

Information for review of fringe benefit tax for the private use of electric cars and depreciation rate review

Introduction

The government has asked Inland Revenue to review whether the current tax depreciation rates that apply to conventional vehicles are appropriate for electric cars. The government has also asked whether the current fringe benefit tax (FBT) calculation method is overvaluing the private benefit of being able to use a company owned electric car. These reviews need to be completed as early as possible, but before 31 March 2017. We request that you complete the following sections of information with the figures you have used in your own internal analysis/assessment.

The basic objective for both reviews is to ensure that the FBT rules and the depreciation rate that apply do not unintentionally discourage investors from investing and using electric cars.

For the purpose of these reviews, electric cars means cars and vans designed mainly to carry people (as opposed to goods) that are powered solely by a battery (such as the Nissan Leaf). It also includes plug-in hybrid vehicles which are powered by a petrol engine and an electric motor, and which have batteries which are externally charged (such as the Mitsubishi Outlander PHEV). Conventional hybrid vehicles – which have both a petrol engine and an electric motor, but no external way of charging the batteries (like most Toyota Prius) are not included in this review.

These reviews will apply the government's tax policy framework. That is, as much as possible the tax rules should neither encourage nor discourage business owners' investment choices and decisions. When business owners and managers allocate resources according to the signals sent by the prices of each activity, relative to every other activity, national welfare is likely to be maximised.

Depreciation rate

Tax depreciation allows deductions for the cost of assets over the useful life of the asset. If the tax depreciation rate matches an asset's expected decline in value, then business owners and managers are likely to invest in assets that are likely to make the biggest contribution to their business.

The current depreciation rate that applies to electric cars is 30 per cent (diminishing value) or 21 per cent (straight line). These depreciation rates apply to passenger vehicles, including minibuses and taxis. The aim of this review is to determine whether the current depreciation rates that apply to electric cars are broadly correct.

The useful life of an electric car is the key factor that influences the tax depreciation rate. Determining an asset's useful life can be difficult and requires estimation.

In the context of the current tax depreciation rules and electric vehicles, estimated useful life means the period over which an electric car might reasonably be expected to be useful in business. Factors that we are required to consider when estimating the useful life of an electric vehicle are the passage of time, likely wear and tear, exhaustion, and obsolescence. We also assume normal and reasonable maintenance. For example, the Commissioner's view is that motor cars have an estimated useful life of five years.

The other factor we can consider when setting the tax depreciation rate is the estimated residual market value of electric vehicles at the end of their useful life. The general

presumption is the residual value for most assets is expected to be no more than 13.5 per cent of the items cost. However, for motor cars the view was that after 5 years motor cars could be expected to have a residual value of 25 per cent of cost.

There are a range of variables that can influence these estimates, including expected battery life, costs of battery replacement and maintenance and other elements that might be unique to electric cars. To assist with this review, we would like your estimates of useful life or residual market value for electric vehicles and any literature or other material that support these estimates, for example from material from manufacturers, valuers, or other consultants. This could also include information of the useful life and residual market value of items of electric cars that you have used previously or are currently using. If your electric car has been used in conditions that are out of the ordinary (eg highly corrosive environments) then information on the industry or industries which use the electric car and the physical conditions which the item is typically exposed would be helpful.

Fringe benefit tax

From a policy perspective, correctly taxing the private benefit of an electric car would make an employee indifferent between receiving this in-kind-benefit and cash wages. If the current approach to calculating FBT is overvaluing the taxable benefit from an electric vehicle then there are strong policy grounds to consider change.

The benefit of an employer-provided vehicle is currently set at 20% of the cost price of the motor vehicle, or 36% of the depreciated value. These rates are intended to represent an employee's cash savings from not having to purchase and operate their own vehicle. The cash savings are taken to be the average annual fixed and variable costs associated with owning a motor vehicle, expressed as a percentage of the cost price or depreciated value of the vehicle. The rate is discounted to recognise that it is likely that the employee would not be driving such a superior vehicle in the absence of the employer-provided vehicle, or there may be some restrictions applied to its private use. Automobile Association (AA) data has previously been used as the basis for estimating the taxable benefit from an employer-provided petrol motor vehicle. The AA 2016 estimates of the annual costs of petrol car ownership¹ are as follows:

Table 1: Automobile Association estimates of annual total running costs 2016

Category of vehicle	Small vehicle 0 -1,500 cc	Compact vehicle 1,501 -2,000 cc	Medium vehicle 2,001- 3,500 cc	Large vehicle 3,500 cc+
<i>Average value of vehicle</i>	\$28,754	\$36,969	\$49,280	\$72,857
<i>Total fixed costs</i>	\$4,424	\$5,554	\$6,832	\$9,390
<i>Total running costs</i>	\$2,566	\$3,154	\$3,599	\$4,541
<i>AA total annual costs of car ownership</i>	\$6,990	\$8,708	\$10,431	\$13,931
<i>Total annual costs as a percentage of average vehicle value</i>	24.3%	23.6%	21.2%	19.1%

Source: NZ Automobile Association, Running Cost Report 2016

Unfortunately the AA currently does not have estimates of the annual fixed and running costs for electric cars.

¹ Assuming the distance travelled is 14,000KM per year in the first five years.

Estimates of fixed and running costs for electric vehicles

With this in mind we are looking for estimates of the yearly benefits from having access to an electric car for private use. We consider that the taxable benefit for an electric car in a year is represented by the following costs:

Fixed costs

- Depreciation
- Insurance – comprehensive, no claim
- Licencing/re-licencing
- Warrant of fitness
- Interest on outlay

Variable (running) costs

- Repairs and maintenance
- Tyres
- Oil (PHEV only)
- Fuel – electricity and petrol (if applicable)

As parties with an interest in ensuring that the FBT rules correctly quantify the taxable benefit from the private use of electric vehicles and hybrids, we are interested in receiving data from you on the fixed and running costs associated with electric and hybrid vehicles.

In particular we would be interested in the following information for electric and hybrid vehicles. We would also appreciate your referencing how or where you estimates have been sourced.

Table 2: data to assist calculating taxable benefit from private use of company car

	Electric vehicles	Plug-in Hybrid Electric Vehicles
Cost of vehicle		
Value of vehicle (end of year 3)		
Estimated depreciation rate		
Annual fixed costs		
Depreciation		
Insurance - comprehensive, no claim		
Licencing/re-licencing		
Warrant of Fitness		
Interest on outlay		
Total annual fixed costs		
Annual variable costs		
Petrol litres per 100 km	xxxxxxxxxxxxxxxxxxxxxxxx	
Average per litre price of petrol	xxxxxxxxxxxxxxxxxxxxxxxx	
Electricity kilowatt-hours (kWh) per 100 km		
Average cost per kWh of electricity		
Annual km of private travel		
Oil	xxxxxxxxxxxxxxxxxxxxxxxx	
Tyres		
Repairs and maintenance		
Total annual variable costs		
Total annual costs		

For FBT purposes, is it worth distinguishing between different kinds of electric vehicles? Having different categories appears to be justified if the amount of taxable benefit differs materially between classes of electric car. In Table 1, the AA distinguishes costs on the basis of engine size. The current FBT rules generally distinguish between classes of motor vehicle on weight and the main purpose of the vehicle (i.e. to carry passengers or goods). Is there merit in considering some form of comparable classification for electric vehicles or hybrid vehicles for FBT purposes? If so, what sort of classification would help produce more accurate estimates of taxable benefit? In answering these questions please be mindful of the compliance costs associated with more detailed categorisation.

We would also be interested in hearing about concerns that you might have with the current method of calculating the taxable benefit from electric and hybrid vehicles. For example, the current FBT rules assume that the average amount of private use for petrol cars is 14,000km per year. Is this figure about right for electric cars?

Please send your submission to policy.webmaster@ird.govt.nz . If anything is unclear or you want to discuss anything in relation to these reviews please contact Gary White on 04 890 6029 or gary.white@ird.govt.nz. Submissions close on 18 November 2016. Thanks for taking the time to provide this information .