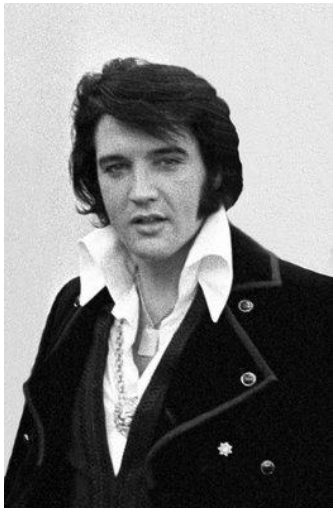
ELVIS NEWSLETTER No. 1 **JUNE 2011**



An electric car charging at one of the CMK posts opposite Xscape.

(Right) Charging posts for electric vehicles have already been installed in Central Milton Keynes and more will come on stream through this year and in 2012. Our Chargemaster's website provides live information on which charging point s are up and running.

Introducing ELVIS

ELVIS is the name for the Milton Keynes **E**lectric **L**ight **V**ehicle **I**nfra**S**tructure project. ELVIS is part of the wider Milton Keynes Low Carbon Living programme intended to help prepare Milton Keynes for the energy and environmental challenges of the next 40 years. ELVIS is an initiative born out of the commitment of the business sector, national and local policymakers and our local universities. We are looking for the best way to foster a low carbon lifestyle and sustainable development for Milton Keynes.

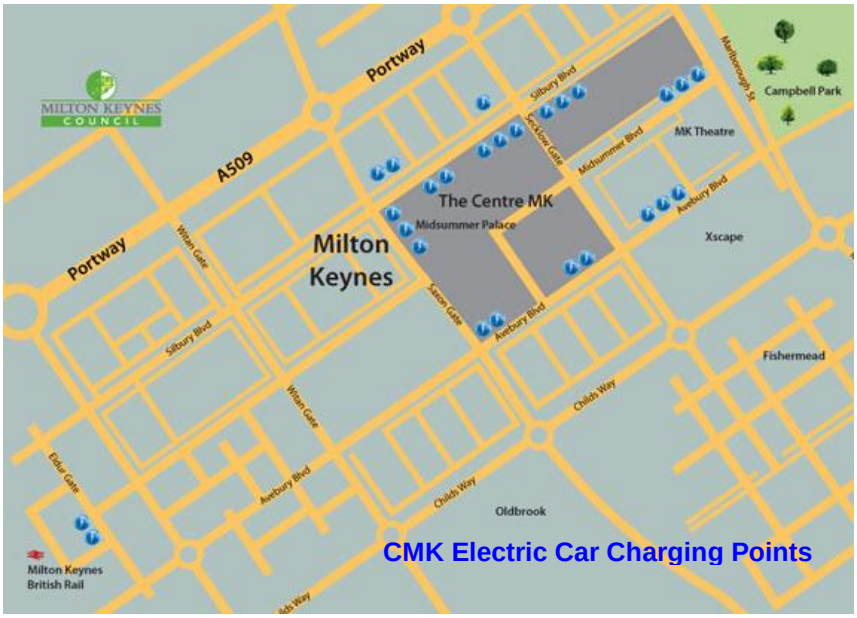
Milton Keynes' energy plans (see our Low Carbon Prospectus), also encompass buildings, waste management, smart grids and energy production. This seeks to open up opportunities for people and businesses to cut carbon and transform Milton Keynes into an international exemplar for low carbon living. We want ELVIS to help make us the 'King' of low carbon cities.
We have obtained funds from the government's *Plugged in Places* programme to install charging points for electric vehicles and to provide grants for homes and businesses to install their own electric vehicle charging points.

What's happening with ELVIS

The goal is to have 1000 electric cars on our roads by 2014 and to set the foundations for low carbon vehicles to be mainstream choices thereafter.

This newsletter provides an overview of ELVIS, how you can find out about electric cars, how much they cost and the grants, incentives and support available locally and nationally.

More details of the scheme to be found on the Milton Keynes Council Website.



1000 electric cars = 132,000 trees!

Is the goal for 1000 electric cars on the roads of Milton Keynes by 2014 ambitious enough to have any impact on the environment?

2.25 million new cars were sold in the UK by the end of 2010: That is one new car for every 30 people. In a given year, about 6,700 cars are sold in the borough. If we get 1 out of 20 new car buyers to choose electric, the goal will be reached. Acquiring a market share of 1/20th for a new technology is ambitious but possible. And it is good for the environment, too!

Conventional petrol and diesel cars are getting a lot more energy efficient and that is good, but they cannot deliver the 80% + cut in carbon needed in the next 40 years. Electric cars can, and once the electricity supply is decarbonized, 1000 cars would prevent 3000 tonnes of carbon dioxide from reaching the atmosphere.

If instead of getting 1000 electric cars in use in Milton Keynes we tried to offset that carbon by planting trees, we would need to plant 132,000 of them. That would need about 400 acres to get the job done –about the size of four grid squares! And that would not produce any of the benefits of new green jobs and the low-carbon expertise created.

Grants for buying Electric Cars

Electric cars do cost more to buy, but this is counterbalanced by their much lower fuel costs. Indeed, the table below shows that, once all costs are taken into account, an electric car can be cheaper than an equivalent diesel car.

However, to help pioneering electric car owners, the government provides a *Plug in Car Grant* of 25 per cent of the cost of the car, up to a maximum of £5,000. The grant is arranged automatically when a car is bought.

For details of the grant scheme, see the government's Plug in Car Grant website.

An electric Nissan Leaf at the March 2011 UK launch held in Milton Keynes' thecentre:mk

The grant is available for cars fulfilling 'mainstream' performance requirements of speed, range, battery life and crash safety. It is not available for electric motorbikes, quadricycles and vans.

Cost Comparison of an electric car and a diesel counterpart driving 10,000 miles/year

	Nissan Leaf (electric)	Ford Focus (diesel)
Purchase Price	£ 24,000 (with grant)	£19,500
Costs per annum*		
Depreciation	£4,160	£3,380
Car Tax	0	£125
Insurance	£280	£550
Interest on purchase loan	£600	£490
Parking and toll charges	£80	£180
Fuel costs	£230	£1100
Service and repairs	£170	£200
Total annual costs	**£5520**	**£6025**
Costs per mile	55p	60p

* Averaged over first three years

Source: Current OU research based on AA and SMMT information. See also a recent Guardian article on EV costs

Other savings

As you can see in the table above, electric cars pay no car tax. The figures for parking and toll charges are an average and will vary according to where you go. Registered electic vehicles get free parking in Central Milton Keynes whether charging or not, as well as free electricity (details on next page).

At our railway stations any electric vehicle qualifies for a 100% discount on monthly, quarterly and annual parking permits in London Midland car parks.

With a cost of £1125 for an annual car parking permit for Central Milton Keynes station car park, if you commute by rail and park at the station, there is a very big saving for using an electric car.

See the London Midland web site for details of claiming discounted parking permits.

There is also a 50% parking discount if you have a low carbon petrol or diesel vehicle emmiting no more than 120g of carbon dioxide every kilometre.

Access to charging points

To use the the charging posts you need an RFID swipe card. This is to prevent any unauthorised use of the free electricity.

As well as giving you access to the Milton Keynes posts and parking free at them in Central Milton Keynes, the swipe card will also give you access to charging posts in Oxford and to posts that will be installed soon in other towns in the region. To apply for a card, go to the MK Chargemaster website or telephone 020 7495 5270

The card costs £50 a year, but this includes all electricity used and registered electric vehicles get free parking in Central Milton Keynes whether charging or not.

Grants for installing charging points at home or business

The Milton Keynes Plugged in Places scheme includes a subsidy towards the purchase of a home charging unit (a safe, secure and water proof external plug).

There are also subsidies available to businesses that wish to install charge points, either for their customers or employees (subsidy up to the value of £1,500).

For more details of the subsidies available, including how to apply, please click on Business Charge Point Subsidy Form or Home Charge Point Subsidy Form.

Leasing Electric Cars

If you don't feel that you are ready to buy an electric car, personal leasing schemes exist for some electric car models. Prices are from £415 a month.

One site that provides details of electric car leasing packages and costs is leasecarsdirect.

Businesses and Electric Cars

There are a number of electric car benefits to businesses and company car users.

A big benefit to company car users is that there is **no tax charge at all** on electric company cars. That is worth at least £500 - £800 a year (and often a lot more) if you are a company car driver.

For companies, this tax concession means there is also a saving in National Insurance Contributions (worth at least £300 a year). Electric cars purchased by companies also attract Enhanced Capital Allowances, permitting 100% of the value of the vehicle to be set against taxable profits in the year following purchase rather than only 25%

Locally, employers can also benefit from the grants to install charging points (see left).

Low Carbon: The only game in town

You may think that there is no point in being environmentally conscious if everybody else is polluting like there is no tomorrow. However, fact is that the most polluting countries are going to have to go green, whether they like it or not. China and the USA, which are the two countries that contribute the most towards the CO2 emissions, have much to lose. If CO2 levels continue unabated coastal real estate in Florida would flood well inland, and corn yields in Indiana and Illinois would decrease by 10 to 20 percent. Meanwhile, the western Qinghai-Tibet plateau of China is warming up faster than any other part of the world, with rapid melting of its glaciers producing a cycle of massive floods and landslides followed by the intense water shortages.
So the biggest polluters are going to have to face reality pretty soon, so we will not be alone in our efforts to control CO2. Since the bigger polluters also happen to have the largest markets, it makes economic sense for us to develop skills for the low carbon economy before they do in order to become exporters of green knowledge. ELVIS will thus help to secure green economy jobs for Milton Keynes.

Friends of ELVIS

ELVIS is backed by several partners. All of them are working towards making life better for the early adopters of Electric Vehicles. These include:

OLEV, or the Office for Low Emission Vehicles, which is a cross-government team dedicated to taking forward low-carbon vehicle initiatives. They sponsor the Plug-in Car Grant and provide matched funding for ELVIS to install charging stations and related infrastructure.

Milton Keynes Council: The council chairs the steering group, because they will be the final owners of the recharging infrastructure on the streets, and they will be responsible for its maintenance.

Invest Milton Keynes, whose goal is to bring new businesses and jobs to Milton Keynes and to help existing businesses to grow. They will ensure that ELVIS and the Low Carbon Living programme work towards strengthening the leading role of Milton Keynes within the booming low carbon economy.

University Centre Milton Keynes, the Open University and Cranfield University: who are providing research backup to the project, helping to build a website and other initiatives to allow users to explore low carbon technologies.

Electricity supplier EON and car manufacturers, including Renault-Nissan who have signed an agreement to support electric vehicles in Milton Keynes

BUT ..the most important partners for this project however are the citizens, the drivers, and the ethical consumers of Milton Keynes

ELVIS and You

.

ELVIS is not really about the council, about the partnerships, the researchers, or the industrialists. ELVIS is about the people and how the vehicles meet our travel needs. We want to provide opportunities for people and businesses to understand experience and explore low carbon travel.

The car as it stands today is a very successful technology, dependant on a rich technological ecosystem. We want to create a similar ecosystem for electric vehicles, and the first step is the installation of the charging infrastructure. However, the aim is not to do what we do today, but with a different car. It can certainly be done, but the aim is to explore and understand the relationship between electric vehicle use and other aspects of low carbon living. Electric cars will only be suitable for some people and types of trips, and we are trying to identify who are the most appropriate pioneer users.

That is where we need your help the most. We will strive to create forums and contact channels so you can tell us what is working, and what can be improved. We need to know the best places to deploy the infrastructure, learn about new usage patterns and models of ownership and how you can be supported in learning about low carbon travel and living.

To get in touch on the Milton Keynes electric vehicle project, contacts Sara Bailey, email: sara.bailey@milton-keynes.gov.uk

ELVIS NEWSLETTER
This newsletter has been produced by a team at the Open University as part of the OU's support of the ELVIS and Low Carbon Living programme.

If you have a contriubution for the next ELVIS Newsletter or a suggestion for what it should cover, then please contact: MCT-elvis-project@open.ac.uk

The Open University