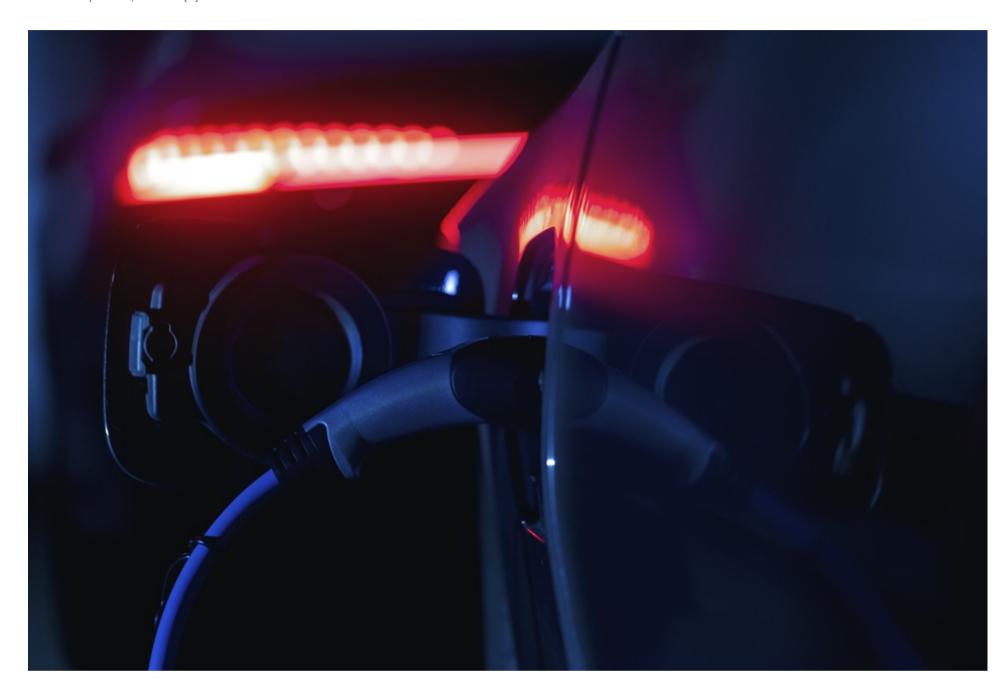
# **Mobility Blog**

### The devil is in the details

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With governments across the world moving to promote, increase and ultimately enforce the use of electrical vehicles (EVs) in the years and decades ahead, many fleet managers have already embarked on the transition from 100% ICE to EVs, whether Plug-in Hybrid Electric Vehicles (PHEVs) or Battery Electric Vehicles (BEVs). We consider some of the key differences between the two, consider why driver profiles, needs and usage are key factors in your decision-making process and outline the main dos and don'ts when introducing either or both to your policy.

## **Spot the difference**

Although most lay people think of cars only in terms of ICE and "electric", the latter category can of course be broken down still further – and anyone within the automotive or fleet hire industries needs to be aware of the various subcategories. We'll focus in here on the two most commonly used: PHEVs and BEVs.

PHEVs are a blend of ICE and BEVs. They combine an electric battery with a fuel-based ICE. Travelling a decent distance (up to 50-60 km) on electric power alone, due to their increased battery size, the ICE kicks in when the battery runs low. The driving experience by and large resembles that of an ICE vehicle. However, because the battery's size, alongside that of the engine, makes the vehicle heavier, fuel consumption (and CO2 emissions) can be considerably higher if the car is not used as designed – for short-distance urban trips. Regular charging at home or the office is required, otherwise there is a risk – during longer journeys for example – of constantly tipping over into ICE use. This not only proves more harmful to the environment but drives up costs, on account of the more frequent fuel stops to fill the smaller tank, and thus represents a false economy over a 100% ICE vehicle.

As the name implies, BEVs are fully battery-operated. The driving experience itself is often more comfortable in that it makes majority use of just one pedal for acceleration and braking, and is certainly more silent. What's more, now that the typical range of a fully charged vehicle can vary between 350 and 600 km, the "range anxiety" of yesteryear is no longer an issue. It has, however, been replaced in some cases by "charging anxiety" – with owners devoting considerable mental energy to the question of where and when they can next charge up. As most company cars are also used privately by employees, concerns about charging still predominate. This anxiety is however gradually compensated by the rapidly emerging charging infrastructure – though some thought and planning is still required, the charging network is developing impressively and promisingly. The ecosystem is increasingly able to cater to mass EV adoption.

As the vision of many countries is ultimately focused on 100% BEV, PHEVs may be considered a transitional phase – a step along the road, and one that looks set to win more initial acceptance among fleet managers.

## **Understanding your drivers**

Tempting though it is to adopt PHEVs or BEVs because of widespread tax incentives, their use must not be seen primarily as a fiscal tool. Close monitoring of your drivers' profiles, needs and behaviours is an essential prerequisite for effective use.

Driver profiling will examine a number of issues, from charging facilities at their place of residence to whether they are tenants or owners, and from the existence of similar facilities at workplaces to the precise requirements, duties, working hours, journey times and itineraries of each individual user. Only then can an effective policy be drawn up which takes advantage of economic incentives while nevertheless providing real benefit to drivers and to the company bottom line.

In the case of PHEVs for example, unless sufficient charging takes place, some drivers will find themselves forced to fuel up more than the standard twice a month, incurring greater expense. Indeed, some companies have introduced fuel capping whereby, for example, they cover all the electricity costs but pass some or all of the fuel costs onto the driver.

Looking further afield, your regional or national context will also determine your choices to some extent – countries in Western and Northern Europe tend to have better charging infrastructures, as well as more stringent laws in force or in the pipeline.

### **Putting profiles into policy**

Once you have a keen and detailed awareness of your drivers, you might need to draft a new policy. Many car firms have policies dating back 5, 10 even 15 years, and are ill equipped to deal with the various changes already in existence and on the horizon.

#### Dos

- Limit the PHEVs to employees with the right profile
- Provide training and education to drivers on changing behaviours
- Incentivise the move to PHEVs, for example by covering 100% of the electricity cost
- Ensure maximum charging opportunities
- Offer or incentivise the use of home chargers
- Define clear rules of usage
- Strictly apply fuel card usage
- Switch to a TCO approach

#### **Don'ts**

- Consider PHEVs like standard vehicles
- See all PHEVs as environmentally beneficial (e.g. SUVs)
- Promote the use of PHEVs without anticipating charging needs
- Apply the same budgetary considerations as in previous policies
- Over-complexify the educational and technical information you pass on

Transitioning needn't be an overwhelming challenge. We hope the information included in this article will give you some pointers to making it a reality within your own company.