco-tax revenue.**

Innovations

- **product-related**, e.g. 3-litre-motor and natural-gas engine
- **process-related**, e.g. material-saving techniques, „energy sensors“
- **function-related**, e.g. carsharing, call-a-bike
- **user-related**, e.g. reorganisation of public transport

Increase of natural gas vehicles in Germany



2. Private Households

Distributional impacts on private households

- Private households are net payers energy tax – as designed here – is slightly regressive
- higher net income for employees due to reduced social security contributions and rising employment
- no direct compensation for self-employed, students, civil servants, long-term unemployed, pensioners

Distributional impacts on private households

- higher motor fuel taxes hit commuters – thus mainly the middle-class which can cope with that
- negative distributional impact could be compensated via transfers or tax allowances
- e.g. heating costs credit for welfare recipients, income tax relief on commuting costs (both in 2000/2001)

Private households actively reduce energy supply by:

- turning-off electrical equipment (83%)
- switching-off lights (97%)
- investing into better insulation (50%)
- using public transport instead of car (20%)
- improving driving behaviour (73%)

→ *cf. advertisement in all municipal cinemas in 2000/2001*



3. Businesses

Burdens for businesses

- 2002: 0,3 bn € (net)
- 2003: 1,2 bn € (net)

→ **but:**

1. service sector has been relieved by 1,2 bn € (2002)
2. manufacturing sector has also been relieved overall

→ Important industries are thus net winners, but...

→ industries communicate quite differently!

Advantages for businesses

- production and dissemination of energy-efficient products and production processes → cost advantages
- supporting innovations and thus exploiting new markets
- tax reductions for adoption of natural gas, biodiesel and CHP

Reliefs for businesses

- **Overall in industry there are more winners than losers (study of RWI)**
- **Many companies were identified as winners in an empirical study with 16 case studies (study of DIW/ecologic)**

Special provisions

- reduced tax rates and special provisions for:
 - producing sector
 - agricultural sector

Positive impacts on selected businesses

Dezem GmbH - making energy consumption transparent

- new service concept reveals energy consumption,
- „energy sensors“ measure the energy consumption,
- sensibility of employees for their behaviour,
- help companies to reduce their energy consumption by 20 to 50%;

GASAG – providing natural gas:

- investment in fuels stations that supply natural gas in Berlin → expected new revenue for GASAG;

Positive impacts on selected businesses

Schering - making production processes more energy-efficient:

- self-supply in most installations,
- energy is produced in efficient CHP installations,
- identification of inefficient energy use in buildings → energy savings of up to 600.000 €/year,
- new production installations and electrical appliances

4. Employment

A young woman with blonde hair, wearing a red hoodie and a grey and white patterned scarf, stands in an urban setting. She is holding a white rectangular sign in front of her chest. The sign has the word 'my' written in red lowercase letters and 'JOB' written in black uppercase letters. The background is blurred, showing a city street with buildings and a yellow and blue vehicle. The image has a green border on the right side.

my
JOB

A close-up, side-profile photograph of a person riding a bicycle. The person is wearing a red long-sleeved shirt, a black and white geometric patterned sweater, and dark blue denim jeans. A white cap is visible at the top. The bicycle has black handlebars with yellow grips and a black saddle. The background is a blurred body of water. A white text box is overlaid at the bottom of the image.

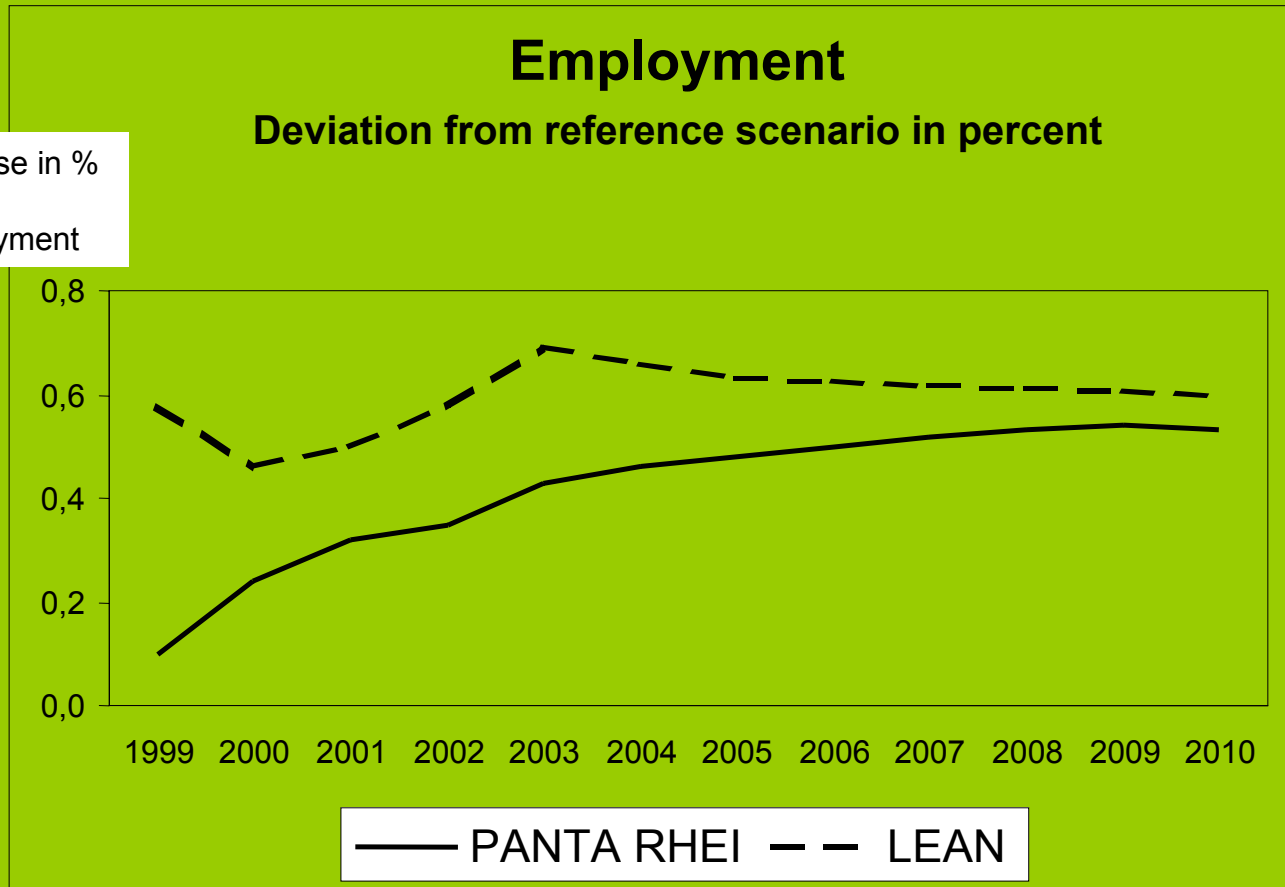
**lower ancillary wage costs
create new jobs**

Lower pension fund contributions

- reduced in nominal terms by 0.8%, i.e. from 20.3% (1998) to 19.5% (2004), in real terms by 1.7%
- without the ETR the contributions would have increased to 21,2% by 2004

Impacts on employment

Increase in %
of total
employment



Economic and social impacts

- **Additional jobs up to 250.000 (= 0.5%) until 2003 (study of DIW)**
- **The incentive to reduce black labour markets is strengthened. In 2003 the black labour market was reduced for the first time by 1.6% in Germany**

5. GDP

Impacts on GDP

- Small – slightly positive – effect on GDP (study of DIW)
- higher energy costs triggers investment in **energy saving technologies** → investment,
- **reduced energy demand** and reduced business volume of energy suppliers

Further positive

impacts...

A woman with short, curly dark hair is smiling broadly. She is wearing a dark turtleneck under a teal sweater. She is holding a white rectangular sign in front of her chest with both hands. The sign has the word 'more' written in red, bold, lowercase letters, and the word 'Sex' written in black, lowercase, cursive letters below it. The background is a blurred outdoor setting with a building and a fence.

more

Sex

Sorry?



more

Sex

for those who turn off the lights.

They are rewarded...

one way or another

Confusion!

German Parliament: MP's request

“Which cognitions influenced the Federal Government to answer the question “what’s the ecotax good for?” with “more sex” and will there be further sexist advertising?”

German Government on MP's request

“...the motive “more sex” is just one out of four motives of a poster-campaign showing the advantages of the ecotax:

- **more climate protection** through efficient use of energy,
- **more jobs** through lower pension fund contributions,
- **more money** due to reducing ancillary wage costs

„...the motive „more sex“
must be interpreted along
with the following statement:

**who turns off the lights gets
rewarded**

one way or another

“

Conclusion

**Does the German ETR
meet its objectives?**

1) Double dividend achieved:

- reduction of GHG-emissions: approx. 3% by 2010 (\approx 20 m tons), particularly transport fuel sales dropped by 17%
- increase in employment: approx. 250.000 jobs in 2003.

2) German industry:

- special provisions and exemptions prevented a reduced competitiveness for German industry,
- important sectors are relieved
- production higher in most sectors than in reference case,
- constant growth rate secured.

3) Managing distributional impacts of the ETR:

- slightly regressive character with negative impacts on low-income households,
- compensation programmes and reduced tax rates for social reasons;
- prevent double burdens.

4) Incentives for a low-carbon economy:

- reduction in GHG-emissions achieved,
 - but: special provisions and exemptions reduce the steering effect,
- further developed required!

However, though innovative campaigns were launched, the social acceptance is mixed, hence not much progress is visible.

But Germany has reached a high level of energy taxation:

Others are most welcome to follow!

Summing up:

WAS BRINGT DIE ÖKOSTEUER?

What's the ecotax good for?

JOBS

KLIMASCHUTZ
climate protection

MEHR GELD
more money

Mehr
more
Sex

**Thank you
for your attention!**

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