Go Ultra Low

# Ultra low emissions, ultra low costs

More fleets are realising the multiple benefits of electric vehicles

# More choice boosts fleet demand for electric vehicles

The corporate sector is leading the drive, accounting for 70% of total ULEV sales and a surge in light commercial vehicles on fleets

## WHAT'S IN THE GUIDE



Cost management is an agenda-topping issue for fleet decision-makers so it makes sound commercial sense that an ever-expanding range of ultra low emission vehicles (ULEVs) – those that emit less than 75g/km $CO_2$ – should be considered for operational use.

New car and light commercial vehicle sales highlight the fact that fleet demand for ULEVs is rapidly increasing, and set to accelerate further, as motor manufacturers increase the choice of models across segments that fit into corporate choice lists.

From city runarounds and family hatchbacks, to 4x4s and sports cars, there is already a wide range of vehicles to meet corporate and employee demands, while the choice of vans embraces car-derived, panel van and 4x4 models.

Allied to a fleet decision-maker's search for financial savings in their choices of company cars and vans is a desire to reduce their organisation's carbon footprint as a policy of good corporate citizenship. ULEVs deliver on both counts, making sound financial and environmental sense, while the vehicle variety ensures the fleet criteria of 'fitness for purpose' is also met.

Currently, 26 cars and nine vans meet the eligibility criteria for government plug-in grant purchasing aid – up to £5,000 off the price of a car and £8,000 on a van – with a further 40 models expected to come to market over the next three years, according to the Department for Transport.

## ULEV TECHNOLOGY EXPLAINED

There are three types of technology powering ULEVs, all offering different benefits to ensure fleets can match fitness for purpose with business need. ULEVs are available from a number of manufacturers, including Audi, BMW, Mitsubishi, Nissan, Renault, Toyota and Volkswagen. These seven have joined the Go Ultra Low campaign to encourage corporate and consumer demand of plug-in vehicles:

- **Pure electric** – powered by a battery charged from mains electricity with a single-charge range typically up to 100 miles. Models available include the BMW i3, Nissan LEAF, Nissan e-NV200, Renault ZOE, Renault Kangoo Z.E., Volkswagen e-Golf and Volkswagen e-up!.
- **Extended range vehicles** – powered by a battery with an internal combustion engine generator on board. Cars have a battery range of up to 100 miles, which can then be topped up indefinitely, within reason, using the generator. Adding the optional two-cylinder petrol engine to the BMW i3 increases the car's range to 180 miles on a single tank of fuel.
- **Plug-in hybrid** – matches a battery for short trips of 10-35 miles with a standard petrol or diesel engine for longer journeys, giving a range of up to 700 miles. Models available include the Audi A3 Sportback e-tron, BMW i8, Mitsubishi Outlander, Toyota Prius Plug-in and Volkswagen Golf GTE.

Toyota Prius Plug-in

## Corporate sector leads ULEV sales drive

New figures show that the corporate sector is leading the ULEV drive, with fleet and business volumes accounting for 70% of total ULEV sales at 6,045 cars in the first quarter.

Businesses operating light commercial vehicles are also reacting to model availability, with 2015 Q1 sales rising more than 450% on Q1 last year.

Plug-in petrol hybrid models account for almost three-quarters of registrations, with the Mitsubishi Outlander currently the best-selling model. Pure electric sales account for the bulk of the remainder of ULEV sales, with the Nissan LEAF and BMW i3 leading the way.

In addition to grants helping offset ULEV acquisition costs, other fiscal benefits include reduced rates of company car benefit-in-kind (BIK) tax for drivers, with Class 1A National Insurance savings for businesses; 100% first year capital allowances and zero Vehicle Excise Duty.

Driving costs from 2p a mile for pure electric versions can deliver fleets and drivers major fuel savings compared to the cost of filling up with petrol or diesel. Go Ultra Low figures suggest fuel costs for an electric model could be 80% less than a conventional vehicle.

The Energy Saving Trust, which offers free fleet consultancy, says wholelife cost data frequently highlight the fact that a plug-in vehicle is cheaper to operate than a conventionally-powered one, with lower fuel costs the key differentiator. It says electric cars cost around £2-£3 to fully charge, while an equivalent petrol or diesel car costs £12-£18 to drive 100 miles.

Given the volatility of oil prices, as witnessed in recent months, and their impact on the pump price of petrol and diesel, operating plug-in vehicles future-proofs a fleet against such exposure.

Mitsubishi's Outlander PHEV is a current best-seller

## Wholelife costs key to company car selection

That's why it is vital that fleet decision-makers base their vehicle selection decisions on wholelife costs and not, for example, list price, P11D value or a headline monthly lease rate.

The higher list price of ULEVs, notwithstanding the government subsidy, is frequently highlighted as a barrier to fleet entry. Vehicle range and the lack of a viable recharging infrastructure are also cited as obstacles when compared with established petrol and diesel models.

Andrew Hogsden, senior manager at fleet consultancy Lex Autolease, with a fleet approaching 300,000 vehicles, including more than 1,500 ULEVs, says: "It is important that fleets look beyond the initial list price of the vehicle.

"Plug-in vehicles benefit from government grants and tax breaks and have significantly cheaper fuel costs, all of which help to reduce the total cost of ownership. In addition, these vehicles provide notable environmental benefits as they produce substantially lower $CO_2$ emissions."

David Bushnell, eMobility consultant at vehicle leasing and fleet management company Alphabet, which launched AlphaElectric in a bid to encourage corporate demand for plug-in vehicles and has more than 1,000 ULEVs on its fleet: "Over the past year we've started to see a shift in attitudes towards electric vehicles. Once considered unfashionable and expensive, they have now found their place among corporate fleets.

Volkswagen e-Golf

"Traditional barriers to adoption are being removed and electric vehicles are becoming an increasingly viable options for businesses.

"Many organisations wrongly assume that electric vehicles are unaffordable, won't provide the desired range for their business requirements or aren't supported by adequate charging infra-structure.

"Yet when they look in more detail, they would realise that introducing models is a lot less risky than first assumed. The typical working range of a pure electric vehicle on a full charge is around 75 miles, more than adequate for most business journeys."

'Company Van Trends' research by GE Capital, Fleet Services suggests an increased adoption of ULEVs over the next two years. A third of fleets planned to operate more electric vans, 29% anticipated using more electric range extender models and 22% more plug-in hybrid vehicles.

**"Plug-in vehicles benefit from government grants and tax breaks and have significantly cheaper fuel costs"**

Andrew Hogsden, Lex Autolease

## THE CHOICE OF CARS AND VANS CURRENTLY AVAILABLE FROM GO ULTRA LOW CAMPAIGN MANUFACTURERS

### 100% ELECTRIC CARS

Renault ZOE

**BMWi3** - lower medium sector 5dr hatch
**Nissan LEAF** - lower medium 5dr hatch
**Renault ZOE** - supermini
**Renault Twizy** - urban compact two-seater
**Volkswagen e-Golf** - lower medium sector 5dr hatch
**Volkswagen e-up!** - 5dr city car

### 100% ELECTRIC VANS


Nissan e-NV200

**Nissan e-NV200** - compact panel van
**Nissan e-NV200 Combi** - five/seven-seat utility and passenger van
**Renault Kangoo Van ZE** - compact panel or crew van
**Mitsubishi Outlander 4Work** - 4x4 utility van

### PLUG-IN HYBRID CARS


Audi A3 e-tron

**Audi A3 Sportback e-tron** - lower medium sector 5dr estate
**BMW i8** - executive 2dr sports car
**Mitsubishi Outlander** - family-size 4x4 SUV
**Toyota Prius Plug-in Hybrid** - upper medium sector 5dr hatch
**Volkswagen Golf GTE** - lower medium sector 5dr hatch

### PLUG-IN HYBRID VANS

**Mitsubishi Outlander 4Work** - 4x4 utility van

### EXTENDED-RANGE ELECTRIC CARS

**BMW i3** with optional range extender

# Grants and funding help boost take-up as snags are overcome

The business case for ULEVs is becoming stronger as fleets realise the savings to be had as well as other ownership benefits

The motoring tax regime is designed to favour the take-up of ULEVs, with government grants furthering the incentives for corporate and private customers.

Additional funding is available to help with the purchase of vehicles and installation of recharging points, making a solid business case for the introduction of such cars and vans to fleet operations.

The London Congestion Charge and the Low Emission Zone ringing the capital also favour the cleanest vehicles, while many local authorities offer free parking for plug-in cars and vans.

In addition, with the planned September 2020 introduction of an ultra low emission zone mirroring the congestion charge zone, regulations are increasingly driving fleets down the ULEV route.

Five low-emission zones operate in England, and 15 local authorities have been allocated government funding to develop similar zones.

The business case for introducing ULEVs is further supported by the requirement for companies employing 250 or more people in the UK – or with an annual turnover exceeding £50 million and a balance sheet exceeding £43 million – to complete energy audits. These include fuel used by company cars and vans and privately-owned vehicles driven on business trips.

The first audit reports under the Energy Savings Opportunity Scheme (ESOS) are due later this year.

Furthermore, approximately 1,800 companies listed on the London Stock Exchange and local authorities must report their greenhouse gas emissions, which includes emissions from cars and vans 'owned or controlled' by organisations.

Embracing ULEVs is one way that businesses can drive down energy consumption and display their 'green' credentials to customers, suppliers and shareholders.

The direction of travel that corporates must follow has been clearly signposted by legislators and, as highlighted right, financial savings will result.

What's more, public, private and voluntary sector fleets that choose ULEVs will be exhibiting corporate social responsibility by delivering emission-reducing environmental benefits.

## Savings in company car benefit-in-kind tax/Class 1A National Insurance

Company car benefit-in-kind (BIK) tax rates are known until the end of 2019/20 – which enables businesses to plan their vehicle choice lists and calculate the financial cost to both themselves and their employees.

Like BIK tax, employers' Class 1A National Insurance contributions (NIC), charged at the rate of 13.8%, are linked to a car's P11D value and $CO_2$ emission figure. The lower a car's $CO_2$ emissions the lower the NIC charge. The tables below (fig1-3) highlight tax benefits and NIC savings over a five year period.

## Van BIK tax charge

Full BIK tax exemption status of electric vans ended in 2015/16, but there are still tax savings to be had.

**"New regulations are increasingly driving fleets down the ULEV route"**

BIK tax on electric vans is being phased in – 20% of the rate paid by conventionally-fuelled vans in 2015/16, followed by 40% in 2016/17, 60% in 2017/18, 80% in 2018/19 and 90% in 2019/20, with rates equalised in 2020/21, when a single benefit charge applying to all vans is planned.

The van BIK tax charge in 2015/16 for petrol and diesel models is a flat rate £3,150; £630 for electric vans. Employers pay NIC on the benefit.

- Electric van BIK tax charge 2015/16 (20%/40%) taxpayer: £126/£252. NIC charge: £86.94
- Petrol/diesel van BIK tax charge 2015/16 (20%/40%) taxpayer: £630/£1,260. NIC charge: £434.70.

Therefore, drivers will save £504/£1,008 in tax on a plug-in van. Employers will save £347.76 in NIC per plug-in vehicle, which on a fleet of just 10 vans delivers a cash saving of almost £3,500.

## Vehicle excise duty

Electric vehicles are exempt from paying vehicle excise duty (VED) and all cars and vans that emit less than 100g/km of $CO_2$ are zero-rated for road tax. These reductions can deliver a substantial amount of additional cash savings to companies.

**Fig 1 – Company car BIK tax rates on ULEVs to 2019/20**

| $CO_2$ (g/km) | 2015/16 % of P11D price | 2016/17 % of P11D price | 2017/18 % of P11D price | 2018/19 % of P11D price | 2019/20 % of P11D price |
|---|---|---|---|---|---|
| 0-50 | 5 | 7 | 9 | 13 | 16 |
| 51-75 | 9 | 11 | 13 | 16 | 19 |
| 100-104 | 15 | 17 | 19 | 21 | 24 |

**Fig 2 – Tax benefits for lower (20%) and higher (40%) rate drivers**

| P11D value | 2015/16 20%/40% | 2016/17 20%/40% | 2017/18 20%/40% | 2018/19 20%/40% | 2019/20 20%/40% |
|---|---|---|---|---|---|
| i3 £30,925 | £309/£618 | £433/£866 | £557/£1,113 | £804£1,608 | £990/£1,979 |
| C200 £30,925 | £1,113/£2,227 | £1,051/£2,103 | £1,175/£2,350 | £1,298/£2,598 | £1,484/£2,969 |
| Saving | £804/£1,608 | £618/£1,237 | £618/£1,237 | £495/£990 | £495/£990 |

**Fig 3 – Class 1A NIC costs and savings over a five-year period**

| P11D value | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|---|---|---|---|---|---|
| i3 £30,925 | £213 | £299 | £384 | £555 | £683 |
| C200 £30,925 | £768 | £725 | £811 | £896 | £1,024 |
| Saving | £555 | £427 | £427 | £341 | £341 |

## Capital allowances

Capital allowances allow companies to write down the cost of purchasing cars and vans against taxable profits.

To encourage the take-up of ULEVs, cars and vans with $CO_2$ emissions of 75g/km or less are eligible for 100% first-year capital allowances to March 31, 2018, thereby giving companies cash flow benefits. However, in respect of zero-emission vans availability is limited to businesses that do not claim the Government's Plug-in Van Grant.

On cars with emissions of 76-130g/km and above 130g/km, companies can write down respectively 18% and 8% of the cost of a car against their taxable profits each year, on a reducing balance basis. Business expenditure on vans (ex-VAT) that are not zero-emission qualify for tax relief as capital allowances at the rate of 18% a year on a reducing balance basis.

## Fuel costs

After car or van acquisition, fuel is typically the second biggest vehicle expense facing businesses, potentially accounting for at least 25% of fleet expenditure. So the ability to cut fuel bills through the introduction of ULEVs to a fleet will give businesses major cash savings, with the Go Ultra Low campaign suggesting that costs for a pure electric vehicle could be 80% less than a conventional vehicle. Employees paying for fuel used privately could save £800 a year in costs.

That's why it is important that fleets use wholelife cost figures as the basis for their company car decision-making as they include fuel costs as well as all other operating costs.

The Department for Transport calculates that electric vehicle running costs are as low as 2p a mile. The Energy Saving Trust suggests that such vehicles cost around £2-£3 to fully charge, for a typical range of 100 miles. An equivalent petrol or diesel car costs £12-£18 to drive 100 miles.

The table below highlights potential fuel costs over 10,000 miles.

| Model | MPG | Fuel price | Fuel cost |
|---|---|---|---|
| Renault ZOE | - | 2p per mile | £200.00 |
| Peugeot 1.0 1.0 Access 3dr | 68.9 | 114.24p | £753.26 |
| Toyota Prius Plug-in Hybrid | 78.5 | 114.24 | £661.15 |
| Ford Mondeo 2.0T EcoBoost 160 | 48.7 | 114.24 | £1,065.70 |
| Honda Accord 2.2 i-DTEC 150 | 53.3 | 119.24 | £1,016.88 |

■ UK average fuel prices: petrol 114.2p a litre and diesel 119.24p a litre. MPG: combined fuel cycle (Toyota Prius MPG sourced from goultralow.com)

The data reveal that the Renault ZOE supermini delivers a potential saving of more than £550 versus a petrol engine supermini over 12 months/10,000 miles.

## CASE STUDY: VAN FLEET

Gnewt Cargo is aiming to change "last mile logistics" with what is claimed to be the world's largest single city-based fleet of pure electric vehicles.

With some 100 electric vehicles, the near six-year-old central London business has plans to launch in cities across the UK and worldwide, with a hub in Oxford due to open this summer.

Gnewt Cargo – an acronym for Green New Transport – delivers parcels on behalf of a wide range of companies, such as third party logistics companies, large retailers and other organisations, including Government departments.

Director and co-founder Sam Clarke says an increasing number of organisations recognise that while goods need to be moved around cities this can be done more efficiently and in more environmentally-friendly ways than in diesel vans in stop-start traffic.

He says: "Delivering goods in central London is both hard and expensive and we recognised that there was a more efficient way than the traditional method of companies travelling into cities from outside depots and using sub-contractors."

As a result, Gnewt Cargo operates a combination of 100% pure electric two and three-wheel cargo-cycles and light commercial vehicles displaying clients' livery as well as its own logo.

More than half the fleet is made up of Renault Kangoo Z.E vans, with six Nissan e-NV200 vans and a mix of models from other suppliers. Vans are typically leased on three-year/30,000-mile contracts. Vehicle maintenance is undertaken in the company's own workshops.

Expansion into Oxford will initially add approximately 10 electric vans to the company's fleet.

Gnewt Cargo's four central London hubs are each equipped with a bank of recharging points. Independent verification by the University of Westminster suggests the company's business model has cut $CO_2$ emissions per parcel delivered by 62%.

Multiply that across an electric car fleet replacement cycle of four years/40,000 miles and the fuel saving rockets to more than £2,200 on just one vehicle.

Similarly, comparing the fuel economy of the Toyota Prius Plug-in with conventionally-powered petrol and diesel equivalents reveals significant savings: more than £400 versus the petrol rival and more than £350 versus the diesel. Multiply that across a typical fleet operating cycle of four years/80,000 miles and it translates into savings of more than £3,230 and £2,840 respectively per vehicle.


## Residual values

Used market acceptability of vehicles is critical in the decision-making process for outright purchase fleets and the setting of monthly lease rates by contract hire companies.

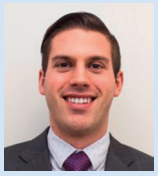
The tide in demand for electric vehicles is starting to turn as new car volumes rise, according to Rupert Pontin, head of valuations at used car experts Glass's, who said: "It is only recently that this market has begun to find itself becoming competitive and the residual value forecasts of key models in this sector of the market have only recently become steady."

Models such as the BMW i3 were, he suggested, "within a close shout of traditional diesel combustion engines in forecast residual value terms and this is where the usable range is only around 80 to 120 miles". Residual value forecasts

**Comparisons of capital allowance**

| Model | Price | $CO_2$ emissions | Writing-down allowance | Corporation tax 2015-16 | Tax relief | Tax written-down value carried forward |
|---|---|---|---|---|---|---|
| Nissan LEAF Visia | £22,029 | 0g/km | 100% | 20% | £22,029.17 x 100% x 20% = £4,405.83 | nil |
| Vauxhall Insignia 2.0 CDTi 120 Sri VX-Line 5dr | £22,104 | 99g/km | 18% | 20% | £22,104 x 18% x 20% = £795.74 | £18,125.28 |

## CASE STUDY: PASSENGER CAR FLEET



Property consultancy Dendrow International has a fleet of four leased electric vehicles – three Nissan LEAFs and a BMW i3 – for its team of negotiators. The west London-based company previously relied on staff to drive their own vehicles to property viewings, valuations and market appraisals or walk or use public transport within an approximate eight-mile radius of its office.

But business development director Matthew Wilkinson says the 100% electric cars were introduced to tie in with the company's sustainability policy, reduce its carbon footprint and generate cost savings due to the availability of free parking in the area; vehicles being £0-rated for both vehicle excise duty and the London congestion charge; and no employee travel costs to reimburse.

The electric vehicles are excellent to drive, according to Wilkinson, but also save employees time in terms of filling cars up with fuel – it is easier and quicker to plug a kerbside recharger into an electric car.

"It's a no-brainer," he says. "It's been a win-win situation for us. There's the obvious cash savings but we've also noticed a significant spike in enquiries since they entered service. I think potential customers see them driving by or while they're charging and are intrigued and remember them more than they would some other vehicle."

Dendrow currently relies on public street recharging points, but is in discussion with a local church to install a facility in its car park that would also be open to the public.

The vehicles carry the company's corporate livery and Wilkinson says: "They reflect really positively on our company, underscoring our sustainability policy and our commitment to the environment.

"Our image is very important to us as a business. Customers see that we're being responsible and thinking about the environment through our sustainable use of vehicles and that's a great talking point and door opener for us."

for models with a longer range were, he said, "absolutely in line with traditional diesel propulsion".

Pontin concluded: "Forecasting the future is not easy when there is a new and exciting propulsion method forging its way in the market. But what is clear is that electric propulsion is finally moving to a position of being a truly viable option and the biggest hurdles may well have been overcome."

| Model | %RV 3 years/ 60,000 miles | %RV 1 years/ 20,000 miles |
|---|---|---|
| Audi A3 Sportback 1.4 TFSI e-tron | 35% | 54% |
| BMW i3 Hatchback Range Extender 5dr auto | 36% | 56% |
| BMW i3 Hatchback 5dr auto | 36% | 56% |
| BMW i8 Coupe 2dr auto | 46% | 70% |
| Mitsubishi Outlander PHEV GX4h 5dr auto | 37% | 59% |
| Toyota Prius 1.8 VVTi T4 Plug-in 5dr CVT auto | 46% | 70% |

*Source: GlassForecast May 2015*

## Wholelife costs

Fleet best practice dictates that vehicle operating choice decisions should be based on wholelife costs because they provide the best forward estimate of the real costs to an organisation over the replacement cycle.

Never has that been more important than in respect of ULEVs. Lex Autolease figures (see Fig 4 below) reveal that, despite their higher P11D values, electric cars are cheaper to operate than either petrol or diesel rivals.

Wholelife costs reflect all the projected, vehicle-specific costs associated with operating a vehicle over its entire fleet life: effective lease rental including disallowed VAT, VED, service, maintenance and repair (SMR) costs, fuel and Class 1A NIC.

In respect of electric vehicles, the higher P11D value is more than offset by significant fuel savings, an estimated 20-30% saving in SMR costs and VED and Class 1A NIC benefits.

SMR savings accrue because there are fewer moving or wearing parts in an electric car that require maintenance than in petrol or diesel equivalents, so servicing costs will be lower.

The data reveals that running a BMW i3 over four years/60,000 miles will deliver a potential saving of £51 a month over rival models or £2,460 over a four-year operating cycle. Multiply that by a fleet of just 10 cars and the savings escalate to almost £25,000 over four years. With the Nissan LEAF Acenta, the monthly savings over a Ford Focus 1.5 EcoBoost Zetec S are £61. That equates to almost £3,000 over a four-year operating cycle and £30,000 on a fleet of only 10 cars.

Wholelife costs for plug-in hybrid vehicles are more difficult to calculate because they rely on maximum use of the car in pure electric guise to deliver major savings. The greater the use of 'plug-in mode,' the greater the efficiency and cost savings (Fig 4).

## Recharging points

There are already more than 7,500 publicly accessible charge points across the UK. The Government has pledged £32 million over the five years to 2020 to further expand the UK's recharging infrastructure. Many employers are also opening recharging points in their company car parks and employees choosing ULEVs are taking advantage of government grants to have them installed at their homes.

The number of fuel forecourts in the UK has declined from a peak of around 40,000 in the 1960s to 8,500– but the number of publicly accessible charging points is rapidly escalating and will soon overtake this figure.

Most networks offer 'standard', 'fast' and 'rapid' charging options. By the end of 2015 the majority of motorway service stations will have rapid chargers.

**Fig 4 – Wholelife costs comparisons**

| Model | P11D value | MPG comb | $CO_2$ g/km | Monthly business fuel cost | 2015/16 wholelife costs |
|---|---|---|---|---|---|
| BMW i3 hatch 5dr auto | £30,925 | N/A | 0 | £37.50 | £455.67 |
| BMW 116d SE 5dr auto | £23,740 | 78.5 | 96 | £85.51 | £468.11 |
| Audi A3 2.0 Tdi SE 3d | £22,160 | 68.9 | 106 | £97.42 | £478.53 |
| BMW 118i SE 5dr auto | £22,270 | 50.4 | 129 | £125.99 | £506.92 |
| Nissan LEAF Acenta 5dr auto | £28,535 | N/A | 0 | £37.50 | £395.97 |
| Ford Focus 1.5 Tdci 120 Zetec S auto | £21,515 | 74.3 | 98 | £90.34 | £401.47 |
| Volkswagen Golf 1.6 Tdi BlueMotion 5dr | £22,035 | 88.3 | 85 | £76.02 | £454.98 |
| Ford Focus 1.5 EcoBoost Zetec S 5dr | £21,315 | 51.4 | 127 | £123.54 | £457.19 |
| Volkswagen E-Golf 5dr auto | £31,114 | N/A | 0 | £37.50 | £472.96 |
| Volkswagen Golf 2.0 Tdi Match 3dr | £22,615 | 68.9 | 106 | £97.42 | £484.16 |
| Volkswagen Golf 1.4 Tsi Match 5dr DSG | £22,030 | 56.5 | 116 | £112.39 | £485.06 |
| Ford Focus 1.6 125 Zetec 5dr Powershift | £20,170 | 44.8 | 146 | £141.74 | £487.57 |

■ *All wholelife costs based on four years/60,000-mile with maintenance contracts. Fuel costs based on manufacturers' official combined cycle mpg and UK average pump prices at April 2015. 3p per mile has been used as the 'fuel' cost for electric vehicles. All wholelife costs included plug-in grant where applicable.*

*Source: Lex Autolease*

# Businesses offer support as employees discover benefits

Tax and fuel cost savings are the big wins for staff opting to replace conventional company cars with ULEVs but there are other bonuses

Employees can save themselves potentially thousands of pounds a year by selecting a ULEV as their company car. Savings on tax and fuel deliver the biggest benefits, but other cash wins include free parking in many locations, exemption from the London congestion charge and a grant towards the installation of a home vehicle recharging point.

## Mileage reimbursement and car fuel benefit

Electricity is not classed as a fuel by HM Revenue and Customs (HMRC) so for mileage reimbursement – whether using advisory fuel rates (company cars) or authorised mileage allowance payments (privately owned cars) – electric and hybrid cars are treated the same way as petrol and diesel models.

Although employers can choose a mileage reimbursement rate, the likelihood is that employees driving a ULEV will make a profit as their running costs will be lower than for a conventional petrol or diesel model.

A full ULEV recharge is estimated to cost around £2-£3 depending on tariff, giving a typical range of 100 miles. Driving 100 miles in a petrol or diesel car is calculated to cost £12-£18 – 600% more on a mile-for-mile basis.

Tax-free advisory fuel rates for plug-in hybrid and range-extended electric vehicles are based on the size of the car's petrol or diesel-fuelled engine. There isn't currently a set rate for pure electric vehicles. Similarly, the tax-free authorised mileage allowance payment rate of 45p for the first 10,000 miles per year and 25p per mile thereafter applies for all plug-in cars as well as petrol and diesel models.

If businesses do not use the full HMRC tax-free rates then employees can apply for mileage allowance relief.

If driving a plug-in car with an employer paying for all 'fuel' – private as well as business – then no car fuel benefit charge arises due to HMRC not recognising electricity as a fuel.

## Home recharging

Government incentives mean a dedicated home recharging point can be installed at little or no cost. The Government has pledged a further £15 million to 2020 to continue the Electric Vehicle Homecharge Scheme, giving ULEV drivers a 75% grant of up to £700 per elligible vehicle towards installation.

Some vehicle manufacturers, energy companies and charge point suppliers will pay the additional 25%, making the installation process absolutely free.

Employers generally take the view that employees will achieve benefit-in-kind tax and fuel cost savings by choosing a ULEV so should not be put off by any recharging unit cost. Others may decide to fund any additional recharging unit cost, though this would incur a BIK tax charge at an employee's marginal rate.

BMW i3

**"Employees driving a ULEV should make a profit as running costs will be lower than for a conventional petrol or diesel model"**

## Free parking

Many local authorities offer free on and off-street parking for electric cars in a bid to further encourage demand.

## Congestion Charge

Plug-in cars are eligible for a 100% discount from the London Congestion Charge, worth up to £2,900 a year.

## CASE STUDY: COMPANY CAR DRIVER

Selecting a BMW i3 range extender as his new car, Mark Constable estimated that 75% of mileage would be electric and 25% petrol power.

Reality has actually proved very different. In the first eight weeks, Constable, senior product manager at EDF Energy, has clocked up more than 2,300 miles, with only 62 miles using the petrol engine.

That means around 97% of mileage, including a twice-weekly 130-mile round trip commute, during which the car is recharged in his employer's car park, has been on electric power at a cost to date of less than £50.

Constable also points out that driving the BMW i3 range extender is more convenient and time-saving than a petrol or diesel car as he's not having to stop at a forecourt to refuel once a week.

His car is subject to a four-year /60,000-mile lease agreement, with two-thirds of journeys estimated to be business miles.

Whether using workplace or public recharging points or one at home, Constable says ULEV motoring delivers financial benefits.

He cites the price of electricity compared with the price of petrol or diesel, coupled with his employer's mileage allowance payments to reimburse business miles.

He opted for the BMW i3 range extender having driven a Toyota Prius Hybrid for three years and before that a number of diesel company cars.

"After I took delivery of the Prius I resolved never to have a diesel car again and now I will never have a car that is not electric," pledges Constable.

The BMW i3's electric range almost exactly matches Constable's commute one-way. Supported by its two-cylinder 647cc petrol engine, it can travel up to 180 miles for longer business journeys.

His message to fellow drivers: "The chief reservations around vehicle range and recharging point availability can be dispelled. Living with an electric car is much easier than most people expect."

Go Ultra Low

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