

Energy & Environmental Taxes

Introduction

1.1 This paper examines options in respect of Energy and Environmental Taxes for Budget 2013.

- Part 1 focuses on issues surrounding carbon tax and examines the extension of the tax to solid fuels as well as possible increases in the carbon tax rate;
- Part 2 considers options for increasing excise duties on energy products as an alternative to increasing the carbon tax; and
- Part 3 sets out other issues for discussion.

Part 1 - carbon tax, including revenue raising and other issues

2.1 Budget 2010 provided for the introduction of a carbon tax on fossil fuels, to be implemented in three phases. Phase 1, in respect of petrol and auto diesel, was implemented with effect from 10 December 2009. Phase 2, the extension of the carbon tax to Kerosene, marked gas oil (green diesel), liquid petroleum gas (LPG) fuel oil and natural gas took effect from 1 May 2010 and Phase 3, its application to coal and commercial peat, is subject to a commencement order. Carbon Tax was applied at a rate of €15 per tonne of CO₂ emissions and this was increased to €20 in Budget 2012. The yield is expected to be around €388 million (incl. VAT) in 2012.

Application of Carbon Tax to Solid Fuels

2.2 The key outstanding issue in relation to the implementation of the tax is its application to solid fuels i.e. coal and peat. The approach in respect of solid fuels was primarily adopted in order to allow time for a robust mechanism to be put in place to improve the control of high sulphur coal being sourced from Northern Ireland suppliers. The Department of the Environment undertook to provide such a robust mechanism in conjunction with the National Standards Authority of Ireland (NSAI). As part of that exercise the Department of Environment consulted with a Stakeholder Working Group, which included officials from the Department of Finance, the Revenue Commissioners, the industry representative Solid Fuel Trade Group (SFTG), the Environmental Protection Agency and representatives of selected Local Authorities.

2.3 The Minister for the Environment introduced a new specification for the sulphur content of bituminous coal placed on the market for residential use in Ireland with effect from 7 June 2011. This has created the circumstances to facilitate the application of carbon tax to coal and peat. If applied, this will mean an increase in price of those fuels of around €2.30 or some 16% per 40kg bag in the case of coal and 52 cents or some 13% in the case of a bale of briquettes. The relatively high percentage increase in the price of these products is due in part to those products having little or no excise applied to them prior to the carbon tax. It should also be noted that coal and peat have the highest carbon content of all fossil fuels and as such a higher carbon tax will apply as a result. (See Annex I for the impact of the carbon tax on coal and peat).

2.4 Applying the carbon tax to solid fuels would yield approximately €23 million in a full year, based on €20 per tonne.

Fuel Poverty

2.5 In the context of domestic heating provision, the carbon tax is intended to apply to all types of coal and commercial peat. This is likely to raise further concerns about the impact on those who rely on solid fuels for their main heating provision and there is the potential for increase in fuel poverty for this group. According to the ESRI, low income households in Ireland usually make more extensive use of cheaper but more carbon intensive fuels, such as coal and turf. The implementation of the carbon tax (at €20 per tonne of CO₂) would increase the cost of a 40kg bag of coal by €2.39 (16%) and a bale of briquettes by 52 cents (13%). The issue of fuel poverty and energy poverty is being addressed through the Energy Affordability Strategy which aims to tackle energy affordability in Ireland through a combination of institutional supports, investments in improving the energy efficiency of housing stock and wide availability of advice on energy efficiency.

Reliefs from the carbon tax

2.6 As a matter of principle the reliefs from the carbon tax are limited to ensure as wide an application as possible. The reliefs that currently apply are set out in the table below.

Current reliefs from the carbon tax

Relief	Rationale
<i>Relief for Fuel used for generation of electricity</i>	<i>Required to comply with EU Energy Tax Directive. Ensures no price increases in electricity arising from carbon tax. Emissions from powergen fall under EU Emission Trading Scheme (ETS)</i>
<i>Relief for participants in the EU ETS</i>	<i>The EU ETS is considered the appropriate carbon pricing mechanism for large scale installations. On that basis reliefs apply to ETS participants subject to the EU minimum rates being observed.</i>
<i>Biofuels</i>	<i>Exemption intended to promote a higher incidence of biofuel in conventional transport fuel sales.</i>
<i>Combined Heat and Power (CHP) Budget 2012</i>	<i>Provides a further incentive for the use of this technology which could lead to a reduction in CO₂ emissions and other pollutants</i>

2.7 Requests for relief from carbon tax made by a number of sectors are set out below for consideration.

(i) Treatment of Mineralogical Processes

2.8 Currently fuels used in the cement sector are effectively exempt from excise duty. At the time of the introduction of the carbon tax in early 2010 the cement sector strongly lobbied for a continued full exemption. Under the Finance Bill 2010, cement manufacture and mineralogical processes in general, qualify for the *partial* relief from carbon tax on natural gas and solid fuel as installations within the EU Emissions Trading System (ETS). However, this means that the current legislation provides that, outside the electricity production sector, the EU minimum excise rate under the Energy Tax Directive (ETD) should apply, even where

a firm is within the ETS. Essentially, a full relief from carbon taxation has been sought for fuels used for the manufacture of cement. The precedent of the previous full relief from tax on coal used for mineralogical processes (which include cement manufacture) has been quoted¹. Sustainable Energy Authority Ireland estimate that of the total fuel usage for mineralogical processes in 2009, approx 64% was coal, 13%, natural gas and 24% mineral oil.

2.9 The ETD provides that certain uses of energy products, including use for mineralogical processes, are excluded from the scope of that Directive. Mineralogical processes are deemed to include the manufacture of cement, ceramics, bricks, tiles, gypsum and periclase (a particular concern for Ireland when the ETD was discussed at EU level).

2.10 Exclusion from the scope of the ETD means that Member States may tax these products, or exempt them from tax, as they see fit, subject to State Aid requirements. Exemptions would however have to be *justified by the nature or general scheme of the system*. It follows that a concession here would have to be extended across a wider area for consistency purposes – this could mean that some sectors already paying a carbon charge would be exempted in future e.g. waste incineration. The impact of non-exemption on competitiveness, domestic and international, and on employment in the sector has been stressed by the cement firms. The cost of a relief here is estimated at €1.25m per annum.

(ii) Waste Incineration – Pharmaceuticals Industries

2.11 Waste incineration is excluded from the ETS scheme because of the complexity of measuring the CO₂ content of the material involved. This means where ETS participants have incineration activity at their plant, the fuel used for such activity is not exempted from the carbon charge. Full relief for incineration has been sought by Pharmaceuticals Ireland, an IBEC representative body for that sector. If a relief were granted for mineralogical processes, industrial waste incineration would be the only known "dual use" with no relief from carbon taxation; "dual use" is also excluded from the scope of the ETD. It is estimated that a relief here would be approx €0.5m.

Options for increasing the Carbon Tax rate

2.12 Potential rates for a carbon tax are set out in Annexes I and II with an estimated impact the rate will have on the price of those products affected and the potential revenue yields that may accrue. It estimates the impact of an increase in the carbon tax rate of €5 per tonne on products to which the carbon tax already applies.

2.13 A €5 increase in the carbon tax rate, applying to petrol and auto-diesel with effect from Budget night and a 1 May 2013 implementation date for other fuels would yield approximately €90 million in 2013 and around €127 million in a full year based on the assumption it was applied to all fuels, including solid fuels.

¹ Coal was in the tax net prior to the introduction of the carbon tax but large scale exemptions were availed of – including one relating to mineralogical processes - which also benefitted the cement manufacturers; the introduction of the carbon charge did not require the previously-held exemption to be maintained .

Part 2 - Increasing excise rates as an alternative to increasing the carbon tax

3.1 An alternative to increasing the carbon tax rate which would impact all fossil fuels would be to increase the rate of excise duty for individual products. Given the sensitivities that may accompany increasing the home-heating oils and natural gas during the winter season, a possibility would be to increase the excise rates on petrol and auto-diesel. Moreover, petrol and auto-diesel have by far the highest revenue raising potential whether it is through either the carbon tax or the excise route.

Excise duty levels of Motor Fuels

3.2 It should be noted, however, that excise duties on motor fuels have been increased in the last the four Budgets, as illustrated in the table below with petrol being increased by 17.8 cents and auto-diesel by 13.3 cents (VAT inclusive). The recent upward trend in fuel prices would need to be taken into consideration. Ireland currently has the 10th highest petrol rate and the 4th highest auto-diesel rate in the EU 27. (See Annex III for a full comparison).

Budgetary Excise Changes on Motor Fuels (VAT inclusive) since 2007		
Budget	Petrol	Diesel
2007	no change	no change
2008	no change	no change
2009 (emergency and supplementary)	increased by 8 cent (Oct. 08)	increased by 5 cent (Apr. 09)
2010 (via carbon tax)	Increased by 4.2 cents	Increased by 4.9 cents
2011	Increased by 4 cents	Increased by 2 cents
2012 (via carbon tax)	Increased by 1.6 cents	Increased by 1.4cents

Price Levels of Motor Fuels

3.3 The retail prices of motor fuels over the 12 month period to September 2012 are illustrated below. Prices rose steadily and peaked in April with a slight decline in the following months but a significant increase in September. Ireland, as with other countries, has experienced an increase in the cost of petrol and auto-diesel. Fuel prices are driven by a number of factors including the price of oil on international markets, exchange rates, production costs and refining costs. The rise in oil prices over recent periods reflected additional factors such as geopolitical uncertainty in Northern Africa and the Middle East with potential supply disruptions.

Prices per Litre in Motor Fuels; October 2011 to September 2012

	Petrol Price Cent	Diesel Prices Cent
Oct 2011	149.8	142.7
Nov 2011	149.0	144.2
Dec 2011	148.4	147.9
Jan 2012	154.2	152.9
Feb 2012	157.8	155.4
Mar 2012	162.9	158.2
Apr 2012	168.6	160.0
May 2012	166.5	157.9
June 2012	162.1	153.4
July 2012	159.9	150.4
Aug 2012	163.1	154.0
Sep 2012	169.9	159.9

Sources: CSO (Dec 2011 – Jul 2012), www.aaroadwatch.ie Aug 2012 & www.Pumps.ie (Sep 2012)

3.4 As can be seen from the table below, fairly moderate increases in the excise on petrol and auto-diesel could achieve around the same revenue as a €5 per tonne increase in the carbon tax. For example, a full year yield of close to €127² million is possible from a €5 per tonne rate increase in the carbon tax. A higher level of revenue could be achieved by increasing motor fuels by 4 cents each. Options for increasing the excise rates for petrol and auto-diesel are set out in the table below:

Yield from Excise Increases

Increase (VAT inclusive)	Petrol		Auto-diesel	
	Cost / Yield €m	CPI Effect %	Cost / Yield €m	CPI Effect %
+2c	32.3	0.051	38.7	0.013
+4c	64.0	0.101	77.1	0.026
+5c	79.8	0.126	96.3	0.033
+6c	95.6	0.152	115.3	0.04
+8c	127.0	0.202	153.3	0.053
+10	158.3	0.253	191.1	0.066

Cross Border Prices

3.5 A survey taken in September this year shows that, mainly due to the differences in excise rates, both petrol and auto-diesel remain significantly cheaper in the State than in Northern Ireland.

Cross Border Comparisons (Prices & rates in €)

Product	ROI Price	N.I. Price	Price Differential	ROI Excise	N.I. Excise	Excise Differential
Petrol (litre)	1.70	1.79	-0.09	0.59	0.73	-0.14
Auto-diesel (litre)	1.60	1.82	-0.22	0.48	0.73	-0.25

(Revenue Commissioners cross border survey 25/09/2012)

² Assumes carbon tax is applied to all fuels including solid fuels

Part 3 - Other Issues for consideration

(i) Essential User Fuel Rebate – proposal by the Irish Road Haulage Association (IRHA)

4.1 The IRHA are opposed to any increase in the taxation of auto-diesel and has asked that consideration be given to an excise rebate scheme for the haulage business. A working group was set up earlier this year between the IRHA, officials of the Department of Finance and Revenue along with Oireachtas representatives. The Group considered two proposals from the Hauliers: (i) was the introduction of an essential user's rebate (EUR) and (ii) a system of registration for users of green diesel.

4.2 Applying a rebate to all users of commercial diesel to the maximum permitted level as provided for in the EU Energy Tax Directive would cost of the order of €187 million, if Revenue's fear is realised that half of the 2.5 million litres of auto-diesel released annually qualified for a rebate. Under the terms of the Directive, the rebate cannot be confined to the haulage sector but must also be made available to all vehicles of 7.5 tonne and over, including vehicles comprising more than 8 seats used for the carriage of passengers whether by regular or occasional service.

4.3 A Budget 2013 paper is being prepared for the Minister setting out options in this regard.

(ii) Equalise excise duties on high and low sulphur grade marked gas oil

4.4 The Department of Environment, Community and Local Government raised an issue regarding the price differential between high and low sulphur grade marked gas oil (MGO) and suggested that the excise on high sulphur grade MGO be increased to bring the price into line with that of low sulphur grade MGO.

4.5 The issue follows from an amendment last year to the Fuel Quality Directive which places an obligation on distributors to supply a low sulphur grade of MGO to end users if the fuel is intended for use in non-road mobile machinery e.g. tractors, generators, fork lifts etc., while high sulphur grade MGO can continue to be used for heating and marine purposes.

4.6 There is a price differential of approximately two to three cent per litre between the high and low sulphur grades of MGO. The extra cost is associated with refining the fuel to the lower sulphur specification. Since the introduction of the new requirement the Department of Environment, Community and Local Government has received representations that many distributors have ignored the new Regulations and continue to sell only high sulphur grade MGO to end users and, due to its lower price per litre, are under-cutting compliant distributors.

4.7 Having considered a number of options to overcome this problem, the Department of Environment, Community and Local Government has suggested that an increase in the excise of the high sulphur grade of MGO in order to remove the price differential would be their preferred option.

4.8 Increasing the excise duty payable on high sulphur grade MGO will result in persons who buy MGO for home/industrial heating purposes paying 3.4 cents (VAT inclusive) extra per litre for their fuel.

(iii) Department of Environment proposal on solid fuels

4.9 The Department of Environment and Local Government in its 2013 pre-budget submission proposes, among other things, the revision of the definitions of coal and peat so as to allow for a rebate for smokeless solid fuels which contain a significant element of biomass and, also, consideration of a tailoring of the application of the carbon tax so as to ameliorate its impact and to incentivise the increased use of cleaner, healthier and more efficient smokeless solid fuel more generally outside designated coal ban areas.

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Illustrative Impact of Application of Carbon Tax to Solid Fuels

Fuel Type	Unit	Current Price	Carbon Tax @ €20	% Price Increase	Revenue yield VAT Incl € m	Carbon Tax @ €25	% Price Increase	Revenue yield VAT Incl € m
Peat Briquette	Bale	3.90	52 cents	13.3	8.41	65 cents	16.6	10.5
Coal	40kg	14.6	€2.39	16.3	14.9	€2.99	20.5	18.6
Total					23.31			29.1

**Illustrative Impact of possible carbon tax increase
on oils and gas**

Estimate for €5 increase in the carbon tax

Fuel Type	Unit	Current Price	Carbon Tax Per Unit (VAT Incl)	% Price Increase	Revenue yield VAT Incl € m
Auto-Diesel	Litre	1.599	0.0164	1.02	31.207
Petrol	Litre	1.699	0.0141	0.83	22.242
Kerosene	k/litre	950	14.3609	1.512	13.580
Marked Gas Oil	k/litre	980	15.4239	1.574	16.084
LPG	k/litre	880	9.1748	1.043	1.404
Fuel Oil	k/litre	970	17.5223	1.806	0.772
Natural Gas	1 MWH	62	1.0518	1.696	12.901
Total					98.188

**Comparison of Excise Tax Rates for
Petrol and Diesel in EU Member States**

Unleaded Petrol			Diesel	
Member State	€ per 1,000 Litres		Member State	€ per 1,000 Litres
Netherlands	730.48	1	UK *	725.65
UK *	726.65	2	Italy	593.20
Italy	704.20	3	Sweden	509.43
Greece	670.00	4	Ireland	479.02
Germany	654.50	5	Germany	470.40
Finland	650.40	6	Finland	469.50
Sweden	616.87	7	Denmark	443.55
Belgium	613.57	8	Czech Republic	440.15
France	606.90	9	Netherlands	430.80
Ireland	587.71	10	France	428.40
Denmark	587.32	11	Belgium	427.69
Portugal	584.42	12	Greece	412.00
Czech Republic	516.12	13	Austria	397.00
Slovakia	514.50	14	Estonia	392.92
Slovenia	501.42	15	Slovakia	386.40
Austria	482.00	16	Hungary	385.59
Malta	469.39	17	Malta	382.40
Luxembourg	462.09	18	Slovenia	381.69
Lithuania	434.43	19	Portugal	366.39
Spain	424.69	20	Spain	331.00
Estonia	422.77	21	Poland	330.01
Hungary	418.68	22	Cyprus	330.00
Latvia	407.50	23	Luxembourg	330.00
Poland	379.82	24	Latvia	329.95
Bulgaria	363.02	25	Bulgaria	322.12
Romania	359.59	26	Romania	316.30
Cyprus	359.00	27	Lithuania	302.07
EU Average (27)	527.74		EU Average (27)	411.65
EU Average (15)	606.79		EU Average (15)	454.35
EU Minimum Rate	359.00		EU Minimum Rate	330.00

Source: EU Excise Duty Table July 2012

* UK Exchange Rate taken as €1 = £0.7975GBP (25/9/12)