



**Energy/Environmental Taxation
in the EU in 90s and 00s**

IREF Conference

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PART I: Environmental taxes



Environmental Tax Reforms (ETRs)

- Gained increasing political momentum in 90s
- Basic idea: to shift the tax burden from labor and capital towards the use of natural resources and environmentally harmful activities
- White Paper on Growth, Competitiveness and Employment (1993)
- Sustainable Development Strategy (2001)



Legal Framework

- Directive 2003/96/EC of October 27, 2003 provides a common framework for taxing energy products and electricity
- Green Paper on market-based instruments for environmental and policy purposes (COM(2007) 140 final) – provides the scope for restructuring of the Energy Tax Directive to reflect better the EU energy and climate policy



The results of ETRs in 90s and 00s I

- Varying success in old Member states
- Environmental taxes usually increased
- Proceeds sometimes used to finance labor tax cuts
- Many rate reduction and refund schemes to protect producers from rising of input costs
- New Member states followed the suit (Slovenia – 1997, Czech Republic – 2006, Estonia – 2008)



The results of ETRs in 90s and 00s II

- Environmental taxes revenues FALL within last decade (2,4% of GDP and 6,1% of total revenues) esp. after 2004
- Peak in 1999 (2,9% of GDP and 7% of total revenues)
- BIG differences between Member States (share of ET on total taxation rose in DK, EST, LV, NL, PL, SK)

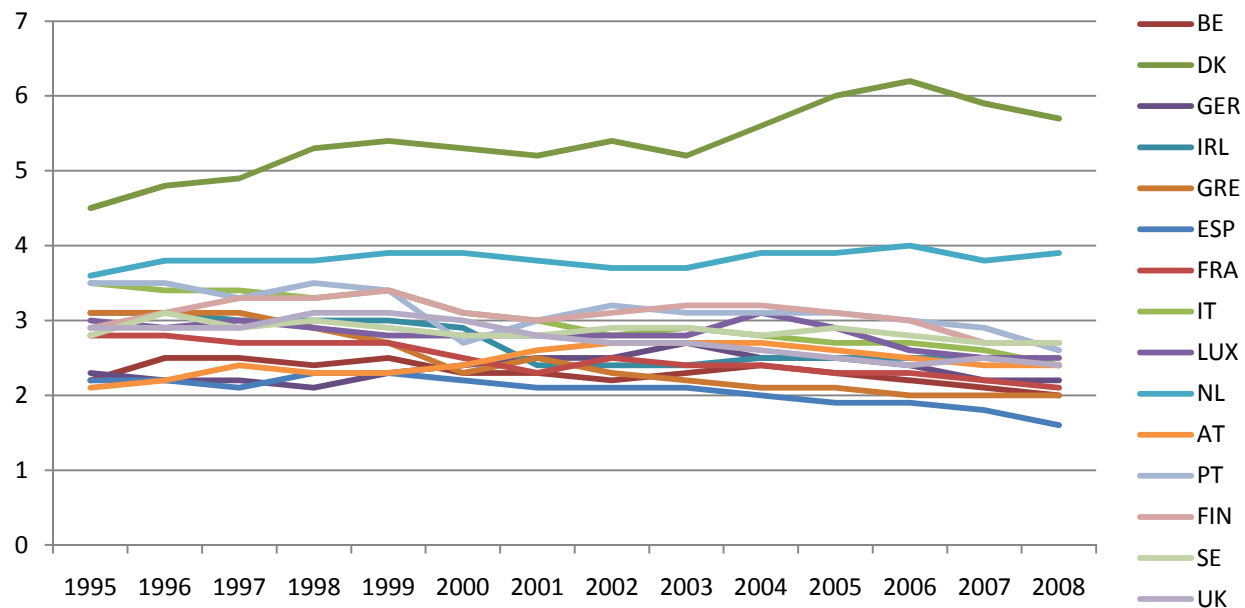


Possible reasons of decrease in weight of ETs

- ET usual construction (unit taxes do not automatically adjust to inflation, indexation only in DK)
- Increasing overall energy efficiency
- Political unpopularity of ETs increase in era of increasing energy prices
- Introduction of other policies – ETS, RES subsidies, road charges/tolls etc.



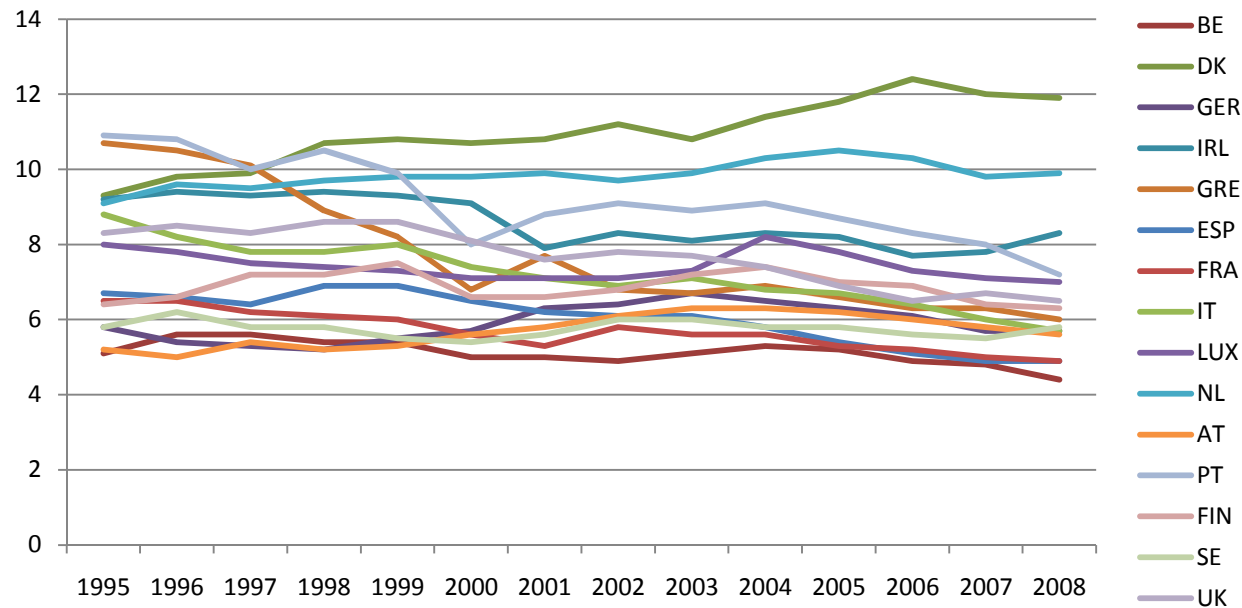
ET revenues in % of GDP, EU15



Countries with positive difference 2008 – 1995: DK, NL, AT
Highest levels of ETs wrt GDP: 1.DK, 2.NL, 3.IT



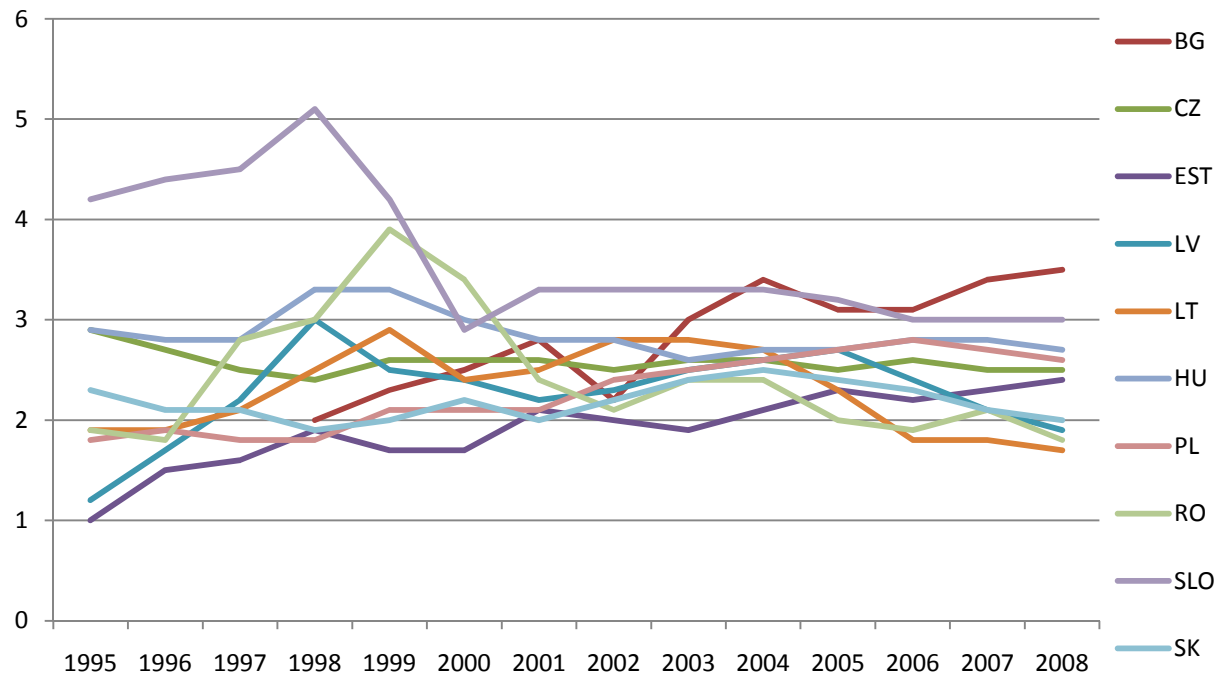
ET revenues in % of total taxation, EU15



Countries with positive difference 2008 – 1995: DK, NL, AT, SE
Highest levels of ETs wrt total taxation: 1.DK, 2.NL, 3.IRL



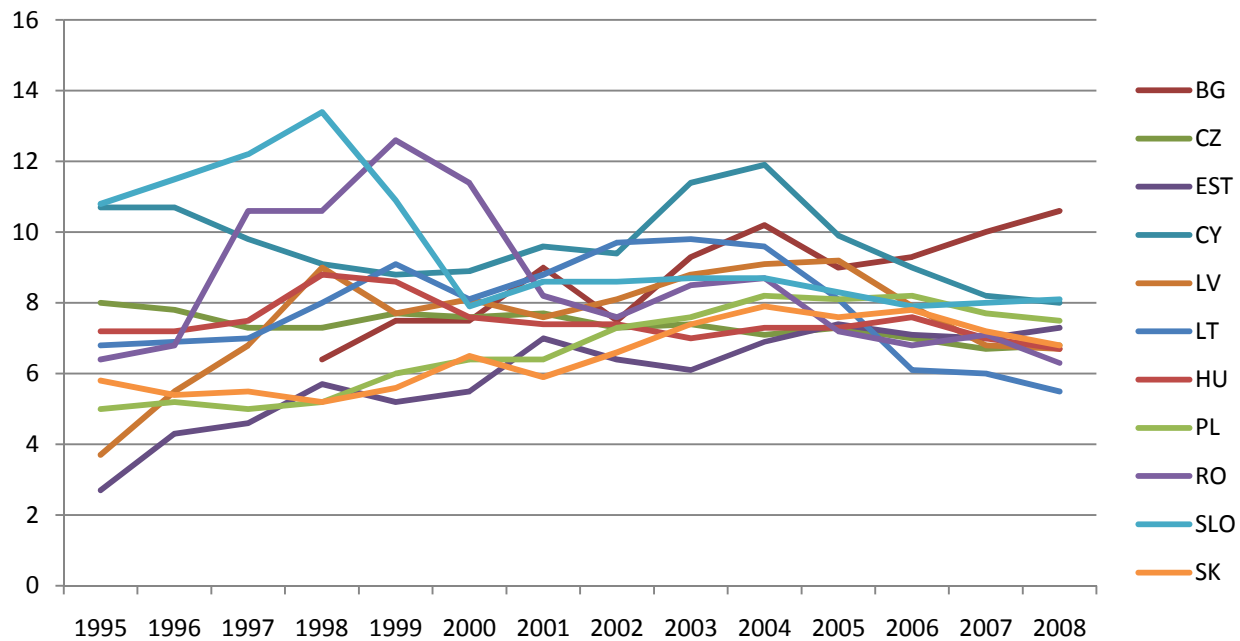
ET revenues in % of GDP, EU12



Countries with positive difference 2008 – 1995: EST, LV, PL
Highest levels of ETs wrt GDP: 1.BG, 2.SLO, 3.HU



ET revenues in % of total taxation, EU12



Countries with positive difference 2008 – 1995: EST, LV, PL, SK
Highest levels of ETs wrt total taxation: 1.BG, 2.PL, 3.EST



Classification of environmental taxes

- Energy taxes (most significant – approx. 75% of all ETs)
- Transport taxes (approx. 25% of all ETs; in CY, Malta, IRL approx. a half of ETs, in DK approx. a third of ETs)
- Pollution and Resource taxes (marginal – approx. 5% of all ETs – but significant in some countries – DK 33% of all ETs due to high hydrocarbon tax)



Transport Fuel Taxes

- Energy taxes comprise taxes on both transport and stationary use of energy products (incl. heating)
- Transport fuel taxes are predominant
- Ones of the oldest energy taxes (UK – 1909, other Europe mostly in 50s)



Transport Fuel Taxes – EU 15

- Relative importance varies considerably
- Fuel tax revenue share on energy taxes more than 90% in IRL, GRE, PT, UK
- Fuel tax revenue share on energy taxes about 50% in DK, SE, NL (difference due to taxes on natural gas and electricity)



Transport Fuel Taxes – EU 12

- Most new Member states levy about 90% of all energy taxes on transport fuels
- Exceptions: CY, PL, EST – about 80% (due to electricity taxes)
- Implied by Directive 2004/74/EC setting exemptions in minimum tax rates on electricity, natural gas, coal for EU12



Fuel taxes only

- For both transport and non-transport use
- Most member states derive 90% of all revenues from transport fuel taxes
- Exemptions: RO (20%), IT, SE, CY, GER, DK (10%) mostly due to high taxes on fuel oils for heating
- High differences in tax rates for transport and non-transport uses (usually 15 times)



PART II: Achievements



Official justifications behind ETRs and tax harmonization and real achievements

- Reduction of distortions, trade-off between taxing energy and labor
- Creation of incentives to use energy efficiently
- Compensation for harmful effects of energy consumption and production
- Reduction of import dependency, higher energy security
- Reduction of CO2 emissions and support of RES



Reduction in distortions

- Between Member states – NOT achieved
- Between energy sources – NOT achieved



Creation of incentives to use energy more efficiently

Achieved in case of transportation and partially in heating

- At higher costs of capital goods (insulation etc.) and higher overall costs
- With less transportation and lower level of a division of labor



Compensation for harmful effects

NOT achieved

- No one is compensated by imposing taxes
- Tax rates are driven by political and social considerations (i.e. fuel for transportation and heating)
- Inherent impossibility to set „Pigovian“ taxes right



Import dependency reduction

NOT achieved

- Physical availability depends on the state of infrastructure, not the level of prices
- Volatility of prices RISES with higher level of taxation



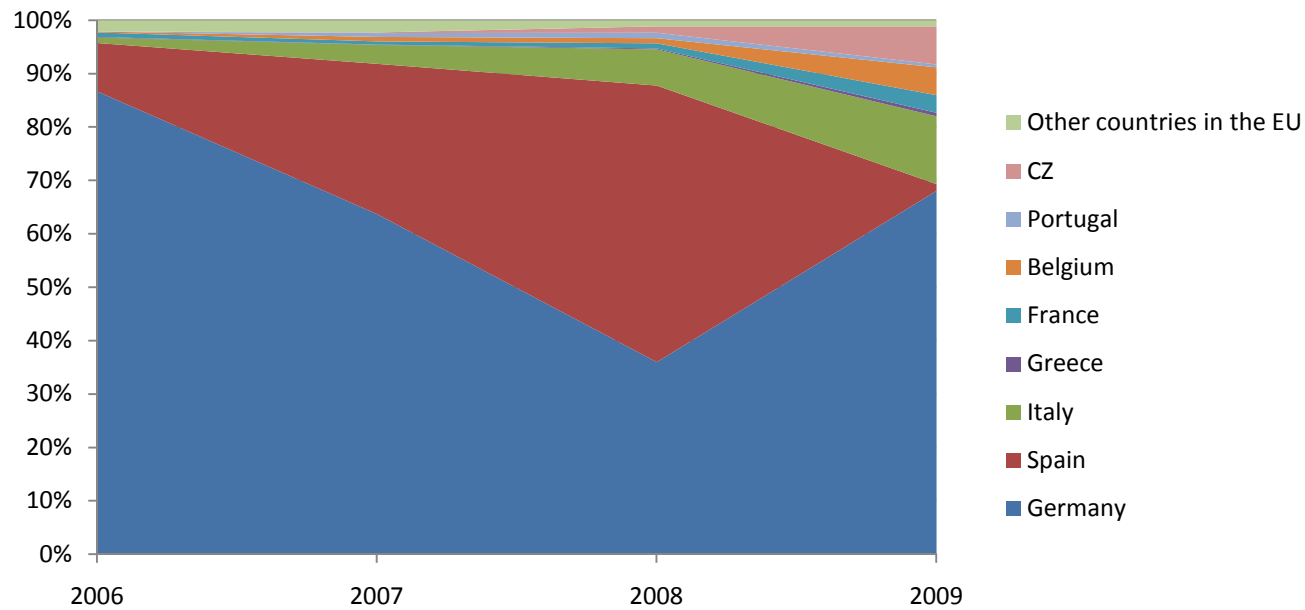
Reduction of CO2 and support of RES

Seemingly achieved BUT!

- Decrease of CO2 emissions negligible and mainly caused by economic slowdown and by the ETS introduction
- Rise of electricity production from RES caused by subsidies to producers from RES, but still, electricity from RES remains a marginal part of the total energy supply



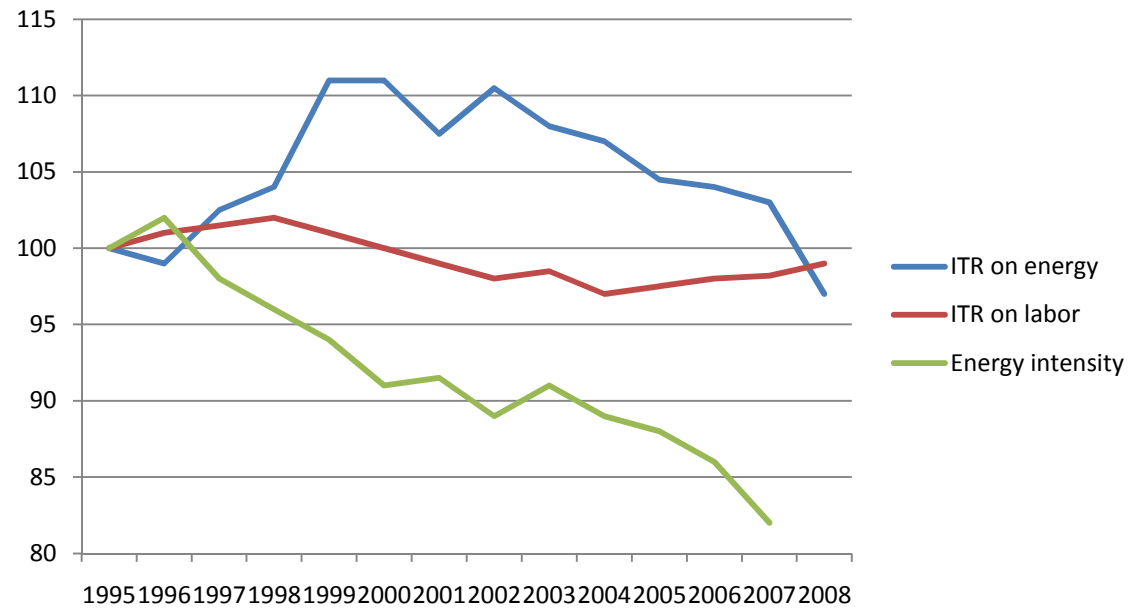
Impact of subsidies: case of PV PPs



European market in PV instalations (market share of new install.)



Is there any trade-off in taxing energy and labor?



Data computed by Eurostat (2010)



Conclusions

- Importance of environmental taxes decreases with exception of transport fuel prices
- Environmental taxes did not achieved almost any of their stipulated goals
- The place of ETs is being substituted by other instruments (ETS, toll, subsidies)



Thank you.