Environmental Tax Issues (VRT)

Rebalancing Vehicle Registration Tax and Capital Allowances to take greater account of CO2 Emission Levels

1. BACKGROUND

2007 Budget Announcement

- 1.1 The Tánaiste, in his 2007 Budget Statement, announced his intention to change the current VRT rating system to relate it more closely to environmental policy objectives, in this case reducing carbon dioxide (CO2) emissions. He stated that there should be some reward in the VRT system for choosing lower-emission vehicles, and that those choosing higher-emission vehicles should pay more. For that reason, a range of options was set out in the Budget booklet for making such a move and a public consultation process on these proposals was announced. Any changes were to have effect from a target date of 1 January 2008.
- 1.2 The Tánaiste also announced that at the same time the Minister for the Environment, Heritage and Local Government would consult on his proposals for a complementary rebalancing of annual motor tax. This would provide a further incentive through the motor tax system for the motoring public to drive cleaner cars and would impose some additional cost in respect of cars with higher carbon dioxide emission levels. This change would apply to vehicles registered on or after 1 January 2008.
- 1.3 Underpinning both of these initiatives would be a new mandatory labelling system for cars based on CO2 emission levels. Some information on VRT Categories and yields is set out in Appendix 1 (Page 11).
- 1.4 The Tánaiste also undertook that his Department would 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 emissions vehicles.

Why rebalance VRT to take greater account of CO2 Emissions?

- 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 CO2 emissions from the road transport sector were under 5 Mt of CO2. Since then CO2 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 **Spring 2007 European Council** agreed ambitious targets for reductions in CO2 levels, 20% reduction by 2020 at Community level compared to 1990, which Ireland has strongly supported and endorsed.
- The National Climate Change Strategy 2007-2012 includes a commitment to "amending the VRT and motor tax systems to take greater account of environmental issues, in particular CO2 emissions".
- The **Programme for Government** states "we will introduce measures to further weight VRT and motor tax in favour of cars with lower emissions".

- 1.5 Controlling and reducing CO2 emissions from transport, especially from cars, has a role to play in reducing the potential cost to the Exchequer arising from the possible purchase of emissions credits. It is estimated that in 2005 there were 402 private cars per 1,000 of the population compared to 227 in 1990. Despite this increase, private car ownership in Ireland is still relatively low by international standards. On this trend, if no action is taken the total quantity of CO2 emissions relating to car transport will continue to increase. Demand for cars is likely to continue to increase due to population and income increases, and the catch-up in cars ownership rates relative to other countries.
- 1.6 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. Since 2000 the average emissions of new cars entering the State's national fleet have remained broadly static. In 2006 the average emissions of new cars were 167g CO2 per km, with CO2 emissions from new petrol cars at 164g CO2 per km or approximately 5% (nine grams) less than for diesel vehicles at 171g CO2 per km.

Developments at EU Level

- 1.7 The European Commission published a proposal for a Directive in relation to car taxes in July 2005 which supports the gradual abolition of registration taxes (VRT) which it believes impacts on the functioning of the internal market. However, the aim of the proposal is that such registration taxes would be replaced by circulation taxes, including fuel taxes, which would have a CO2 element. The proposal includes:
 - The gradual abolition of Vehicle Registration Tax over a transitional period of 5 to 10 years (to be abolished by 1 January 2016) but replacing the yield by increasing excise on petrol and auto-diesel.
 - The <u>establishment of a VRT refund system</u> for cars registered in a Member State (MS) subsequently exported or permanently transferred to another MS.
 - While being abolished, the <u>restructuring of MSs' VRT (and motor tax) in order to apply the tax partially or totally based on the carbon dioxide emissions</u> of each car by 2010. [At least 25% of total revenue from VRT to originate in the CO2 based element by end 2008 and at least 50% by end 2010.]

Consultation Process

- 1.10 A public consultation process, as announced in the 2007 Budget Statement, was undertaken in regard to rebalancing VRT and motor tax, on a revenue neutral basis, to take greater account of CO2 emissions, with an implementation target date of 1 January 2008. The invitation for submissions was put in the national newspapers and on the Departments' websites in December 2006.
- 1.11 The Consultation Paper set out four possible options. The focus of the consultation document was on changing the VRT system rather than abolishing it. Therefore, four broadly revenue neutral options were outlined in the documentation. Briefly, one option retained the current VRT system of using engine size to determine the tax level but introduced new additional rates for smaller and larger engine sizes. The other three options introduced a CO2 emissions element directly into the VRT system, both under the existing three-rate structure and a new five-rate engine size structure, with a discount and a penalty of 5 percentage points in the VRT rates applying respectively to low and high emission cars.
- 1.12 Over 60 submissions were received, of which 19 are from representative organisations or firms, with the remainder from individuals. Representatives from the Department of Finance, the Revenue Commissioners and the Department of the Environment, met with eight representative organisations and with five individuals to discuss their submissions.
- 1.13 Those that made submissions generally welcomed that consideration was being given to making VRT and motor tax take greater account of CO2 emissions. Beyond that, from a VRT perspective, views varied considerably from groups wanting the immediate removal of VRT, to the phased reduction of VRT, and to the switching of VRT to excise on fuels either immediately or over a period of time. The great majority of groups stated that the Options being considered were too limited and that there was little reason why VRT should continue to be linked to engine size. They suggested a completely CO2 related system should be introduced. While some accepted that this may need to be phased in, they were concerned at complex system(s) that such phasing could involve.
- 1.14 A few groups considered that some of the Options proposed were not an unreasonable first step, however, it was considered that having three CO2 categories/bands was too few. The number of CO2 categories was an issue on which there were differences of views, with some suggesting that there should be up to 20 such categories/bands, or indeed that the tax should be related to the individual vehicle's actual CO2 emission level.
- 1.15 SIMI stated that their policy was to have VRT phased out over a number of years and in their view motoring was overtaxed. Of the options proposed, SIMI would prefer a variation of the Option retaining the existing three-rate engine size structure, with a discount and a penalty of 5 percentage points in the VRT rates applying respectively to low and high emission cars. (Further details in Appendix 2 Page 12)
- 1.16 The issue of CO2 Emissions Labelling of cars and the advertising of the Labelling system were considered to be important by most of the groups. Most groups also expressed the view that given the current level of public finances, they did not consider that the change to a CO2 related VRT system had to be introduced on a revenue neutral basis.

2. ENVIRONMENTAL AND TAX POLICY

New CO2 Emissions Labelling System for cars

- 2.1 While a CO2 Emissions Labelling system for cars currently exist in Ireland in line with an EU Directive, it is considered that any change to the VRT system to take greater account of CO2 emission levels requires a new, stronger and well advertised mandatory CO2 Emissions Labelling system for cars to be put in place. The Department of the Environment, Heritage and Local Government will support the tax changes by introducing a new vehicle label, similar to the energy efficiency label for White Goods. It is the intention that the label will be visible on cars for sale in vehicle showrooms, and will allow the consumer to clearly see the CO2 rating of cars, therefore influencing the purchasing decision. It is proposed to approach the introduction of the new labelling requirements from 1 January 2008 on the basis of a voluntary agreement with the motor industry rather than legislation.
- 2.2 Following discussions and with the agreement of Department of Environment, Heritage and Local Government it is considered that the new CO2 Emissions Labelling system for cars should consist of seven bands, categorised from A to G as follows:

CO2 Emissions Bands	A	В	C	D	E	F	G
gCO2/km	0-120g	121-	141-	156-	171 -	191-	Over
		140g	155g	170g	190 g	225g	225g
For Information							
Distribution by CO2							
Band of new cars in 2006	1.57%	12.84%	25.88%	21.95%	23.08%	9.94%	4.74%

Further information regarding the distribution of new Category A vehicles (cars) sold in 2006, by number and as a percentage of the new car market, using such a CO2 Emissions Labelling system is contained in Appendix 3 – Page 13.

Motor Tax

2.3 The Minister for Environment, Heritage and Local Government, as indicated above, is considering how the motor tax system might be rebalanced to take greater account of CO2 Emission levels also using the above CO2 Emissions Labelling system.

Taking greater account of CO2 Emission Levels through VRT

2.4 In introducing any changes to the VRT system it is desirable that the system be maintained as simple as possible both in terms of ease to understand and to administer. In addition the VRT yield should be protected and retained, as far as possible, at the level it would have achieved if the proposed changes had not been introduced. This requires the changes to be made on a broadly revenue neutral basis not only on introduction but also into the future. Linking the VRT rates to CO2 Emission levels should mean cleaner cars being purchased and thereby in itself leading to a reduction in VRT yield. Consequently, the system introduced should be relatively easy to change in terms of tightening the CO2 Emissions bands and/or changing the VRT rates being applied, should such changes be considered necessary in the future to maintain revenue yield. Account needs also to be taken of its likely impact on and disruption in the car market. Furthermore, if a fully CO2 related VRT system is not being introduced, regard should be had to the easy by which the system introduced can be further progressed over time towards being a fully CO2 related system.

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- 2.5 Taking these considerations, and the views expressed during the public consultation process, into account there are broadly four options that are being considered.
 - > Option A: Retain the current three engine size bands and VRT rates and apply discounts and levies, of various sizes, for cars with CO2 emissions below and above set CO2 emissions ranges, the same ranges applying to all engine size bands.
 - > Option B: Introduce a fully CO2 Emissions related VRT system [with percentage VRT rates continuing to apply to the Open Market Selling Price (OMSP) of the vehicle].
 - > Option C: Introduce a partly CO2 Emissions related VRT system, with half the VRT yield being related to engine size and half being CO2 Emissions related.
 - > Option D: Introduce a fully CO2 Emissions related system, but with the VRT being set at a nominal fixed amount for each CO2 Emissions band independent of the price of the car.
- 2.6 These four options are considered in detail in Appendix 4 (Page 14). Appendix 5 (Page 21) also provides some comparisons of the Options under various headings.

Impact on CO2 Emission Levels

- 2.7 Determining the impact of the Options on overall CO2 emissions levels is difficult to determine given that VRT rates on low emission cars will be reduced. This should encourage some switching of purchasing from higher CO2 emission cars to lower emission cars. However, it should also lead to an increase in the overall number of cars purchased as the lower emission cars have become cheaper. Changes or reductions in CO2 arising from changes in VRT and in the price of cars may not be as significant as might be expected. Estimates of the impact of the Options on CO2 Emissions of new cars purchased in year one and over 10 years are in the range 1,883 - 3,562 and 18,830 - 35,620 tonnes respectively. Details are set out in Appendix 5, under heading (e) (Page 25). The estimated reductions, taking the changes in car prices into account, are relatively small¹.
- 2.8 As the real impact on people's purchasing behaviour may not arise from the changes in car prices resulting from VRT changes, but through their increased awareness, as a result of publicity. of the impact of their choice of car on the environment, the above estimates may well be on the conservative side. Changing the VRT system should contribute towards reducing the average CO2 emissions of cars purchased over time.

3. IMPLEMENTATION ISSUES

Determining CO2 Emission Levels of Vehicles

3.1 Determining the CO2 emissions levels of vehicles will, particularly in some cases, create difficulty. However, it is considered that such difficulties can be overcome. For most new cars the CO2 emissions level will be contained in the models Certificate of Conformity. The main difficulty will arise in respect of imported used cars manufactured prior to 2001. In respect of

¹ In this regard it should be noted that Comhar (Sustainable Development Council) in its consultation submission indicated that introducing a fully related CO2 Emissions VRT system, on a revenue neutral basis, but some VRT rates as high as 45%, would reduce CO2 produced by new cars purchased in a year by 5,080 tonne per annum or by less than 1% of CO2 emitted by such cars per annum. The level of CO2 reduction would increase over time to around 50,000 tonne by annum by year ten.

imported used cars the most viable option appears to be that the CO2 rating must be declared on form VRT4 (Declaration for registration of a used vehicle) by the person registering the vehicle. It is proposed that this obligation be underpinned by legislation. It is further proposed that the declaration must be supported by documentary evidence of the CO2 rating. Satisfactory documentation would include:

- Previous registration certificate where the CO2 was included
- Certificate of Conformity provided the CO2 rating is included
- Certificate from the manufacturer or a main distributor
- Certificate from an organisation approved by the Revenue Commissioners to provide such certificates e.g. AA, RIAC, NCT, etc.

Where a certificate, or a measurement, is not available or fails to satisfy the Revenue Commissioners, it is considered that the VRT tax charged would be at the maximum VRT rate allowable. Such a VRT rating would be open to appeal through the VRT appeals system.

Timing of Implementation

- 3.2 The Minister for Finance in his 2007 Budget Statement indicated that any changes were to have effect from a target date of 1 January 2008. The timing of when the changes are implemented need to be carefully considered. The changes now being considered are potentially considerably more radical than what had initially been contemplated. They are significant changes to the VRT system and should result in a sizable impact on the motor car market on introduction. Charges are also required to the Revenue Commissioners VRT computer system to accommodate the proposed revised VRT system. In addition it will be necessary for Revenue to update the OMSP data on its computer system in regard to new and second hand cars in the light of the VRT changes being made.
- 3.3 The motor industry needs at least six months prior notice of any substantial change being made, as dealers begin ordering vehicles well in advance especially of the main sales period of January and February each year. Otherwise dealers will have over ordered those models that experience an increase in VRT rates.
- 3.4 Implementing the changes from 1 January 2008 would require the legislative framework for the VRT changes to be introduced by means of a Financial Resolution on Budget Night in early December 2007. While the exact changes could be announced in advance, the advisability and practicability of legislatively introducing such major changes by means of a Financial Resolution on Budget Night with them coming into effect some three weeks later on 1 January 2008 is questionable.
- 3.5 Consequently, while the change to the VRT system could be announced early, the changed VRT system should be legislatively provided for in the Finance Bill, rather than by Financial Resolution, and be made effective from around mid 2008.

Confining initial rebalancing of VRT to Category A vehicles (cars)

3.6 It is considered that the revision of VRT to take greater account of CO2 Emissions should initially be confined to Category A vehicles (cars), where most of the VRT yield is derived. When experience is obtained of now the new system operates in the case of cars its extension to Category B vehicles (car and jeep derived vans) and to motorcycles can be considered in future years. In this regard it should be note that data on the CO2 emissions of Category B vehicles and of motorcycles is not available. This information is not captured in the VRT database.

4. OTHER VRT POLICY ISSUES

Current 50% VRT Relief for Hybrid, Flexible Fuel and Electricity Cars

- 4.1 A repayment of 50% of VRT in respect of certain hybrid electric vehicles was introduced in January 2001 on a temporary basis to encourage the development and use of hybrid technology. This scheme has since been extended on a two year basis. In January 2006 the scheme was extended to certain flexible fuel vehicles and to electrical cars in January 2007. All these schemes are due to expire on 31 December 2007 unless they are extended. Some 720 such cars were purchased in 2006 and 1,700 have been purchased in 2007 to end August.
- 4.3 When VRT is revised to take greater account of CO2 emission levels the current 50% VRT reliefs should not continue to apply as otherwise the vehicles in question would be compensated on the double for their improved CO2 emission performance. In addition, as referred to above, some of these cars have emission levels well above the national average for new cars and indeed at levels at which normal cars are going to have their VRT rates actually increased under the new VRT system. Once VRT is revised to take greater account of CO2 Emission levels it should apply equally to all cars independent of the technology being used in the car. This especially applies when the fully CO2 Emissions related system is introduced. If a part CO2 related system is being introduced there is a strong case to at least reduce the VRT relief to 25% and also put a monetary cap on the maximum level of relief that can be obtained.

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Switching VRT on to Increased Excise on Fuels

4.8 Given the ongoing developments at EU level and as linking CO2 pollution costs more closely to the actual creation of the pollution (i.e. when a car is used and the extent to which it is used rather than to VRT which is a tax on the purchase of the car,) is considered the more effective means of impacting on CO2 Emission levels, the scope for switching some VRT on to increased excise on petrol and auto-diesel should continue to be considered. While in theory such a switch should be CPI neutral, however, as indicated above, it could in practice have CPI implications in that the increased excise on fuel would be immediately passed on to customers, but the same is unlikely to be the case in regard to any reductions in VRT. In this regard it should be noted that excise on petrol and auto-diesel is relatively low in Ireland compared to our main trading partners, this is particularly so when compared to the UK, which has the highest excise rates on petrol and auto-diesel in the EU. The excise rates on petrol and auto-diesel in Ireland have not been increased since December 2003 due to increasing oil prices and its impact on CPI.

5. Review of Capital Allowances and Leasing expenses for high CO₂ vehicles

Background

- 5.1 In Budget 2007, the Tánaiste undertook that his Department would 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 emissions vehicles.
- 5.2 The availability of capital allowances and leasing expenses could be viewed as an encouragement for businesses to purchase cars. Structuring capital allowances and leasing expenses in a way in which businesses would be discouraged from purchasing high CO_2 emitting cars and to favour purchasing lower CO_2 emitting cars could play some small role in improving the CO_2 emissions profile of the national fleet.

The Scheme

- 5.3 Section 373 Taxes Consolidation Act, 1997 provides a wear and tear allowance which is applied to business cars other than cars in use in a taxi or car hire business. The straight line rate of wear and tear on motor vehicles is $12\frac{1}{2}\%$. The maximum amount of allowable expenditure for wear and tear purposes is currently restricted to €24,000. Capital Allowances as calculated are apportioned to exclude any private use.
- 5.4 When a motor vehicle (either new or second-hand) is bought by a business, capital allowances can be claimed annually on the basis described and in relation to the expenditure incurred, subject to the €24,000 limit. Capital Allowances are deducted from a company's profit figure before taxation. Self employed individuals can also avail of the capital allowances scheme in relation to the business use of a vehicle.
- 5.5 There are currently no other restrictions in the scheme of allowances e.g. by reference to the engine capacity of the vehicle or to carbon emissions by the vehicle. In 2005, almost 60,000 new cars were registered as company cars; this was approximately one third of the gross new car registrations in 2005.

Possible Options for amending the scheme based on CO₂ emissions only

5.6 There are a number of possible options for rebalancing the existing scheme to promote the use of lower emitting vehicles (Table 5.1.) These options involve the banding of vehicles by reference to CO_2 emissions which is consistent with the proposals for amending the VRT scheme (described elsewhere in this paper) but using less bands for simplicity. The banding structure as it relates to the proposed VRT banding structure would be as follows:

Band number	1.	2.	3.	4
Capital allowance scheme			1.5.1.0.0	100
CO ₂ emission bands (g/km)	0-120	121-155	156-190	190+
VRT scheme equivalent				
bands	A	B+C	D+E	F+G

Option 1 proposes that vehicles within Band 1 and Band 2 (up to 155 g/km) would receive capital allowances, XXXXXXXXXXX, up to the cost of the car or the capital allowance threshold (€24,000) whichever is the lower. Vehicles in Band 3 would receive capital allowances up to the cost of the car or 75% of the capital allowance threshold (€18,000) whichever is the lower. Vehicles in Band 4 would receive no capital allowances.

Option 2 proposes that all cars with emissions up to 155g/km would receive capital allowances, XXXXXXXXXXXXXXXX, up to the cost of the car or the capital allowance threshold (€24,000) whichever is the lower and all cars with emissions above 156 g/km would receive no capital allowances.

Option 3 proposes that all cars with emissions up to 120g/km would receive capital allowances, XXXXXXXXXXXXXXXX, up to the cost of the car or the capital allowance threshold (€24,000) whichever is the lower. All cars with emissions from 121 to 155g/km would receive capital allowances up to the cost of the car or 75% of the capital allowance threshold (€18,000) whichever is the lower. Cars with emissions between 156 and 190g/km would receive capital allowances of 50% of the capital allowance threshold (€12,000).

Table 5.1

CO amissions Bonds (g/lym)	Band 1	Band 2	Band 3	Band 4
CO ₂ emissions Bands (g/km)	Up to 120	121 – 155	156 – 190	Over 190
OPTION 1				
Capital Allowances Available	x 100%	x 100%	x 75%	NIL
OPTION 2				
Capital Allowances Available	x 100%	x 100%	NIL	NIL
OPTION 3				

Capital Allowances Available	v 100%	x 75%	x 50%	NIL
Capital Allowalices Available	A 100/0	A / J / 0	A 30/0	INIL

Leasing expenses

5.8 If a business leases an asset for business use, a claim can be made as a deduction for the lease payments as a business expense. However, there is a restriction on the amount of lease payments allowable for tax purposes on private motor vehicles. Where the retail price of the vehicle at the time of manufacture exceeds the Relevant Capital Limit (threshold) the allowable lease payments are restricted to:

Leasing charges x Relevant Capital Limit
Retail price of vehicle

Example: - Leasing charges = $\in 18,000$

- Capital Allowance Threshold = €24,000 (2007)

- Retail Price of the Vehicle = €25,000

Allowable amount for leasing expenses:

In standard cases this amount is spread over 4 years so the allowable amount is €4,320 per annum.

5.9 Any of the options as described in relation to capital allowances could be applied to leasing expenses. For the purpose of illustration, Table 5.2 below sets out how option 3 above might operate in relation to leasing expenses.

Table 5.2

CO ₂ Emissions	Leasing expenses – allowable amount per Band
Band 1 Up to 120g/km	Leasing charges x Capital Allowance Threshold Retail price of vehicle 100%
Band 2 121 – 155g/km	Leasing charges x Capital Allowance Threshold Retail price of vehicle x 75%
Band 3 156 – 190g/km	Leasing charges x Capital Allowance Threshold Retail price of vehicle x 50%
Band 4 Over 190g/km	NIL

5.10 The cost of these various options is being examined by the Revenue Commissioners and adjustments to the options put forward above may be needed to ensure that any changes proposed would be revenue neutral.

Impact on CO₂ Emission Levels.

- 5.11 As in the case of the VRT options, this is difficult to determine but the changes proposed should contribute to the lowering of average emission levels over time.
- 6.1 The views of the Group are invited.

Some Information on Vehicle Registration Tax

- 1.1 Vehicle Registration Tax (VRT) is an important source of revenue for the Exchequer. The yield from VRT was €1.15bn in 2005, €1.3bn in 2006, and is forecast to be €1.45bn 2007, providing around 3% of the total net tax receipts. It is therefore particularly valuable in view of the Government's strategy of reducing other taxes such as Income Tax and ensuring that there is sufficient revenue to fund public services.
- 1.2 The main categories within VRT and the associated VRT charges are:

Cars

A1 Cars up to 1,400cc 22.5% of Open Market Selling Price - OMSP

A2 1,401 to 1,900cc 25% of OMSP A3 Cars over 1,900cc 30% of OMSP

(Passenger cars are subject to a minimum VRT tax of €315)

B Car and Jeep Derived Vans 13.3% of OMSP (subject to a minimum tax of €125)

C Other Vehicles €50 – flat rate (e.g. trucks, large vans, pick-ups, tractors and buses)

- 1.3 Most of the yield from VRT is derived from passenger cars. The VRT yields from Category B at around €23m, Category C €3.7m and Category M (motorcycles) €3.5m are relatively small.
- 1.4 VRT on Category A and B vehicles is related to the cost of the vehicle. Consequently as the price of a car increases through annual inflation or being a better vehicle, the VRT on the vehicle automatically increases as does the overall yield from VRT.
- 1.5 As can be seen from the above increases in VRT yield there has been reasonably strong growth in new car sales over recent years. However, second hand car imports, after declining in the late 1990s to around 2003, have in recent years increased rapidly reaching some 50,000 net registrations in 2006 or equal to 29 per cent of new car sales. Second hand car imports are considerably more concentrated in the larger car category Category A3 than is the case for new cars. This development is of particular concern to SIMI.

SIMI's Views at the Consultation Process

- 2.1 SIMI at the consultation process stated that their policy was to have VRT phased out over a number of years and in their view motoring was overtaxed. Of the options proposed in the consultation documentation, SIMI would prefer a variation of the Option retaining the existing three-rate engine size structure, with a discount and a penalty of 5 percentage points in the VRT rates applying respectively to low and high emission cars.
- 2.2 However, SIMI propose that the existing three VRT rates should be retained as the highest VRT rates to be paid by any vehicles, with medium CO2 emission cars receiving a 2.5 percentage points and low CO2 emission cars receiving a 5 percentage points reductions respectively in the existing VRT rates. SIMI stressed in particular that the highest rate of VRT charged on any vehicle should not exceed 30 percentage points or it would further assist the import of second hand cars. SIMI's proposal 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
A1 (1400 and lower)	17.5%	20%	22.5%
A2 (1401 – 1900)	20%	22.5%	25%
A3 (1901 and higher)	25%	27.5%	30%

- 2.3 Under the SIMI proposal no one loses, while some 70% of new cars would have their VRT reduced by 2.5 percentage points and a further 15% would have their VRT reduced by 5 percentage points. SIMI acknowledged that this proposal would not be revenue neutral and, while they did not consider it was needed, any revenue shortfall might be made up by increasing excise on fuels.
- 2.4 In fact the SIMI Option would in 2006 terms reduce VRT yield by around €105m, or by around 9% of VRT yield, which would require a 2.5 cent increase in excise on both petrol and auto-diesel. It also reduces the CO2 related element in the VRT rates to 5 percentage points compared to the10 percentage points that had been proposed.
- 2.5 SIMI stated that any new system has to apply to imported second hand cars as well as to new cars and that an export VRT Refund scheme and a new scrappage scheme should be introduced. SIMI also stressed that the motor industry needed at least six months prior notice of any such change being made. SIMI has proposed an implementation date no earlier than 1 July 2008, with the society favouring postponing such changes until 1 January 2009.

New CO2 Emissions Labelling System for Cars

3.1 Following discussions and with the agreement of Department of Environment, Heritage and Local Government it is proposed that the new CO2 Emissions Labelling system for cars should consist of seven bands, categorised from A to G as follows:

CO2 Emissions Bands	A	В	C	D	E	F	G
gCO2/km	0-120g	121-	141-	156-	171 -	191-	Over
		140g	155g	170g	190 g	225g	225g
For Information							
Distribution by CO2							
Band of new cars in 2006	1.57%	12.84%	25.88%	21.95%	23.08%	9.94%	4.74%

3.2 For information the following Table sets out the distribution of new Category A vehicles (cars) sold in 2006, by number and as a percentage of the new car market, using such a CO2 Emissions Labelling system (data on CO2 emission levels for imported used cars is not readily available).

CO2 Emissions Bands	A	В	C	D	E	F	G	
gCO2/km	0-120g	121-	141-	156-	171 -	191-	Over	Total
		140g	155g	170g	190 g	225g	225g	
CC Bands								
A1 (1400 and lower)	2285	15917	31868	22929	3381	9	10	76,399
A2 (1401 – 1900)	493	6775	9096	12606	30231	6534	232	65,967
A3 (1901 and higher)	4	23	4827	3310	7226	11053	8144	34,587
Total	2,782	22,715	45,791	38,845	40,838	17,596	8,386	176,953
By Percentage of the								
New Car Market								
A1 (1400 and lower)	1.29%	9.00%	18.01%	12.96%	1.91%	0.01%	0.01%	43.17%
A2 (1401 – 1900)	0.28%	3.83%	5.14%	7.12%	17.08%	3.69%	0.13%	37.28%
A3 (1901 and higher)	0.00%	0.01%	2.73%	1.87%	4.08%	6.25%	4.60%	19.55%
Total	1.57%	12.84%	25.88%	21.95%	23.08%	9.94%	4.74%	100.0%

Consideration of the Options for taking greater account of CO2 Emission Levels through VRT

<u>Option A</u>: Retain the current three engine size bands and VRT rates and apply discounts and levies, of various sizes, for cars with CO2 emissions below and above set CO2 emissions ranges, the same ranges applying to all engine size bands.

- 4.1 Retain the current three engine size bands and VRT rates and apply discounts and levies, of various sizes, for cars with CO2 emissions below and above set CO2 emissions ranges, the same ranges applying to all engine size bands. This Option is a variation of one of the options used in the consultation documentation but with the number of CO2 Emission bands being increased from three to seven and the degree of discounts/levies being increased from 5 percentage points to 7.5 percentage points of VRT.
- 4.2 In this Option cars in CO2 Emissions Label D would retain the existing VRT rates of 22.5%, 25% and 30% based on engine size. Cars in CO2 Emissions Labels A, B and C would pay a VRT rate of 7.5, 5 and 2.5 percentage points respectively <u>lower</u> than the standard current rate for their engine size band. Cars in CO2 Emissions Labels E, F and G would pay a VRT rate of 2.5, 5 and 7.5 percentage points respectively <u>higher</u> than the standard for their engine size band based on their CO2 emissions.
- 4.3 **Table A** gives the VRT rates that would apply under this Option.

Table A

	CO2 Emissions Labels A gCO2/km 0-120g	CO2 Emissions Label B gCO2/km 121-140g	CO2 Emissions Label C gCO2/km 140 - 155g	CO2 Emissions Labels D gCO2/km 156-170g	CO2 Emissions Labels E gCO2/km 171-190g	CO2 Emissions Labels F gCO2/km 191-225	CO2 Emissions Label G gCO2/km Over 225
Engine	VRT Rate	VRT Rate	VRT Rate	VRT Rate	VRT Rate	VRT Rate	VRT Rate
Size							
A1 (1400	15.0%	17.5%	20%	22.5%	25%	27.5%	30.0%
and lower)							
A2 (1401	17.5%	20%	22.5%	25%	27.5%	30%	32.5%
-1900)							
A3 (1901	22.5%	25%	27.5%	30%	32.5%	35%	37.5%
and higher)							
Distribution	[1.57%]	[12.84%]	[25.88%]	[21.95%]	[23.08%]	[9.94%]	[4.74%]
of New cars	•		•	•			
2006							

4.4 **Table A1** shows where the increases and reductions in VRT would arise, and the levels of such increases/decreases, compared to the current VRT system. It also shows the proportion of all new cars purchased in 2006 that would have fallen into those engine size and CO2 combination, was such a system then in place [these latter percentage figures are shown in brackets].

Table A1 - Percentage Points Changes in VRT Rates

CO2	A	В	C	D	E	F	G
Emissions							
Bands							
gCO2/km	0-120g	121-140g	141-155g	156-170g	171-190 g	191-225g	Over 225g
CC Bands							
A1 (1400 and	-7.5%	-5%	-2.5%	0.0%	+2.5%	+5%	+7.5%
lower)							
	[1.29%]	[9.00%]	[18.01%]	[12.96%]	[1.91%]	[0.01%]	[0.01%]
A2 (1401 –	-7.5%	-5%	-2.5%	0.0%	+2.5%	+5%	+7.5%
1900)							
	[0.28%]	[3.83%]	[5.14%]	[7.12%]	[17.08%]	[3.69%]	[0.13%]
A3 (1901 and	-7.5%	-5%	-2.5%	0.0%	+2.5%	+5%	+7.5%
higher)							
	[0.00%]	[0.01%]	[2.73%]	[1.87%]	[4.08%]	[6.25%]	[4.60%]

- 4.5 Under this Option around 22% of new cars would retain their current VRT rates, while 40.3% would have their VRT rates reduced (around 26% by 2.5 percentage points, 13% by 5 percentage points and 1.5% by 7.5 percentage points). Some 37.8% of new cars would have their VRT rates increased (around 23% by 2.5, 10% by 5 and 4.7% by 7.5 percentage points respectively). The effective VRT rates would vary from 15 to 37.5 percentage points depending on engine size and CO2 Emission levels The Option increases the variation in VRT rates from currently 7.5 percentage points to a total of 22.5 percentage points, with 15 percentage points of that variation being CO2 related.
- 4.6 Nevertheless the VRT rates are likely to be still seen by the public as being determined mainly by engine size. The number of effective VRT rates is increased from three in the current system to twenty one, thereby making it more complex than the current VRT system. It would also not be that easy to further progressed over time towards being a fully CO2 related system if so desired.

This Option is costed in 2006 terms as a short basis increase in VRT yield of around €65m. This is to allow for some behavioural response leading to lower emission cars in future years.

Option B: Introduce a fully CO2 Emissions related VRT system [with percentage VRT rates continuing to apply to the Open Market Selling Price (OMSP) of the vehicle]

- 4.8 In this Option the VRT rate is determined by the CO2 Emission levels of the car and is unrelated to the engine size. The percentage VRT rates would continue to apply to the OMSP of the vehicle. The VRT rates vary from 12 to 36 percentage points depending on the CO2 Emission levels. The Option at those VRT rates would be broadly revenue neutral on introduction.
- **4.9 Table B** gives the VRT rates that would apply under this Option.

			<u>Tal</u>	<u>ble B</u>			
CO2 Emissions	A	В	C	D	E	F	G
Bands							
gCO2/km	0-120g	121-140g	141-155g	156-170g	171 - 190 g	191-225g	Over 225g
VRT Rates	12%	16%	20%	24%	28%	32%	36%
Distribution of New cars 2006	[1.57%]	[12.84%]	[25.88%]	[21.95%]	[23.08%]	[9.94%]	[4.74%]

4.10 Table B1 shows where the increases and reductions in VRT would arise, and the levels of such increases/decreases, compared to the current VRT system. It also shows the proportion of all new cars purchased in 2006 that would have fallen into those engine size and CO2 combination, was such a system then in place [these latter percentage figures are shown in brackets].

CO2 Emissions A В \mathbf{C} D E F \mathbf{G} **Bands** 0-120g 121-140g 141-155g 156-170g 171-190 g 191-225g gCO2/km Over 225g **CC Bands A1** (1400 and -10.5% -6.5% -2.5% +1.5% +5.5% +9.5% +13.5% lower) [1.29%] [9.00%] [18.01%] [12.96%] [1.91%] [0.01%] [0.01%] $A2 \overline{(1401 - 1$ -13% -1% - 9% -5% +3% +7% +11% 1900) [0.28%] [3.83%] [5.14%] [7.12%] [17.08%] [3.69%] [0.13%]**A3** (1901 and - 18% - 14% -10% -6% -2% +2% +6% higher) [0.00%] [0.01%][2.73%] [1.87%] [4.08%] [6.25%] [4.60%]

Table B1 - Percentage Points Changes in VRT Rates

- 4.11 Under this Option around 53% of new cars would have their current VRT rates reduced by varying degrees and around 47% would have their VRT rates increased. While the resulting reductions and increases in VRT rates are quite significant in some instances, however, it should be noted that where the largest increases and reductions occur the proportion of the car market that arise in those categories are small, particularly so in the more extreme instances. It increases the variation in VRT rates from currently 7.5 percentage points to a total of 24 percentage points.
- **4.12** The VRT system would be clearly seen by the public as being related to the CO2 Emissions levels of vehicles and unrelated to engine size. It would send a very strong signal to the public and to the car market. The number of effective VRT rates would be increased from three to seven, thereby making it slightly more complex in that regard than the current VRT system.

Option C: Introduce a partly CO2 Emissions related VRT system, with half the VRT yield being related to engine size and half being CO2 Emissions related.

4.13 In this Option the current VRT three engine size bands are retained, the current engine size VRT rates are effectively halved to 11%, 12.5% and 15% respectively and continue to be applied to the current engine size bands. Then the second half of the VRT yield is maintained based solely on CO2 Emission levels, with these additional rates varying from 6 to 18 percentage points depending on the CO2 Emission levels. The rates derived from the two sources are joined to provide a single VRT rate structure depending on engine size and CO2 Emissions band of the car. The Option at the VRT rates shown below would be broadly revenue neutral on introduction.

4.14. **Table C** gives the VRT rates that would apply under this Option.

Table C. Effective VRT Rates

CO2 Emissions	A	В	C	D	E	F	G
Bands							
gCO2/km	0-120g	121-	145-	156-170g	171-190 g	191-225g	Over 225g
-		140g	155g				
CC Bands							
A1 (1400 and lower)	17%	19%	21%	23%	25%	27%	29%
A2 (1401 – 1900)	18.5%	20.5%	22.5%	24.5%	26.5%	28.5%	30.5%
A3 (1901 and	21%	23%	25%	27%	29%	31%	33%
higher)							

4.15 Table C1 shows where the increases and reductions in VRT would arise, and the levels of such increases/decreases, compared to the current VRT system. It also shows the proportion of all new cars purchased in 2006 that would have fallen into those engine size and CO2 combination, was such a system then in place [these latter percentage figures are shown in brackets].

Table C1 - Percentage Points Changes in VRT Rates

CO2 Emissions	A	В	C	D	E	F	G
Bands							
gCO2/km	0-120g	121-140g	141-155g	156-170g	171-190 g	191-225g	Over 225g
CC Bands							
A1 (1400 and	-5.5%	-3.5%	-1.5%	+0.5%	+2.5%	+4.5%	+6.5%
lower)							
	[1.29%]	[9.00%]	[18.01%]	[12.96%]	[1.91%]	[0.01%]	[0.01%]
A2 (1401 – 1900)	-6.5%	-4.5%	-2.5%	-0.5%	+1.5%	+3.5%%	+5.5%
	[0.28%]	[3.83%]	[5.14%]	[7.12%]	[17.08%]	[3.69%]	[0.13%]
A3 (1901 and	- 9%	- 7%	-5%	-3%	-1%	+1%	+3%
higher)							
	[0.00%]	[0.01%]	[2.73%]	[1.87%]	[4.08%]	[6.25%]	[4.60%]

- 4.16 Under this Option, as in Option B above, around 53% of new cars would have their current VRT rates reduced by varying degrees and around 47% would have their VRT rates increased. However, the resulting reductions and increases in VRT rates are halved compared with Option B. The effective VRT rates vary from 17 to 33 percentage points depending on engine size and CO2 Emission levels The Option increases the variation in VRT rates from currently 7.5 percentage points to a total of 16 percentage points.
- 4.17 The degree to which it would be seen by the public as being related to the CO2 Emissions levels of vehicles rather than to engine size is open to debate. This is despite the fact that of the possible 16 percentage points VRT variation under the Option, 12 are CO2 emissions related and

only 4 are engine size related. The number of effective VRT rates is increased from three in the current system to twenty one, thereby making it more complex than the current VRT system.

- 4.18 This Option is effectively Option B fully CO2 Emissions related VRT system being half introduced or being phased in. It would be relatively easy to further progress the system over time towards being a fully CO2 related system, if so desired, by further changing part, or the full remaining part, of the engine size related VRT element into the CO2 Emissions related element.
- 4.19 It is debatable whether there is an advantage in phasing in the change. It should reduce any potential immediate risk to revenue yield, and allow an opportunity to see now it impacts on revenue yield, however, such a risk is not considered to be significant., While it reduces the immediate impact on the car market on the one hand, it also involves the car industry in having to make two or more adjustments rather than one, even if those adjustments are some years apart. Furthermore, it is more difficult to explain to the public.

Option D: Introduce a fully CO2 Emissions related system, but with the VRT being set at a nominal fixed amount for each CO2 Emissions band independent of the price of the car.

4.20 An alternative to Option B, a fully CO2 Emissions related VRT system with the percentage VRT rates continuing to be applied to the OMSP of the vehicle, is to introduce a system where the VRT is set at a nominal fixed amount for each CO2 Emissions band independent of the price of the car. For illustrative purposes such a system might be as indicated in Table D. While a system based on the figures in Table D would reduce VRT yield by some €60m, the figures applied could be altered to make it broadly revenue neutral on introduction.

Table D

CO2 Emissions Bands	A	В	C	D	E	F	G
gCO2/km	0-120g	121-140g	141-155g	156-170g	171 - 190 g	191-225g	Over 225g
VRT Rates	€1,000	€2,000	€4,000	€6,000	€8,000	€12,000	€16,000
Distribution of	C1,000	C2,000	C4,000			C12,000	C10,000
New cars 2006	[1.57%]	[12.84%]	[25.88%]	[21.95%]	[23.08%]	[9.94%]	[4.74%]

- 4.22 On the other hand, while the OMSP system has been questioned by the EU Commission it has to date withstood those challenged. There is no reason to consider that any alternative system put in place would not also be similarly questioned and challenged by the EU Commission. Furthermore, there are a number of fundamental problems in changing from the current VRT system based on OMSP to a nominal fixed amount system. Firstly, as currently VRT is based on the price of the car, the yield from VRT increases as car prices increase, without any action having to be taken. This automatic revenue buoyancy would be lost by changing to a flat rate VRT system. While the mandatory indexation could be provided for in legislation, it would still require some one to actually calculate the new rate and advertise it on an annual basis. This would create strong annual pressure for the increase not to be made and also create further resistance to VRT itself. It is therefore very likely that, as happens in the case of flat rate excises, the real value of any specific VRT flat rate nominal value would decrease over time leading to a loss in revenue yield.
- 4.23 Secondly, disconnecting VRT from the value of the car can be seen as being inequitable. Most major taxes are related to the price/value of the good or service and/or the ability of the person to pay. Introducing a flat nominal rate VRT system based exclusively on CO2 emissions would increase the VRT paid on lower cost cars and reduce the VRT paid on higher cost cars (compared to having it related to the OMSP) within each band, significantly so in some cases. Thirdly, it would result in the VRT of many cheaper cars being increased, despite having relatively low CO2 Emissions levels, while the VRT of some high emissions higher cost cars would have their VRT reduced.
- 4.24 Consequently, while if one was introducing a VRT system for the first time and at reasonably low rates, a nominal fixed flat-rate amount for each CO2 Emissions band independent

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of the price of the car might be the more practical approach to adopt. However, that is not the position that now exists. Switching from the current VRT system to such a flat nominal rate VRT system raises fundamental problems. These problems relate to moving from a percentage of value (OMSP) system to a nominal fixed flat-rate system and are primarily unconnected to the issue of making VRT take greater account of CO2 Emission levels.

Some Comparisons of the VRT Options

(a) Summary of VRT Options

➤ Option A: Retain the current three engine size bands and VRT rates and apply discounts and levies, of various sizes, for cars with CO2 emissions below and above set CO2 emissions ranges, the same ranges applying to all engine size bands.

	CO2	CO2	CO2	CO2	CO2	CO2	CO2
	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions
	Labels A	Label B	Label C	Labels D	Labels E	Labels F	Label G
	gCO2/km	gCO2/km	gCO2/km	gCO2/km	gCO2/km	gCO2/km	gCO2/km
	0-120g	121-140g	140 - 155g	156-170g	171-190g	191-225	Over 225
Engine	VRT Rate	VRT Rate	VRT Rate	VRT Rate	VRT Rate	VRT Rate	VRT Rate
Size							
A1 (1400	15.0%	17.5%	20%	22.5%	25%	27.5%	30.0%
and lower)							
A2 (1401 –	17.5%	20%	22.5%	25%	27.5%	30%	32.5%
1900)							
A3 (1901	22.5%	25%	27.5%	30%	32.5%	35%	37.5%
and higher)							
Distribution							
of New cars	[1.57%]	[12.84%]	[25.88%]	[21.95%]	[23.08%]	[9.94%]	[4.74%]
2006 (a)							

➤ Option B: Introduce a fully CO2 Emissions related VRT system [with percentage VRT rates continuing to apply to the Open Market Selling Price (OMSP) of the vehicle].

CO2 Emissions Bands	A	В	C	D	E	F	G
gCO2/km	0-120g	121-140g	141-155g	156-170g	171 - 190 g	191-225g	Over 225g
VRT Rates	12%	16%	20%	24%	28%	32%	36%

Option C: Introduce a partly CO2 Emissions related VRT system, with half the VRT yield being related to engine size and half being CO2 Emissions related.

CO2 Emissions	A	В	C	D	E	F	G
Bands							
gCO2/km	0-120g	121-	145-	156-170g	171-190 g	191-225g	Over 225g
		140g	155g				
CC Bands							
A1 (1400 and lower)	17%	19%	21%	23%	25%	27%	29%
A2 (1401 – 1900)	18.5%	20.5%	22.5%	24.5%	26.5%	28.5%	30.5%
A3 (1901 and	21%	23%	25%	27%	29%	31%	33%
higher)							

➤ Option D: Introduce a fully CO2 Emissions related system, but with the VRT being set at a nominal fixed amount for each CO2 Emissions band independent of the price of the car.

CO2 Emissions	A	В	C	D	E	F	G
Bands							
gCO2/km	0-120g	121-140g	141-155g	156-170g	171 - 190 g	191-225g	Over 225g
VRT Rates	€1,000	€2,000	€4,000	€6,000	€8,000	€12,000	€16,000

(a) The same distribution of new cars in 2006 across CO2 Emissions Bands applies to the four Options.

(b) VRT Rates and Estimated Change in VRT Yield on full year of introduction

	VRT Rates [Percentage Points]	Maximum possible variation in VRT rates that can be achieved from changing the CO2 emissions level of the car purchased [Percentage Points]	Estimated Change in VRT Yield
Existing VRT System	22.5 to 30	Nil directly	
Option A	15 to 37.5	15 (a)	Increase of €65m (b)
Option B	12 to 36	24	Broadly revenue neutral
Option C	17 to 33	12 (a)	Broadly revenue neutral
Option D	€1,000 to €16,000	€15,000	Reduction of €60m (b)

- (a) In the case of Option A and C, where the VRT rates are related to engine size and to the CO2 emissions level, it is assumed that the person continues to purchase a car within the same engine size band. Otherwise the maximum possible variation in VRT rates is 22.5 and 16 percentage points respectively, where the person reduces both the engine size and the CO2 emissions level of the car purchased.
- (b) The rates of VRT could be changes to make both Options broadly revenue neutral e.g. Option A by reducing the VRT rates by 1 percentage point; Option D by increasing the nominal flat-rate

(c) Risk to Revenue Yield

Overall Option D would be likely to have the higher revenue risk, followed by Option B and then by Option A and Option C respectively, for the reasons indicated below.

The potential risk to revenue yield depends on the likely success of the new VRT system in getting people to change their purchasing behaviour and buy cleaner cars, thereby reducing the level of VRT that has to be paid. In looking at the various Options this risk can be influenced by a number of factors including;

- (i) The lowest level of VRT rate available as it sets the floor to the maximum "possible" VRT loss. In this regard the lowest VRT rates are Option B 12%, A 15% and C 17%.
- (ii) The maximum level of VRT rate available, as it should encourage people to try and avoid it. In this regard the highest VRT rates are Option A 37.5%, B 36% and C 33%.
- (iii) The range of VRT rates within each Option. In this regard the range in VRT rates is Option B 24%, A 22.5% and C 12%. [This however, overlaps to a degree with (i) and (ii) above.]
- (iv) The difference in VRT rates between each CO2 Emissions Band, as the larger the difference in VRT rates the more it should encourage people to move to the next lower CO2 Emissions Band. This is the means by which most people are likely to reduce the CO2 emissions of their car, if they indeed do so, rather than by moving down several CO2 Emission Bands in one go. In this regard the differences in VRT rates between each CO2 Emissions Band are mainly Option B 4%, A 2.5% and C 2%.

While the risk to revenue yield is not considered to be significant, or to vary much between the above three Options, taking those factors in to account, <u>Option B would be likely to have the higher revenue risk</u>, followed by A and then Option C. Of course should revenue yield not grow

as would have been expected or indeed fall in the future, it would be relatively easy to tighten the CO2 Emissions bands and/or change the VRT rates being applied, and thereby help maintain revenue yield.

It is difficult to judge Option D, as it is a flat-rate system, with the above three Options. However, in regard to encouraging people to buy cleaner cars it is likely to have a revenue risk factor broadly similar to Option B. In being a flat-rate VRT system it however carries the further real risk that the level of the flat-rates will not be increased on an ongoing basis in line with inflation and that the value of the flat-rates will fall in real terms over time. This, if allowed to happen, which is very likely to be the case given our experience with flat-rate excises, would be a significant risk to the revenue yield.

(d) Reductions/Increases in VRT in Percentage Points Compared to Existing VRT Rates

OPTION A

VRT	Reduction	Reduction	Reduction	Same	Increase	Increase	Increase
Percentage Points	7.5	5	2.5		2.5	5	7.5
Percentage of new car market	1.57%	12.84%	25.88%	21.95%	23.08%	9.94%	4.74%
Total							
Reduction	40.29%						
Same	21.95%						
Increase	37.76%						

OPTION B

VRT	Reduction	Reduction	Reduction	Reduction	Increase	Increase	Increase
Percentage Points	13 to 18	9 to 11	5 to 7	1 to 3	1 to 3	5 to 7	9 to 13.5
Percentage of new car market	0.29%	7.85%	16.01%	29.21%	36.29%	10.2%	0.15%
Total							
Reduction	53.36%						
Same	Nil						
Increase	46.64%						

OPTION C

VRT	Reduction	Reduction	Reduction	Reduction	Increase	Increase	Increase
Percentage Points	6.5 to 9	5 to 5.5	3.5 to 4.5	0.5 to 3	0.5 to 3	3.5 to 4.5	5.5 to 6.5
Percentage of new car market	0.29%	4.02%	12.83%	36.22%	42.80%	3.70%	0.14%
Total							
Reduction	53.36%						
Same	Nil						
Increase	46.64%						

OPTION D

As Option D involves a move from a system based on VRT percentage rates applied to the OMSP of the car to a nominal flat-rate VRT system is it not possible to represent the changes in the above type of Tables. However, for information on the changes arising under this Option for some individual car models see attached Table headed "Options - Examples of Changes in VRT and in OMSP Compared with Existing VRT System" (Page 25).

(e) Impact of Options on CO2 Emissions on New Cars

	Estimated Change in Average CO2 Emissions per new car	Change in Total CO2 Emissions in year of introduction	Change in Total CO2 Emissions in year after 10 years
	Percentage Decrease	Estimated CO2 Tonnes Decrease	Estimated CO2 Tonnes Decrease
Option A	0.424%	3,003	30,030
Option B	0.503%	3,562	35,620
Option C	0.274%	1,938	19,380
Option D	0.266%	1,883	18,830