GreenBudgetEurope

Tackling the crisis with ecological tax/fiscal reforms

Ljubljana, 20.09.2012

Environmental Fiscal Reforms for Budget Consolidation

Kai Schlegelmilch

Vice President of Green Budget Europe

www.green-budget.eu

Structure of presentation

- Green Budget Europe
- Energy taxation in Germany, Sweden, Denmark, Finland, Greece, Ireland, United Kingdom
- Resource taxation
- Initiatives in the United States and Asia
- Financing of Energy Efficiency and Renewable Energies
- Summary

GreenBudgetEurope

- **Non-Profit Non-Governmental Organization**
  - Green Budget Germany (GBG) founded in 1994, now 12 employees and 10+ interns
  - > 90% are from third party financing

- **Fields of expertise**

  Commitment to Market-Based Instruments in environmental policy as the price strongest market signal, influenced by:
  - Environmental Fiscal/Tax Reform: Taxes/Charges on energy and resources
  - Cutting of environmentally harmful subsidies

- **Main activities**
  - Studies and Newsletters, Conferences and Trainings
  - GreenBudgetEurope since 2008 as project of GBG = European network on MBI/EFR
  - **Next GBE-Conference on 29th/30th October in Paris (http://www.foes.de/internationales/green-budget-europe/gbe-veranstaltungen/)**
  - Host of Global Conference on Environmental Taxation 2007 in Munich and 2014 in Berlin
  - Several studies on environmentally harmful subsidies
  - Projects on resource taxation and CETRiE

Business as usual is not an option:

Options for action:
Sustainable consumption and production patterns triggered by an Environmental Fiscal Reform (EFR)!

Germany: EFR elements Implemented

1999-2003 (Social Democrats and Greens): ETR, then steps of EFR

- **Social security contributions were reduced**
- **Transport/heating fuel taxes were increased**
- **An electricity tax was introduced between**
- **Impacts: -2-3% CO2-emissions, first time ever lasting reduction of fuel sales (-17% incl. oil price impact), 250,000 additional jobs created**

2011 (Conservatives and Liberals): Extending EFR to untaxed areas

- **Ticket fees on air transport**
- **Tax on nuclear fuel**
- **Heavy goods vehicle toll extended**
- **Reduction of industrial exemptions from the energy tax**
- **Financial transaction tax (generally adopted, started as a banking charge)**
- Not (yet?) implemented: Base company car taxation on CO_2-emissions

Green Budget Germany (GBG) proposed all these elements

→ Environmental Fiscal Reform is now a cross-party consensus

Germany: Direct impacts of ETR only in 2003

Less

- **CO_2-emissions** (2-3%)
- **Tax on 'goods': Pension costs** (-16 bn € or -1.7%)
- **Costs for industry** (-€1 bn)

+

- **Partly also the impacts shown on the previous slide**

More

- **Tax on environmental 'bads': energy taxes** (+€18.7 bn)
- **Employment** (+250,000 jobs)
- **Pensions** (+1.2%)

+

- **Partly also the impacts shown on the previous slide**

Source: Green Budget Germany calculations

Germany: Overall impacts of energy price increases (including ETR) in 2003

Less

- **Fuel consumption** (-17%)
- **Unloaded truck mileage**

(- 2%-points between 1998-2000)

- **Fossil fuel imports** (-13%)
- **Overall tax burden** (-4 %)

More

- **Car sharing** (+70%)
- **Public transport** (+5%)
- **Energy saving technologies**
- **Energy efficiency**
- **Gas-powered cars** (x10)
- **Biofuel cars** (x2)
- **Renewable energies**

Source: Green Budget Germany calculations

Sweden

- **Energy Tax** (implemented in 1950s) on electricity, gas, fuel oil, coal und coke

- **CO_2 –Tax** (implemented in 1991, gradual increases since) on CO_2 content of petroleum products, natural gas ,coal, and coke
- → Only households are taxed fully with CO_2–tax and energy tax (industry is broadly exempt from the energy tax)

Effects:

- → **CO_2 emissions were reduced by 9%** between 1990 and 2007, while economic growth amounted to 48% in the same period (Source: Ministry of Finance, SWE)

- **Secrets of success:** All political parties are willing to implement elements of EFR. This was achieved, in part, by granting reduced CO_2 tax rates (50%) and imposing no energy tax for industrial consumers, in order to prevent the loss of a competitive edge (OECD 2000)

Denmark

1. **CO_2 tax from 1991, first on business only, from 1992 also on private households**

→ CO2 emissions were **reduced by 24%** against a business-as-usual scenario between 1990-2001 (Source: Speck et al. 2005).

2. **Sulphur tax: introduced in 1996 and levied on all fossil fuels with a sulphur content exceeding 0.05% (based on weight). The rate was set at €2.7/kg of sulphur in energy products, or at about €1.3/kg of sulphur dioxide (SO_2) emissions**

→ Sulphur tax resulted in **84% reductions** in sulphur emissions between 1995 to 2004. Denmark now has the lowest SO_2-intensity per unit of GDP in the OECD.

3. **A major tax reform is being phased in from 2010 to 2019 with the aim of reducing the fiscal burden on personal income in order to stimulate labour supply in the long term**

- Financing is partly provided by higher energy, transport and environmental taxes; energy taxes on business and households – except for petrol and diesel - are increased by 15%
- Potentially negative effects on household with a low disposable income, a lump-sum transfer ('green check') will be granted to adults and children

Finland

1. Offsetting tax revenue losses due to the **abolition of the national pension contribution for employers**.
2. Changes of the structure of energy taxes on fuel for transport and heat and power plants since 2011. The tax structure is now based on **energy content, carbon dioxide emissions and local/particle** emissions that have adverse health effects.
3. In 2011, **additional Euro 730 million** were collected in taxes on fuel for heat and power plants and energy taxes on electricity.

Greece

- Fiscal crisis and deficit forced the government to also take some positive decisions regarding EFR: transport fuel taxes were increased very substantially:

  2008-11:
- petrol +91%
- diesel +40%

Ireland

- Also here the fiscal crisis helped EFR-elements to be implemented: Increase in excise taxes levied on transport fuels (2008-2011: +30%)

- Introduction of a CO_2 tax (15 Euro/ton CO_2) on all energy products and further increases (doubling) as part of the National Recovery Plan 2011-2014 (part of the fiscal consolidation process)

- Introduction of an air ticket tax by 3/2008:
- basic €10 tax on tickets, €2 for inland flights and international flights less than 300km.
- Flights to London: €10, British west coast: €2.
- Revenue: €150m.
- Ryanair described it as 'discriminatory', 'regressive' and 'damaging to Ireland's tourism industry'. The international air transport association IATA described it as 'collective madness'.

- Ireland was the fourth air ticket tax in the EU
- UK 1994, substantial increase in 2007 to €12.50 to €50.
- FR 2007

Belgium

Failure of introducing an air ticket tax:

- Belgium's tax was to come into effect before the end of 2008, starting at €10 for all flights, rising to €50 for intercontinental and business class.
- It was announced not as environmental measure, but just as a way of raising money: €132 million p.a.
- Belgium abandoned its tax plans only 24 days after launching it following opposition from regional airports.

Netherlands

Abolition of an introduced air ticket tax 2008-7/2009:

- ranged from 11 to 45 euros
- exempted cargo flights and transfer passengers.
- Major opposition by aviation and local industry, blamed tax for decline in passenger traffic at the main Dutch airports, esp. at Amsterdam Schiphol.
- Revenue: €300 million p.a.
- Commissioned report: Cost the Dutch economy €1.3 billion in lost revenue.
- Schiphol Group announced cuts in its work force of 10-25% by the end of 2009. Schiphol Airport, Europe's 5th biggest, recorded a drop of 430,000 passengers in February, a 13.7% fall against the same month a year ago. The number of locally boarding passengers fell by 17.7%. The number of transfer passengers, who were exempted from the tax, declined by 8.5%.
- Passengers tried avoiding the tax by flying from airports across the border in Belgium or Germany

United Kingdom

1. **The Climate Change Levy (CCL): introduced 2001**, is levied on natural gas, coal and electricity, applies to industrial and commercial energy use. Revenues recycled to companies - reduced social security payments. Rates equivalent to €27 (coal) – €51 (natural gas, electricity) per tonne CO_2

   → Energy demand decreased by 2.3% p.a. until 2010 (against 2001). Trade and the public sector accounted for the largest past of the reductions.

   → CCL led to the introduction of energy management departments in most of the affected companies

2. **Fuel Duty Escalator: 1993-1999,** road fuel duties increased by 5% p.a. in real terms (= above inflation)

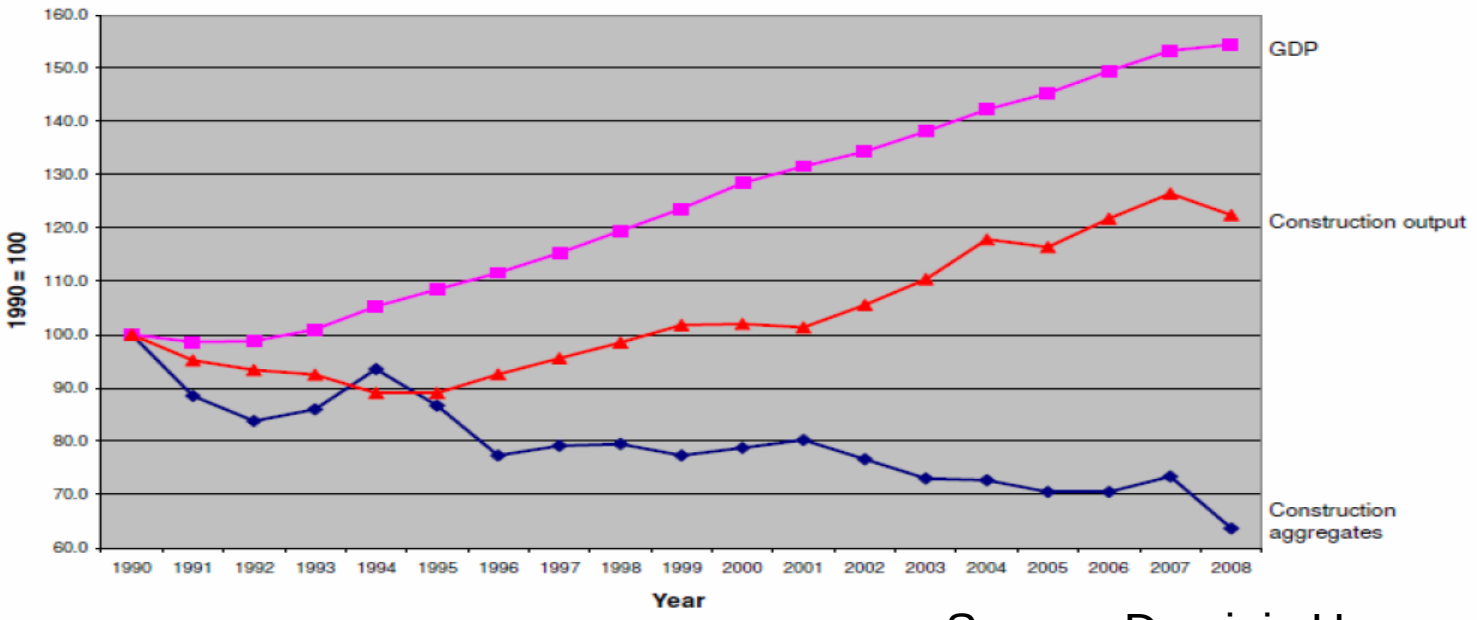
   → traffic levels remained same 1998-2000, good revenue raiser

3. **UK introduced an aggregates levy in 1996: …**

Resource tax examples (I):

- UK: Aggregates levy introduced in 1996

Use of Primary Aggregates in Construction, GDP and Construction Output



Source: BDS

Source: Dominic Hogg 2011

research & consulting

Further resource tax examples (II)

- **EU Energy Taxation:**

  - Only on energetic use of energy products (since 2004)

  - New COM-proposal of 13.04.2011: CO_2-tax component proposed

- **But why only restrict taxation to non-energetic use?**

  - Plastic production (e.g. packaging), is a substantial material flows. Also basic chemicals and pharmazeutica could be taxed.

  - Italy, Ireland, South Africa, Vietnam and likely even more apply at least a plastic bag tax

- **Largest flow of materials (> 80%) are construction materials.**

  - UK introduced an aggregates levy in 1996

  - Denmark and Sweden apply similar taxation on minerals

  - Time for the EU-COM to provide a construction or a minerals taxation framework?

Further resource tax examples (III)

- **Environmentally harmful subsidies in Germany:**

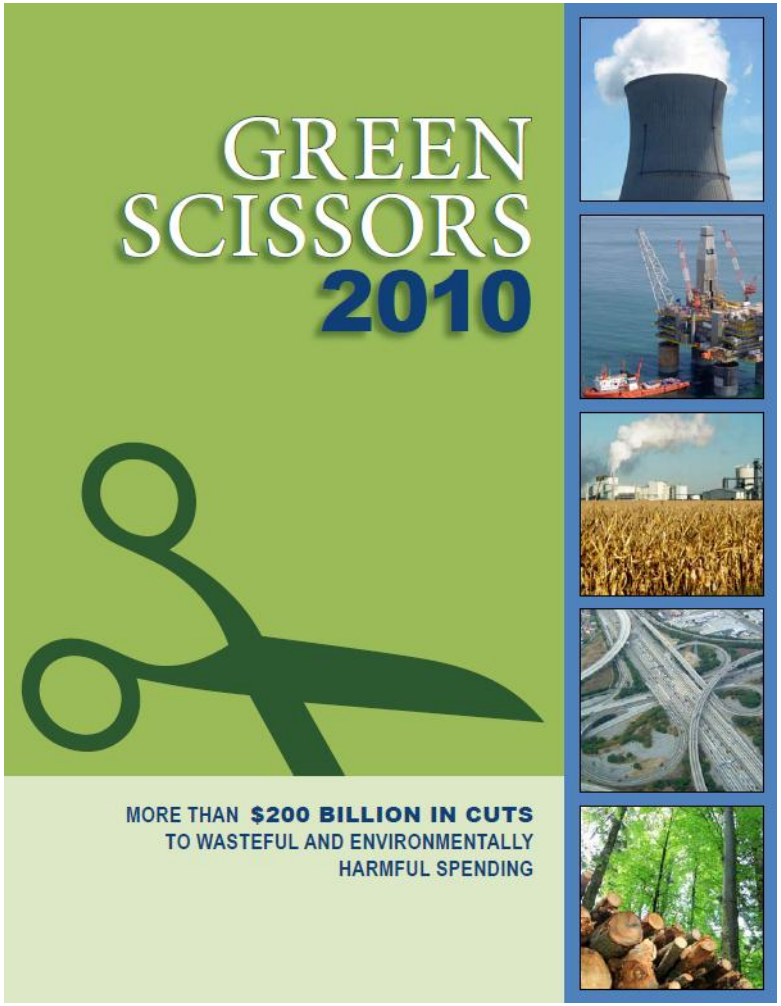
  The German mining law offers the possibility for comprehensive taxation, though it is hardly used: Hard coal and brown coal are exempt. Only Lower Saxony is skimming off some of the rents of resource exploitation regarding natural gas.

- **Main criteria for the yearly fixing of the resource tax rates:**

  - Allowing companies to still make profits (thus world energy prices are very important)

  - Fiscal aspect can be taken into account which attracts the MoF.

Cutting Environmentally Harmful Subsidies is the way forward in the USA



But also Europe has to do its homework: Roadmad for Reducing Environmentally Harmful Subsidies/Europe 2020

http://news.thomasnet.com/green_clean/2011/09/26/green-scissors-gets-heartland-institute-and-friends-of-the-earth-in-bed-together/

Asia

- **Many Asian countries** are about to introduce broad energy taxes, often in the context of an Environmental Tax/Fiscal Reform (ETR/EFR) like **China, Thailand, Indonesia, Vietnam**

- **China** announced introducting a carbon tax for 2015
- **Thailand** considers several fiscal instruments (i.a. water charge, fuel tax)
- **Indonesia** started phasing out fossil fuel subsidies
- **Vietnam** applies broad energy taxation, from 2012, no exemptions for industry, but including shipping/ aviation. Addionally plastic bag and pesticides tax

Financing of Energy Efficiency and Renewable Energies

- **All these economic instruments have the great advantage and attraction that they do NOT cost money, but quite the opposite: They do also raise revenues for the MoF/MoE.**

- The **revenues** should generally be used in a way to **achieve political majorities**.

- To this end, in most EFR-packages, there are minor packages for **financing energy efficiency and renewable energies** which is often very substantial for these two areas.

- In any case, the **economic framework conditions are improved** as fossil/nuclear fuels are made more expensive and thus **your investment in energy efficiency and renewable energies become more profitable, create jobs and save millions for imported fuels**.

Summary

- **Several European countries** implemented Environmental Tax and Fiscal Reforms (ETR/EFR) **successfully**.
- Main concerns are often **distributional and competitive aspects**, but there are various tools for overcoming such barriers by the design and compensation measures
- There is **no cure-all** for implementing ETR/EFR-approaches, but national circumstances have to be taken account of.
- However, there is **no excuse for not identifying and implementing various EFR-elements:** many have been experienced and many others have them.
- The road of "**getting prices right**" is explored, but many further steps still need to be taken to move towards a green economy and to implement Europe 2020 strategy.
- Particularly in **times of crisis and large budget deficits** many countries have started solving the problem with environmental, particularly carbon/energy taxes (supported by findings from CETRiE-study)
- When will **Slovenia** join others again on the tempting road towards Environmental Fiscal Elements given its substantial budget deficit?

Thank you for your attention!

Kai Schlegelmilch

Vice President of

GreenBudgetEurope

www.green-budget.eu

Kai.Schlegelmilch@green-budget.eu