European Environment Agency

"Green taxes for a green island" - some fiscal consolidation opportunities in the case of Ireland based on European experiences

Prof. Mikael Skou Andersen

Growth and green tax shifting in an era of fiscal consolidation Brussels December 15-16, 2010

European Environment Agency



EEA: European Environment Agency

- "The EEA aims to support sustainable development and to help achieve significant and measurable improvement in Europe's environment...
- ... through the provision of timely, targeted, relevant and reliable information to policy making agents and the public"
- EEA is an independent EU institution with 32 member countries incl. Turkey, Switzerland and Norway
- Executive director: Prof. Jacqueline McGlade



Collaborating countries

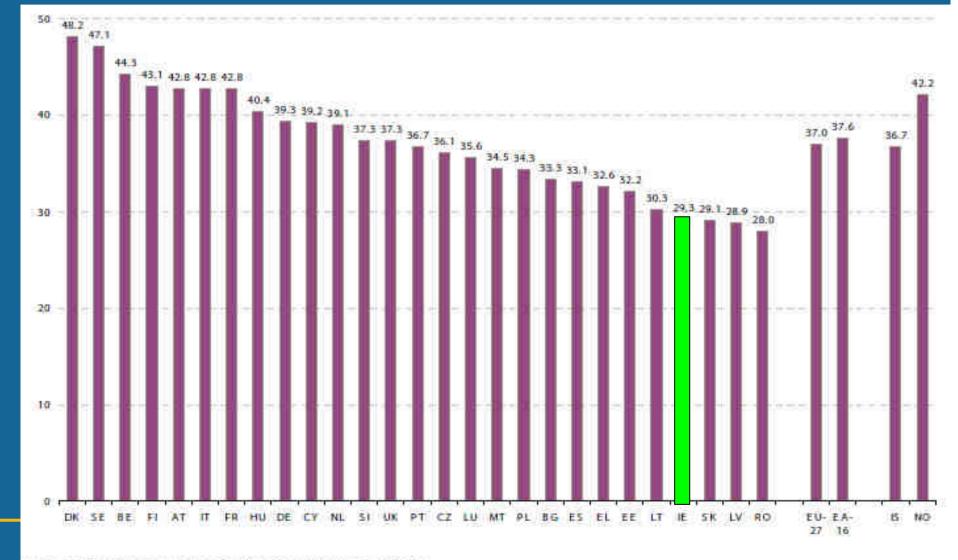
 200 staff in Copenhagen headquarters - and 6 Topic Centres with wide network throughout Europe

The economy and tax system in Ireland: some key facts

- Continuous GDP growth from 1983 up to 2007
- Success in national debt reduction before the crisis, i.e. from a ratio of debt to GDP of more than 50% in 1998 to 25% in 2006
- Since 2008 Ireland has been hugely affected by the financial crisis: GDP reduction, massive fall in government revenues, and budget deficits leading to a large increase in government debt
- Ireland has one of the lowest tax-to-GDP ratio (ranked 24th of EU-27). However, it is higher than in some OECD countries, such as the US and Japan
- The Irish tax structure is ranked 4th for the contribution of direct tax revenues to total tax revenues and 5th for indirect tax revenues, whilst social security contribution are relatively low, ranking 25th in the EU in 2008

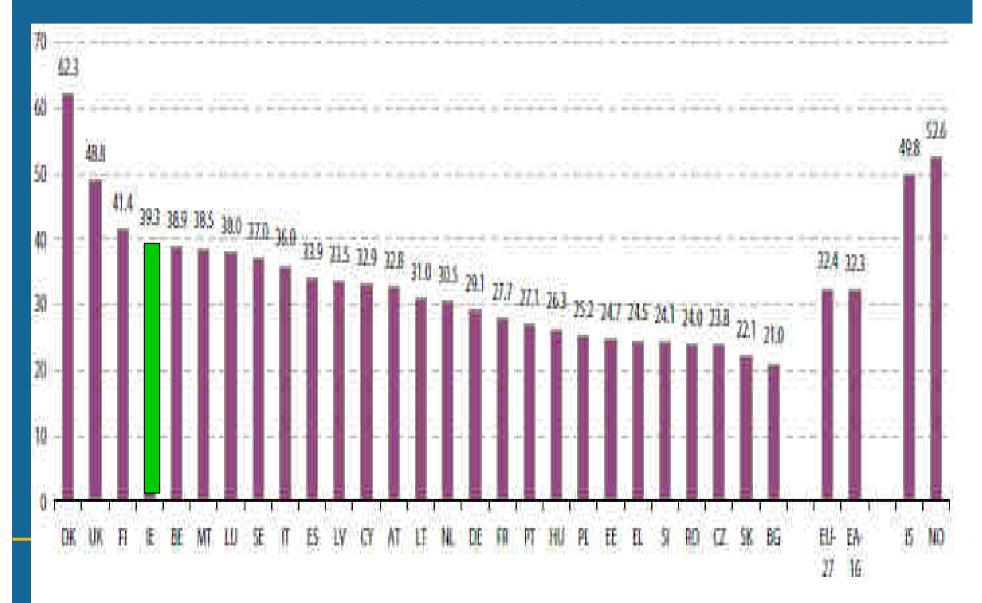


Overall tax to GDP ratio in the EU (2008 in %)



Source: Commission services for the EU countries, IS and NO

Structure of tax revenues: share of direct taxes to total tax (2008, in %)



Structure of tax revenues: share of indirect taxes to total tax (2008, in %)



Structure of tax revenues: share of SSC to total tax (2008, in %)



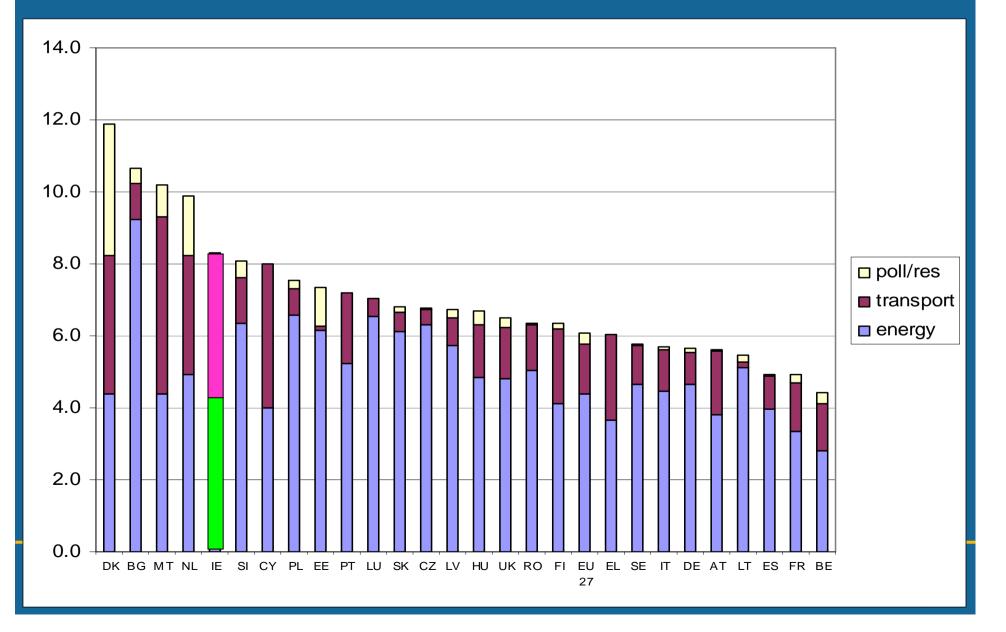
Where does Ireland's environmental tax system stand within the EU?

- There are many environmental taxes applied on energy and transport and such taxes have been recently revised and extended. There are two taxes on pollution and resources, the plastic bag levy (March 2002) and the landfill levy (July 2002)
- Ireland can be described as a forerunner its carbon tax is a pure carbon tax
- The base for transport taxes (vehicle registration tax and annual motor tax) has been recently changed to better account for environmental effects, i.e. tax rates for new cars are now levied on the basis of CO2 emission levels, not on engine size
- Recent introduction of an air travel tax (2009) and a tax on the carbon windfall profits of utilities (July 2010)
- Ireland was ranked 5th concerning the ratio environmental tax to total tax in 2008 – the ratio was 8.3%

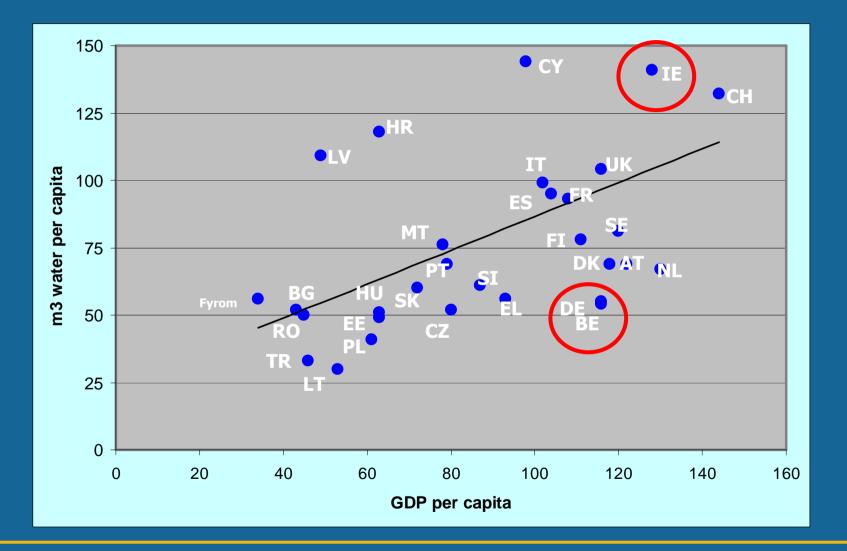


Environmental tax revenues in EU-27

(2008, in % of total tax revenue, source: Eurostat)

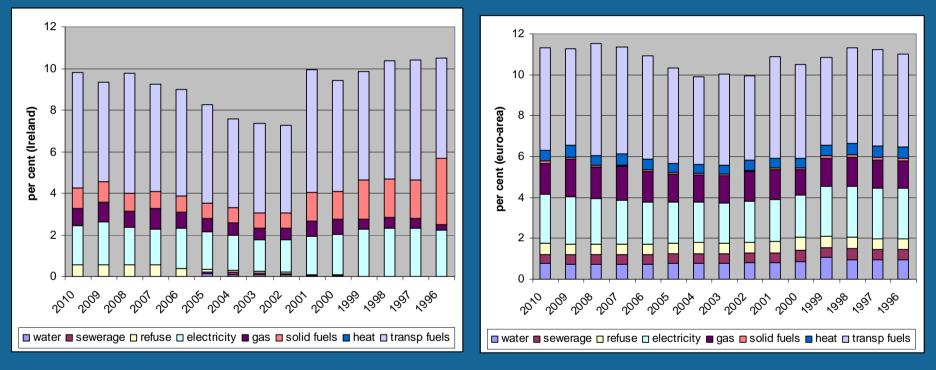


Water use: GDP/capita – and price ?





What's in the consumer basket ? (HICP)



Ireland

Euro-area



Environment-related taxes in pipeline

Environmental tax revenues amounted to about \leq 4,400 million (2008) and \leq 3,700 million (2009) – a reduction of about 17% comparable to reduction in total tax revenue

Policies implemented or already in place:

- Fiscal package (Budget 2009): € 466 million Euro
- Carbon tax (Budget 2010): € 330 million Euro
- Carbon windfall levy (July 2010): € 75 million Euro

An estimate of € 870 million Euro and would increase the environmental tax to total tax ratio to approximately 10% from 8.3% in 2008 and 2009.

The increase in the landfill levy up to €75 per tonne in 2012 and the auctioning of emission allowances under the EU ETS from 2013 onwards.



The potential for new environmentallyrelated taxes in Ireland

based on experiences in other European countries:

- Increasing carbon-energy taxes on transport fuels (diesel, petrol)
- Increasing carbon-energy taxes on energy products used for other purposes (heating and business use) for economic sectors not covered by the EU ETS and for households
- Revising the annual car tax and vehicle registration tax for vehicles other than passenger cars
- Introducing pollution taxes levied on SO2 and NOx emissions
- Introduce taxes on water effluent / pollution
- Introducing water abstraction taxes
- Introducing property taxes / land value taxation

Reform environmentally damaging subsidies:

Introducing a national scheme of user charges for water services (water supply and wastewater) – freeing up resources of up about $\in 1.0 - 1.2$ billion (OECD, 2010)



Pollution and resource taxes

Million € /year	2011	2012	2013	2014	Comment
Abstraction levy water	21	42	64	85	Applying Danish rates and system, whereby pipe leakage could be reduced from 30-40% to 10%
Aggregates levy	79	79	79	79	Sand, gravel, crushed rock. Applying UK rates for reduced volume + 25% recycling.
Packaging tax	35	45	55	70	Applying Danish rates for glass bottles and by weight for other waste streams.
SO ₂ tax	29	59	88	118	Applying rates applicable in Denmark
NOx tax	78	155	233	311	Applying rates applicable in Sweden
GHG-nitrogen	23	45	68	90	15 € per $\rm CO_{2-eq}$ for $\rm N_2O$ of mineral fertilisers
Sum	265	425	587	753	

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Energy

Transport Million €	2011	2012	2013	2014	Comment
Vehicles re-calibration of VRT + extension to commercial	200	300	300	300	Data as to number of commercial vehicles etc. required for more accurate revenue estimates.
Air travel tax	55	55	55	55	Apply UK rate of 14 € for longer flights; lower rate for short flights at 3 € per passenger
HGV vignette scheme	56	56	112	112	Applying Germany's approach and rates.
Sum	311	411	467	467	

	Energy taxes Million €	2011	2012	2013	2014	Comment
	Petrol and liesel	54	98	131	153	UK levels. Revenues netted out for the expected reduction in tank tourism from N Ireland and for differences in VAT rates.
	CO2 tax, 10n-ETS	21	42	64	85	Increase CO2-tax to level in Sweden of 22€/tCO2
	CO2 tax, offshore	21	42	63	85	Apply Norwegian system for taxation of offshore emissions from flaring etc. (0.05 €/Nm3)
E	Electricity tax	2	4	6	8	Introduce EU minimum rate for domestic sector (1.3 $\notin/\text{GJ})$
E	Energy tax	59	118	178	237	Introduce new energy tax with minimum rate of 1.3 \in per GJ - similar to EU minimum for electricity
S	Sum	107	214	321	429	



Environmental Tax Reform (ETR): potential in Ireland

Reforms may be gradually implemented over several years (budget cycle 2011-2014) and estimates are illustrative:

- Energy environmental taxes up to € 429 million
- Transport environmental taxes up to € 467 million
- Resource / pollution taxes up to € 753 million
- Total environmental taxes up to € 1,788 million
- Property tax / land value tax between € 2,000 and € 3,000 million

All measures together could generate up to \in 5 billion in extra revenues! Env-related taxes could amount to 18 % of total taxes.





Thank you for your attention!

Mikael Skou Andersen

email: <u>mikael.skouandersen@eea.europa.eu</u> <u>http://www.eea.europa.eu</u>

