

## ANNEX D

### Vehicle Registration Tax (VRT)

#### Public Consultation on Options for revising the VRT system to take greater account of CO2 emission levels

The Minister for Finance, Mr. Brian Cowen, T.D., invites interested parties to make submissions regarding the proposed revision of the current VRT system to take greater account of environmental issues, in particular Carbon Dioxide (CO<sub>2</sub>) emissions. This paper provides a summary of a document being made available on the Department of Finance's website, [www.finance.gov.ie](http://www.finance.gov.ie).

Submissions received will be published on the Department's website. Submissions may be emailed to: [VRT@finance.gov.ie](mailto:VRT@finance.gov.ie), or posted to 'VRT Consultation', Excise Policy Section, Budget and Economic Division, Department of Finance, Government Buildings, Upper Merrion Street, Dublin 2.

**All Submissions should be received, at the latest, by 1 March 2007.**

#### **1. Background**

Vehicle Registration Tax (VRT) is an important source of revenue for the Exchequer, yielding €1.15bn in 2005 and is estimated to yield €1.3bn in 2006. Most of the VRT yield is derived from passenger cars.

The main categories within VRT and the associated VRT charges for cars are:

A1 Cars up to 1,400cc	22.5% <sup>1</sup> of Open Market Selling Price - OMSP
A2 Cars 1,401 to 1,900cc	25% of OMSP
A3 Cars over 1,900cc	30% of OMSP

#### **2. Why consider changing VRT, particularly in relation to CO2 Emissions?**

There are various reasons for considering the VRT system to make it more CO<sub>2</sub> emissions related. Under the Kyoto Protocol, Ireland has agreed to limit the growth in greenhouse gas emissions to 13% above 1990 levels in the period 2008-2012. In 1990 CO<sub>2</sub> emissions from the road transport sector were under 5 Mt of CO<sub>2</sub>. Since then CO<sub>2</sub> emissions from road transport has more than doubled and is projected to reach over 13 Mt per annum in the period 2008 to 2012.

The 2000 National Climate Change Strategy (NCCS) includes the strategy of "*further rebalancing of VRT and annual motor tax to favour more fuel-efficient cars*". That Strategy also included targeted levels of emissions reductions from the transport sector including reducing CO<sub>2</sub> emissions by 0.5 Mt per annum using 'VRT and Taxes'.

Controlling and reducing CO<sub>2</sub> emissions from transport, especially from cars, has an important role to play in reducing the cost to the Exchequer from emissions. It is estimated that in 2005 there were 402 private cars per 1,000 of the population compared to 227 in 1990.

---

<sup>1</sup> Passenger cars are subject to a minimum VRT tax of €315

On this trend, if no action is taken the total quantity of CO2 emissions relating to car transport will continue to increase.

The car industry is playing a role in reducing the emissions from new vehicles, however, the ongoing technical improvement in new cars will not be sufficient to overcome the increased demand for cars and the effect of the trend to purchase larger cars. The European, Japanese and Korean Motor Manufacturers' Associations (ACEA, JAMA, and KAMA) have made voluntary agreements with the European Commission to achieve a target for average CO2 emissions of new passenger cars of 140g CO2 per km by 2008 (ACEA) or 2009 (JAMA and KAMA). This compares to the average CO2 emissions of new cars entering the Irish fleet in 2005 of 167g. It must be noted that there is significant variation in the emissions of similar engine sized cars.

### **3. Existing Environmental Specific Initiatives in VRT system**

Provision exists for VRT relief of 50% for series production Flexible Fuel Vehicles and Hybrid Electric cars. These reliefs are in place until 31 December 2007, unless they are extended.

### **4. Moving to a more CO2 emissions related VRT system: Issues to Consider**

In considering moving to a more CO2 emissions related VRT system there are a range of issues that have to be taken into account, including reasons for making such a move on a phased basis over a period of years. Among these are environmental aspects, the impact on the Exchequer, equity and administrative, taxation and economic efficiency aspects. It is considered that the changes made should be broadly revenue neutral, at least in the short term, and that given the size of the yield from VRT, a change should not put a significant proportion of the revenue yield at risk, at the one time.

### **5. Some Relevant Measures being considered by the Department of Environment, Heritage and Local Government**

The Department of Environment, Heritage and Local Government are currently examining the feasibility of placing motor tax on a more related CO2 emission levels basis. Such a new system might apply only to new and pre-owned imported cars with effect from January 2008. That Department are also considering introducing a new mandatory labelling system for cars based on CO2 emission levels as stated in their Certificate of Conformity – the labelling approach could resemble that in place for white goods. [A proposed approach from a motor tax perspective, for consultation purposes is provided at Annex E.]

### **6. Example of a possible Labelling System and Distribution of New Cars**

An example of a possible CO2 emissions related Labelling System may consist of seven bands categorised from A to G. The following Table gives a possible example of such a Labelling System together with, for information purposes, the distribution of new cars purchased in 2005 across such a system, using also the existing three VRT engine size bands. The following Table gives the data as a percentage of new cars.

### New Cars sold per VRT Category and CO2 Emissions – 2005 (% per CO2 Emissions band)

CO2 Emissions Bands	A	B	C	D	E	F	G	
<b>gCO2/km</b>	0-125g	126-145g	146-155g	156-170g	171-190g	191-220g	Over 220g	<b>Total</b>
<b>CC Bands</b>								
<b>A1</b> (1400 and lower)	2.69%	13.44%	8.33%	17.54%	1.47%	0.01%	0.01%	43.49%
<b>A2</b> (1401 – 1900)	1.08%	4.53%	2.97%	12.40%	13.48%	3.88%	0.55%	38.89%
<b>A3</b> (1901 and higher)	0.08%	0.18%	3.06%	1.07%	3.96%	4.58%	4.70%	17.62%
<b>Total</b>	3.85%	18.15%	14.37%	31.01%	18.91%	8.47%	5.26%	100.0%

Note:

CO2 emissions data as returned to the Revenue Commissions in conjunction with new car gross registrations in 2005, subject to some necessary cleaning of data.

Data on CO2 emissions on imported used cars is not readily available.

## 7. Possible Options

There is a wide range of possible options for allowing the VRT system to take greater account, indirectly or directly, of the level of CO2 emission levels produced by cars. One such option is of course to base the VRT system solely on CO2 emission levels. However, it is considered that such an approach should not be adopted due to a number of reasons, including:

- The outcome of a VRT system based solely on CO2 emission levels is too difficult to predict or estimate;
- Given the yield from VRT at around €1.3bn in 2006, a change in the VRT system should not put a significant proportion of this revenue yield at risk. Consequently any change in the VRT system to link it more to CO2 emission levels should be done on a phased basis, and
- Cars create costs and have adverse effects on society (as well as benefits) beyond those arising from CO2 emissions (health costs, accident costs, road congestion and building costs, noise etc). Therefore it would be unwise to base the VRT system solely on CO2 emissions. As with all major tax heads, revenue raising for the purposes of allowing Government to provide services to our people is the principal purpose of this tax.

Another approach would be to apply a discount to cars with CO2 emissions below a certain level. Such an approach would not be revenue neutral, even if the CO2 emission level was set very low, and it would only focus the incentive to purchase cars with lower CO2 emissions at one specific pivot point, and could actually lead to a greater number of cars on the road.

The following options are being presented with a view to introducing changes to the VRT system with effect from a target date of 1 January 2008. These options are considered to be broadly revenue neutral, i.e. within the order of around two percent of VRT yield.

### **Option 1 – Adjusting Existing Bands and VRT Rates**

In recognition that there is a general correlation between engine size and CO2 emission levels, the current VRT rates and/or bands might be adjusted to encourage the purchase of small cars and discourage the purchase of large vehicles. With that in mind the following changes could be made as a package:

- a) introduce a new band for smaller engine cars up to 1200cc at say 15% VRT rate;
- b) reduce the current A1 VRT rate of 22.5% to 20% for cars 1201 to 1400cc;

- c) introduce a new band for large engine vehicles over 2400cc at say 35% VRT rate.

The new system would be as follows:

<b>Cars</b>	<b>Rate</b>
Up to 1,200ccs	15%
1,201 to 1,400ccs	20%
1,401 to 1,900ccs	25%
1901 to 2,400ccs	30%
2,401ccs and over	35%

### **Introduce a CO2 element directly into the VRT System**

Option 1 above would incentivise purchases of smaller cars, with – on average – lower CO2 emissions. But it does not link VRT rates directly to CO2 emissions. Options 2, 3 and 4, to be described below, would make this link more explicit. What should be possible, however, is to introduce a system allowing for a discount or saving to be given on the standard VRT rates explicitly linked to CO2 emission levels, while levying a higher VRT rate on high CO2 emission vehicles. In this regard, the following considerations arise:

- (a) whether to have a directly proportional charge related to each unit of CO2 emissions of the vehicle. This could be based on each gram of CO2 emissions as reported in Standard EU emissions tests. However, given the complexity it would introduce into the VRT system it is not proposed to adopt an approach along the lines of charging/discounting per gram of CO2 emissions.
- (b) whether to have a system whereby a discount could be applied to vehicles below a particular CO2 emissions level within a VRT engine size band and a levy apply to vehicles above a particular point within a VRT engine size band. In this scenario different ‘pivot points’ could apply to each VRT Category. [See Option 2].
- (c) whether to have the same CO2 discount for lower emission vehicles applying at the same point across VRT engine size bands and the same levy for higher emission vehicles applying at the same point across VRT engine size bands. This rewards purchasers of low CO2 efficient vehicles and penalises high CO2 emission vehicles. [See Options 3 and 4].

### **Option 2**

Retain the current three engine size bands and VRT rates but apply a discount, say 5 percentage points, for cars with CO2 emissions a certain amount below broadly the average CO2 emissions range for cars within each engine size band and also apply an additional levy for cars above that range. For example it might look as set out in the following Table<sup>2</sup>, with a 5 percentage point Discount and Levy and using the possible CO2 Emissions Labelling system indicated in Paragraph 6 above.

In the case of Category A1, cars in CO2 Emissions Label A would have their VRT rate reduced by 5 percentage points, while cars in CO2 Emissions Labels E or higher would have their VRT rate increased by 5 percentage points.

<sup>2</sup> Those to the left of the figures in Bold would have their VRT reduced by 5 percentage points while those to the right of the figures in Bold would have their VRT increased by 5 percentage points.

In the case of Category A2, cars in CO2 Emissions Labels A and B would have their VRT rate reduced by 5 percentage points, while cars in CO2 Emissions Labels F or higher would have their VRT rate increased by 5 percentage points.

In the case of Category A3, cars in CO2 Emissions Labels A, B and C would have their VRT rate reduced by 5 percentage points, while cars in CO2 Emissions Label G would have their VRT rate increased by 5 percentage points.

CO2 Emissions Bands	A	B	C	D	E	F	G
<b>gCO2/km</b>	0-125g	126-145g	146-155g	156-170g	171-190 g	191-220g	Over 220g
<b>CC Bands</b>	VRT Rate	VRT Rate	VRT Rate	VRT Rate	VRT Rate	VRT Rate	VRT Rate
<b>A1</b> (1400 and lower)	17.5%	<b>22.5%</b>	<b>22.5%</b>	<b>22.5%</b>	27.5%	27.5%	27.5%
<b>A2</b> (1401 – 1900)	20%	20%	<b>25%</b>	<b>25%</b>	<b>25%</b>	30%	30%
<b>A3</b> (1901 and higher)	25%	25%	25%	<b>30%</b>	<b>30%</b>	<b>30%</b>	35%

Such a system would effectively have 9 VRT rates compared to 3 rates at present (15 VRT rates if applied to a 5 engine size band system). Such a system has advantages for new cars which have low CO2 emissions within a particular Category. However, such a system has the potential to cause inequities and internal inconsistencies, given that where the discount/levy kicks in, in terms of CO2 emissions, differs between engine size bands and increases with the higher bands. Unless the discount/levy is kept very small, it very quickly leads to a situation where two cars with the same CO2 emissions level but in different engine size bands, has the car in the lower engine size band paying VRT at a higher rate than the car in the higher engine size band. This would appear anomalous, and such anomalies would arise in this example between cells A1/B and A2/B, and between cells A1/E and A2/E. It would therefore be difficult to use such an approach to progressively make the VRT system more related to CO2 emission levels in the future.

### **Option 3**

Retain the current three engine size existing bands and VRT rates but apply a reduced rate of VRT for cars with CO2 emissions below a set CO2 emissions range, and a levy for cars above a certain range, the same range applying to all engine size bands.

Using the possible CO2 Emissions Labelling system indicated in Paragraph 6 above, cars in CO2 emissions Labels A and B would pay a VRT rate 5 percentage points lower than the standard current rate for their engine size band, cars in CO2 emissions Labels C, D and E would pay the standard VRT rate for their engine size band, and cars in CO2 emissions Labels F and G would pay a VRT rate 5 percentage point higher than the standard for their engine size band. The seven CO2 emissions Labels are grouped into three bands. For example it would be as follows:

Cars	CO2 Emissions Labels A and B gCO2/km 0-145g	CO2 Emissions Labels C, D and E gCO2/km 146-190g	CO2 Emissions Labels F and G gCO2/km Over 191g
Engine Size	VRT Rate	VRT Rate	VRT Rate
<b>A1</b> (1400 and lower)	17.5%	22.5%	27.5%
<b>A2</b> (1401 – 1900)	20%	25%	30%
<b>A3</b> (1901 and higher)	25%	30%	35%

As in Option 2, the system has effectively 9 VRT rates compared to 3 rates at present (15 VRT rates if applied to a 5 engine size band system). This approach avoids the overlapping difficulties that would arise if different CO2 emission bands applied for the discount/levy depending on the engine size of the vehicle (Option 2). It can be further developed if it is decided over time to progressively make VRT more CO2 emissions related.

#### **Option 4**

Introduce five engine size bands and VRT rates system as in Option 1, i.e.

- introduce a new band for smaller engine cars up to 1200cc at say 15% VRT rate;
- reduce the current A1 VRT rate of 22.5% to 20% for cars 1201 to 1400cc; and
- introduce a new band for large engine vehicles over 2400cc at say 35% VRT rate.

Then apply a discount and levy, say again of 5 percentage points, for cars with CO2 emissions below and above a set CO2 emissions range, the same range applying to all engine size bands. Again using the possible CO2 Emissions Labelling system indicated in Paragraph 6 above, cars in CO2 emissions Labels A and B would pay a VRT rate 5 percentage points lower than the standard for their engine size band, cars in CO2 emissions Labels C, D and E would pay the standard VRT rate for their engine size band, and cars in CO2 emissions Labels F and G would pay a VRT rate 5 percentage points higher than the standard for their engine size band. For example it would be, as follows:

<b>Cars</b>	<b>CO2 Emissions Labels A and B gCO2/km 0-145g</b>	<b>CO2 Emissions Labels C, D and E gCO2/km 146-190g</b>	<b>CO2 Emissions Labels F and G gCO2/km Over 191g</b>
<b>Engine Size</b>	<b>VRT Rate</b>	<b>VRT Rate</b>	<b>VRT Rate</b>
Up to 1,200 ccs	10%	15%	20%
1,201 to 1,400 ccs	15%	20%	25%
1,401 to 1,900 ccs	20%	25%	30%
1,901 to 2,400 ccs	25%	30%	35%
2,401 and over	30%	35%	40%

This Option is effectively a combination of Options 1 and 3 above. Such a system has, effectively, 15 VRT rates compared to 3 rates at present. It can be further developed, if it is decided, over time to progressively increase the relationship between VRT rates and CO2 emission levels.

## **8. Conclusions**

VRT is a tax; its principal purpose is to raise revenue to help pay for Government services for the population. However, CO2 emissions from vehicles, as from other sources, need to be addressed. It is considered that adjustments in the VRT system, as well as the motor tax system, can both affect car buyers' behaviour directly through pricing adjustments favouring lower-emissions cars, but also by making more explicit in their minds the link between their vehicle choice and its environmental impacts.

Any system linking VRT to CO2 emission levels should be relatively simple, not give rise to unnecessary anomalies, be capable of adjustment over time to maintain appropriate downward pressure on emissions and should be capable of being introduced at a relatively low risk to overall revenue. Equity, economic-efficiency and market impact issues are also important.

Against these criterion, it is the preliminary view that Options 3 or 4 deliver the best balance. However, the Department of Finance will carefully consider all the views submitted by interested parties, with a view to implementation of a revised VRT system from the start of 2008.

The Department of Finance will also examine, in the context of the preparations for Budget 2008, the case for disallowing (totally or in part) capital allowances and leasing expenses for high CO2 emission vehicles. Consultations will take place with the motor industry and the business sector as part of any review.

**Department of Finance**  
**December 2006**