

<b>Title:</b> <b>Permitted development rights and advertisement regulations proposal relating to electric vehicle charging infrastructure</b>  <b>Lead department or agency:</b> Department for Communities and Local Government  <b>Other departments or agencies:</b>	<b>Impact Assessment (IA)</b>
	<b>IA No:</b> 0010
	<b>Date:</b> February 2011
	<b>Stage:</b> Final
	<b>Source of intervention:</b> Domestic
	<b>Type of measure:</b> Secondary legislation
	<b>Contact for enquiries:</b> Darren McCreery 0303 444 4352

## Summary: Intervention and Options

### What is the problem under consideration? Why is government intervention necessary?

The current status of electric vehicle charging points in planning legislation which regulates development and advertising is unclear. This legal uncertainty may be a disincentive to the installation of electric vehicle charging points, and therefore result in slow progress towards Government objectives of reducing greenhouse gas emissions from transport, specifically in relation to achieving carbon reduction targets set out in the Climate Change Act 2008. Government intervention is necessary to ensure the planning system facilitates the establishment of electric vehicle charging points, as a strong network of charging points is needed to support the anticipated significant increase in electric vehicle use.

### What are the policy objectives and the intended effects?

The policy objectives are:

- To ensure the planning regime facilitates the installation of electric vehicle charging points by clarifying existing permitted development rights for local authorities and introducing new permitted development rights for the installation of charging infrastructure. Permitted development is development for which specific planning permission from the local planning authority is not required.
- To contribute towards the reduction of carbon emissions from transport.

### What policy options have been considered? Please justify preferred option (further details in Evidence Base)

Option 1: Do nothing.

Option 2: Grant permitted development rights for electric vehicle charging infrastructure and deemed advertisement consent for the display of nameplates. More specifically:

- Clarify that local authorities may install electric vehicle charging points as permitted development.
- Allow for the installation of electric vehicle charging points as permitted development in off-street public and private car parking areas.
- Allow for the display of two nameplates of energy supplier and charging point provider on an electric vehicle charging point.

Option 2 is the favoured option as it will create a more enabling regime for the installation of electric vehicle charging infrastructure.

**When will the policy be reviewed to establish its impact and the extent to which the policy objectives have been achieved?**

It will be reviewed  
Two years after  
implementation.

**Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?**

No

**Sign-off** For enactment stage Impact Assessments:

***I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.***

Signed by the responsible Minister:

Greg Clark

Date:

30<sup>th</sup> August 2011

# Summary: Analysis and Evidence

# Policy Option 2

## Description:

Price Base Year 2010	PV Base Year 2010	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £2.8m	High: £18.9m	Best Estimate: £10.4m

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			
High			
Best Estimate			

### Description and scale of key monetised costs by 'main affected groups'

### Other key non-monetised costs by 'main affected groups'

Potential increase in applications for certificates of lawful development by those seeking to install points (though this would require less expense than submission of a planning application, which would be required if Option 2 were not to go ahead). Potential costs incurred by local authorities, energy operators, property owners looking to provide electric vehicle charging points by needing to familiarise themselves with new planning rules (though these are expected to be minimal).

New planning rules require familiarisation on the behalf of applicants, although such costs are likely to be negligible. Third party costs associated with removal of detailed local authority assessment of a planning application (mitigated against through limitations and conditions designed to limit impacts).

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	n/a	£0.33m	£2.8m
High	n/a	£2.20m	£18.9m
Best Estimate		£1.27m	£10.4m

### Description and scale of key monetised benefits by 'main affected groups'

Estimated Average Annual fee savings and administrative savings for businesses wishing to install electric vehicle charging points: £330,000 - £2,200,000

### Other key non-monetised benefits by 'main affected groups'

Option 2 will provide certainty to local authorities seeking to install on-street vehicle charging points and, by virtue of the publicity it creates, may encourage the wider installation of electric vehicle charging points. Option 2 aims to encourage electric vehicle take-up, reduce transport emissions, and therefore improve the immediate environment (i.e. air quality) and broader environment (in terms of carbon emissions) – although this has not been quantified.

### Key assumptions/sensitivities/risks

Discount rate (%) 3.5%

The benefits have been calculated based on a mid-range estimate of likely growth in electric vehicle use and associated growth in the installation of charging points. If growth in use differs substantially from the projected trajectory the estimated savings could be either over or under-estimated. As electric vehicles and associated charging points are an emerging and developing technology, many of the assumptions behind the estimates of benefits are also subject to a wide margin of error.

The impact assessment solely considers the impact on the planning system. It is likely that the policy will reduce carbon emissions but this is not considered here.

Impact on admin burden (AB) (£m):	Impact on policy cost savings (£m):	In scope
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New AB: 0	AB savings: 1.1	Net: - 1.1	Policy cost savings: 0.17	Yes/No
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## Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?		England				
From what date will the policy be implemented?		Winter 2011				
Which organisation(s) will enforce the policy?		Local planning authorities				
What is the annual change in enforcement cost (£m)?		Unquantifiable				
Does enforcement comply with Hampton principles?		Yes				
Does implementation go beyond minimum EU requirements?		N/A				
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)		Traded: n/a		Non-traded: n/a		
Does the proposal have an impact on competition?		No				
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?		Costs:		Benefits:		
Annual cost (£m) per organisation (excl. Transition) (Constant Price)		Micro	< 20	Small	Medium	Large
Are any of these organisations exempt?		No	No	No	No	No

## Specific Impact Tests: Checklist

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on...?	Impact	Page ref within IA
<b>Statutory equality duties</b> <sup>1</sup> <a href="#">Statutory Equality Duties Impact Test guidance</a>	No	13
<b>Economic impacts</b>		
Competition <a href="#">Competition Assessment Impact Test guidance</a>	No	13
Small firms <a href="#">Small Firms Impact Test guidance</a>	No	13
<b>Environmental impacts</b>		
Greenhouse gas assessment <a href="#">Greenhouse Gas Assessment Impact Test guidance</a>	Yes	13
Wider environmental issues <a href="#">Wider Environmental Issues Impact Test guidance</a>	Yes	13
<b>Social impacts</b>		
Health and well-being <a href="#">Health and Well-being Impact Test guidance</a>	Yes	13
Human rights <a href="#">Human Rights Impact Test guidance</a>	No	13
Justice system <a href="#">Justice Impact Test guidance</a>	No	13
Rural proofing <a href="#">Rural Proofing Impact Test guidance</a>	No	13
<b>Sustainable development</b> <a href="#">Sustainable Development Impact Test guidance</a>	No	13

<sup>1</sup> Race, disability and gender Impact assessments are statutory requirements for relevant policies. Equality statutory requirements will be expanded 2011, once the Equality Bill comes into force. Statutory equality duties part of the Equality Bill apply to GB only. The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

No.	Legislation or publication
1	Department for Transport (July 2009): <i>Low Carbon Transport: A Greener Future</i>
2	DCLG (January 2009): <i>Review of permitted development for charging points for electric cars</i>
3	Permitted development rights for small scale renewable and low carbon energy technologies, and electric vehicle charging points: Consultation November 2009 (includes consultation stage impact assessment).
4	BIS/ DfT (2008). Investigation into the scope for the Transport sector to switch to electric vehicles and plug-in hybrid vehicles.

## Evidence Base (for summary sheets) – Notes

Use this space to set out the relevant references, evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Please fill in **References** section.

### References

Include the links to relevant legislation and publications, such as public impact assessment of earlier stages (e.g. Consultation, Final, Enactment).

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### Evidence Base

Ensure that the information in this section provides clear evidence of the information provided in the summary pages of this form (recommended maximum of 30 pages). Complete the **Annual profile of monetised costs and benefits** (transition and recurring) below over the life of the preferred policy (use the spreadsheet attached if the period is longer than 10 years).

The spreadsheet also contains an emission changes table that you will need to fill in if your measure has an impact on greenhouse gas emissions.

### Annual profile of monetised costs and benefits\* - (£m) constant prices

	Y <sub>0</sub>	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>3</sub>	Y <sub>4</sub>	Y <sub>5</sub>	Y <sub>6</sub>	Y <sub>7</sub>	Y <sub>8</sub>	Y <sub>9</sub>
<b>Transition costs</b>										
<b>Annual recurring cost</b>										
<b>Total annual costs</b>										
<b>Transition benefits</b>										
<b>Annual recurring benefits</b>										
<b>Total annual benefits</b>	0.7	0.8	1.0	1.1	1.3	1.3	1.5	1.5	1.6	1.6

\* For non-monetised benefits please see summary pages and main evidence base section



Microsoft Office  
Excel Worksheet

# Evidence Base (for summary sheets)

## Background

### Government agenda

The Government's aim, as set out in its programme for government, is to 'mandate a national recharging network for electric and plug-in hybrid vehicles'. The proposed changes to the planning system (the subject of this IA) are designed to help facilitate this policy.

Carbon dioxide emissions from UK transport account for 21 per cent of total UK emissions<sup>2</sup>, and a reduction in emissions from transport is therefore crucial in achieving wider Governmental climate-change mitigation goals<sup>3</sup>. De-carbonising transport is highly important in achieving carbon reduction targets set out in the Climate Change Act 2008 - i.e. an 80 per cent reduction in UK greenhouse gas emissions on 1990 levels. Electric and plug-in hybrid vehicles potentially offer significant environmental benefits compared with existing internal combustion engine vehicles, and greatly improved fuel efficiency.

A strong network of charging points is crucial to supporting increased usage of electric vehicles - the economic viability, and hence growth, of electric vehicles as a transport option is increased with a strong charging network.

One of the perceived obstacles to developing a national infrastructure is the planning system. However, the conclusion of research undertaken by an independent consultant in 2009 on behalf of DCLG was that the current planning system would not present a problem for infrastructure development according to current levels of anticipated take up, though analysis will be necessary as the industry develops. Concentrating on permitted development rights, the research recommended that certain changes could be made to these rights to clarify what local authorities, home owners and the non-domestic sectors can and cannot do in terms of installing charging points without needing planning consent. In order to help stimulate the industry, the report also advocates minor changes to the advertising regulations to allow for installers and energy suppliers to place modest advertising on the charging points.

### Government & low carbon initiatives

The installation of electric vehicle charging points and promotion of electric cars are both benefiting from specific Government support. Department for Transport's low carbon transport strategy envisions making low carbon travel a genuine, viable, and attractive option for both businesses and public alike<sup>4</sup>. The Government has allocated over £400 million over the next 4 years to help make the UK one of the leading places for the development, demonstration, manufacture, and use of ultra-low carbon vehicles, including electric and plug-in hybrid cars.

Department for Transport has made available up to £20m of this funding, alongside up to £10m from the Low Carbon Strategic Investment Fund, to the Plugged-In Places Programme to the end of 2012/13. Funding under Plugged-In Places was allocated in two tranches (February 2010 and December 2010) to support eight projects across the UK to install a critical mass of charging infrastructure in their areas. The Energy Technologies Institute (ETI) has also announced an £11million (predominantly research) programme which aims to better understand the impacts of electric vehicle use on the electricity Grid and develop tools to help with installation of electric vehicle charging infrastructure. The first stage of the programme consists of three elements:

- (1) Consumers and Vehicles.
- (2) Electricity Distribution and Intelligent Infrastructure.
- (3) Economics and Carbon Benefits

The project is to complete in August 2011.

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<sup>2</sup> <http://www.dft.gov.uk/pgr/sustainable/carbonreduction/low-carbon.pdf>

<sup>3</sup> <http://www.berr.gov.uk/files/file41443.pdf>

<sup>4</sup> <http://www.dft.gov.uk/pgr/sustainable/carbonreduction/low-carbon.pdf>

The results of this research are planned to inform a second stage, a large scale consumer evaluation, using real world experience of electric vehicles, which is expected to begin in 2012.

In May 2009 the Mayor of London, Boris Johnson, published his Electric Vehicle Delivery Plan setting out London's aim to install 25,000 charging points across London. Of these, 22,500 will be in work places, 500 on-street and 2000 in other publicly accessible locations such as underground car parks and retail centres.

### **Electric vehicles and charging points - current situation**

Electric vehicle charging points are being installed in increasing numbers. Currently there are over 300 electric vehicle charging point locations in the UK (importantly, each location may contain more than one charging point)<sup>5</sup> and recently urban networks of charging points have begun developing outside London<sup>6</sup>.

Wide scale take-up of electric vehicles will require a comprehensive network of electric vehicle charging points to reassure drivers that they will be able to recharge their vehicles whenever and wherever they need to. It is difficult to predict the future take-up of electric vehicles and charging points given the variables involved (e.g. oil prices, Government policies, technology shifts) but a growth in electric vehicle usage, and the growth of an electric vehicle charging point network, go hand-in-hand.

### **Planning**

The planning system is already undergoing a modernisation. The Killian Pretty Review (published November 2008) recommended that steps should be taken to substantially reduce the number of minor non-domestic developments requiring planning permission, resulting in savings for business and the freeing up of local authority resources for more strategic issues<sup>7</sup>. Clarification of the planning regulations regarding electric vehicle charging infrastructure accords with this process.

## **Current planning legislation**

### **Development**

Electric vehicle charging infrastructure is not dealt with explicitly in the regulatory planning framework. A strict interpretation of the Town and Country Planning (General Permitted Development) Order 1995 (the GPDO), which sets out types of minor development that do not require a specific planning application, could mean that a planning application for outdoor charging points is required.

### **Advertising**

The advertisement control system helps everyone involved in the display of outdoor advertising to contribute positively to the appearance of an attractive and cared for environment. The Town and Country Planning (Control of Advertisements) (England) Regulations 2007 govern the display of advertisements in England. It specifies a very wide range of particular advertisements and signs that may be displayed without the express consent of the local planning authority, including public information notices and traffic signs. They contain no specific provision for commercial advertising on electric vehicle charging infrastructure.

## **Rationale for intervention**

Government intervention is necessary to clarify the status of electric vehicle charging infrastructure in planning and advertising legislation and ensure that planning does not act as disincentive to the installation of charging points. A network of charging points is a pre-requisite for significantly increased electric vehicle use, which in turn will contribute towards reducing carbon emissions from transport. Publicly accessible and visible infrastructure will be important in the early years to support the market for electric vehicles and central and local government need to act to ensure that a minimum level of publicly accessible charging facilities is installed.

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<sup>5</sup> <http://www.ev-network.org.uk/>

<sup>6</sup> [http://www.silobreaker.com/brighton-becomes-electric-car-second-city-5\\_2262631193998524480](http://www.silobreaker.com/brighton-becomes-electric-car-second-city-5_2262631193998524480)

<sup>7</sup>

<http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyimplementation/reformplanningsystem/killianprettyreview/>

## Policy objectives

The policy objectives are:

- To ensure the planning regime facilitates the installation of electric vehicle charging points by clarifying existing permitted development rights for local authorities and introducing permitted development rights for the installation of charging infrastructure.
- To contribute towards the reduction of carbon emissions from transport. While difficult to assess due to the number of variables, the conclusion of a Department for Transport impact analysis of transport and carbon reductions was that up until 2020, the impact on emissions saving by the growth of electric vehicle and hybrid vehicles is not expected to be significant, but that ‘in the period up to 2050, these vehicles, and other ultra-low emission technologies, could make major contributions towards decarbonising the road transport system’. See: <http://webarchive.nationalarchives.gov.uk/+http://www.dft.gov.uk/pgr/sustainable/carbonreduction/ia.pdf>

## Policy options

**Option 1:** Do nothing.

**Option 2:** Grant permitted development rights for electric vehicle charging infrastructure and deemed advertisement consent for the display of nameplates. More specifically:

- Clarify that local authorities may install electric vehicle charging points as permitted development (i.e. development for which specific planning permission from the local planning authority is not required).
- Allow for the installation of electric vehicle charging points as permitted development in off-street public and private car parking areas.
- Allow for the display of two nameplates of the energy supplier or charging point provider (or both) on an electric vehicle charging point.

**Option 2** is the favoured option as it will create a more enabling regime for the installation of electric vehicle charging infrastructure.

## Cost benefit analysis

### Parties affected by the proposals

- Energy operators seeking to install electric vehicle charging points;
- Commercial property owners looking to provide electric vehicle charging facilities;
- Local authorities (proposals will clarify both what local authorities can do directly themselves, and where electric vehicle charging points stand in planning terms for persons wishing to install them);
- Public (in terms of the provision of electric vehicle charging points, the viability of electric vehicles as a mode of transport, and ultimately the reduction in greenhouse gas emissions from transport over the longer term)

*\* Please note this impact assessment covers the impact of this policy from a planning perspective, and although it is acknowledged there will be an impact on carbon emissions this is not included in the main evidence base (see page 13 under Greenhouse gas emissions for further information).*

### Qualitative assessment of costs and benefits

The following tables lay out the impacts of the proposals associated with each option according to each group affected and identify some administrative costs and benefits which have been monetised in the next section. None of the costs and benefits under the “do nothing” option have been monetised. Instead it acts as a baseline against which to measure the impacts of the proposed changes.

**Option 1: Do nothing:**

In this case, one benefit that can be identified is local authorities would not need to familiarise themselves with new regulations and nor would developers which, although this is likely to be negligible. As for the costs of doing nothing, the current imprecision of the planning system in relation to electric vehicle charging points would persist. In addition, those seeking to install electric vehicle charging points would continue to face paying a planning application fee, associated administrative work, and delay while waiting for the planning application to be determined. Furthermore, the planning system would not be seen to be working towards the Government’s aim of de-carbonising transport.

**Option 2: Grant permitted development rights for electric vehicle charging infrastructure and deemed advertisement consent for the display of nameplates:**

**(a) Local authorities**

<b>Benefits</b>	<b>Costs</b>
Certainty to local authorities that they have permitted development rights to install electric vehicle charging infrastructure. The benefits of clarifying this have not been monetised.	New planning rules require familiarisation, although in relation to these policy options, familiarisation costs are likely to be minimal.
By removing current uncertainty in the planning system, clarification would reduce extent of investigation required in relation to determining whether a development is lawful.	Local authorities will receive less in planning fees. It is assumed that the planning fee covers the cost of processing a planning application and therefore the cost to the local authority equals the benefit they derive from the freeing up of resources.

**(b) Developers**

<b>Benefits</b>	<b>Costs</b>
Those wishing to install electric vehicle charging points will make savings on planning fees and the administrative costs of making a planning application (commercial £170) and associated administration (approx £1450) <sup>8</sup> . These savings have been monetised. There are time savings for businesses and the uncertainty of the planning decision process is removed.	New planning rules require familiarisation by applicants, though familiarisation costs are likely to be minimal. Businesses may feel the need to apply for certificates of lawful development.
Increase commercial viability by rights to display nameplates of electric vehicle charging point provide or energy supplier.	
Businesses wishing to install electric vehicle charging points with nameplates will not need to pay a fee for advertisement consent (typically £335 for this type of installation) <sup>9</sup> . This benefit has been monetised.	

<sup>8</sup> Based on the PwC Administrative Burdens Measurement Project. The transaction cost of a minor application was calculated as £1450.

<sup>9</sup> <http://www.planning-applications.co.uk/Town%20and%20country%20planning%20regulations.pdf>



**(c) Third parties**

<b>Benefits</b>	<b>Costs</b>
	<p>There may be costs to third parties living in the vicinity of the new electric vehicle charging infrastructure resulting from the removal of local authority site specific assessment and public consultation. The risk of visual amenity impacts resulting from poorly sited equipment and third parties feeling that they have not had the opportunity to comment has been mitigated using the permitted development right limitations and conditions. As a result, development carried out under permitted development should be that which is un-contentious. Impacts on third parties are not monetised.</p>

**(d) General**

<b>Benefits</b>	<b>Costs</b>
Granting new permitted development rights to install charging infrastructure points in off-street public and private car parking areas would encourage take-up by removing a disincentive to installation. The secondary effect this may have would be to encourage local authorities, householders and firms to consider installation of electric vehicle charging points, especially if providers are able to advertise that they have done so. These benefits have not been monetised.	Cumulative visual impact of nameplates may be of concern in sensitive areas, although the risk of this is likely to be minimum given the small size of the proposed nameplates (70 square centimetres).
Proposal will contribute to providing a network of charging points which in turn will encourage electric vehicle take up. This suggests the proposal will contribute to a fall in carbon emissions from transport which will benefit society. These have not been monetised here, as it is not possible to quantify the proportion of potential savings that might be due to the proposed change to the planning system.	

Many of the costs and benefits of the proposals have not been monetised due to uncertainty around the scale of the impacts or lack of other evidence. Only two effects of the proposals are quantifiable (i.e savings from those who would not have to undertake administrative work and pay the associated fee for both specific planning and advertising consent), but both rely on predicting the future use of electric vehicles and installation of associated charging points. With regards to scope, it is the projected increase in charging point numbers installed on-street by local authorities and also those installed within public and private off-street car parking areas which we are concerned with herein, as only these will be affected by proposals and therefore subject to costs and benefits.

**Quantitative assessment of costs and benefits**

All costs and benefits have been calculated over a 10 year period using a real discount rate of 3.5%.

Planning fee and administrative cost savings

In order to calculate the savings for businesses from reduced planning application fees and associated administrative costs, it is necessary to assume a level of demand for the installation of charging points over the assessment period. It is difficult to base future predictions of electric vehicle charging point installation on existing trends given that take-up of electric vehicles will probably accelerate as the technology develops and becomes increasingly mainstream.

Basing future installation of electric vehicle charging points on existing trends is likely to be too conservative. However, basing monetised costs and benefits on predicted or aspirational electric vehicle take-up is equally problematic as these predictions rely on policies that are currently being formulated coming into effect, and being effective. It is not yet known how many publicly accessible charging points are needed to support electric vehicle uptake. The Greater London Authority, for example, suggests that one electric vehicle charging point is required for every four electric cars, although this assumes that motorists can recharge their vehicles at home.

A report undertaken for the Department of Transport by Arup-Cenex<sup>10</sup> suggested three trajectories for electric vehicle uptake:

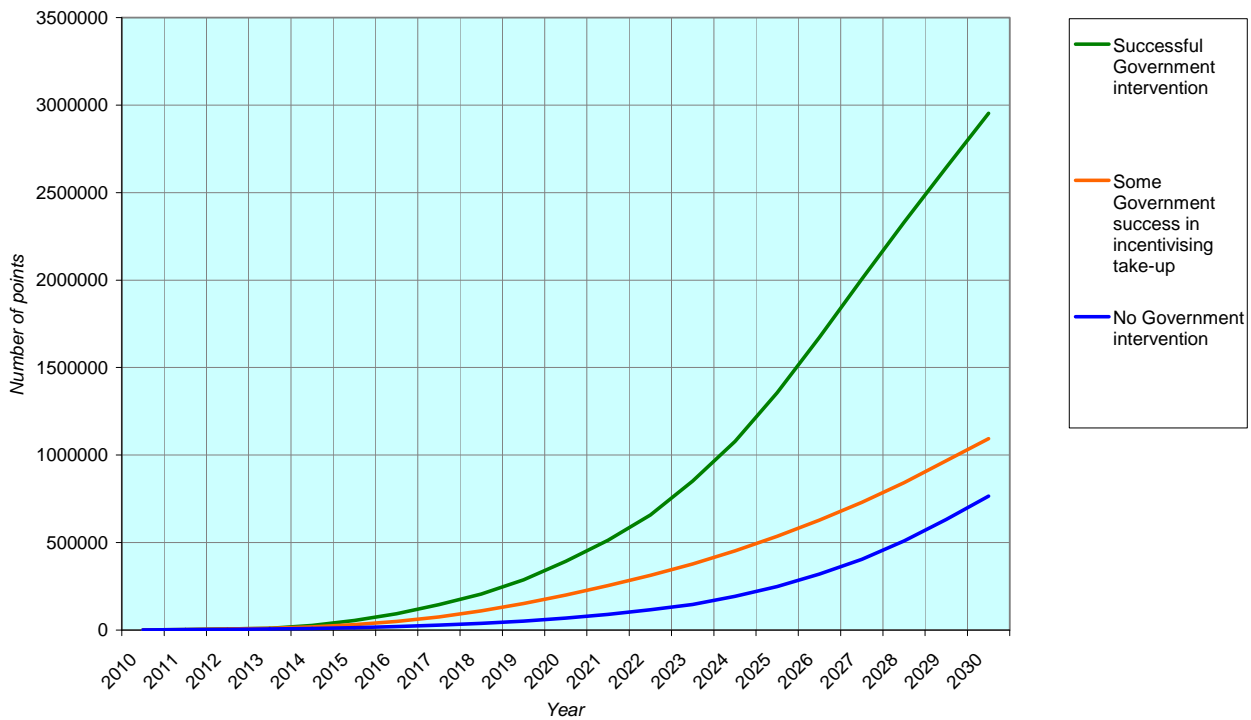
- A low take-up trajectory uninfluenced by Government policy to incentivise take-up;
- A conservative trajectory where Government policy has a limited incentivisation role;

<sup>10</sup> <http://www.berr.gov.uk/files/file48653.pdf>

- A high take-up scenario in which Government policy is highly successful.

The graph below plots these three trajectories for number of points, assuming the GLA ratio of one charging point to every four cars is fixed (how points relate to savings will be considered subsequently):

*Hypothetical electric vehicle charging point installation trajectories*



The costs and benefits of these proposals are based on the conservative central trajectory which gives a scenario where Government has some success in incentivising take up. The impact of the proposals has been subject to a sensitivity analysis which shows the costs and benefits under the other trajectory assumptions.

- *Number of planning applications affected*

To quantify the impacts of this change it is necessary to make a number of modelling assumptions. Basing assumptions of future take-up on the central trajectory, there are a number of factors that mean that there is not a direct ratio between number of electric vehicle charging point installations and planning applications lodged. The wide range of some of these variables results from electric vehicle charging point installation being an emerging, and therefore as yet relatively unstudied phenomenon:

- A proportion of installations will be undertaken by local authorities. It is understood that some local authorities have interpreted the existing permitted development rights in Part 12 of the GDPO as being applicable to electric vehicle charging points, and therefore have not pursued planning applications for these installations. Although provision of on-street vehicle parking points (and therefore provision by the local authority) is set to increase, it is anticipated that a high proportion of installations will be undertaken by business. There are, however, scarce figures for the existing ratio of points installed by local authorities to points installed by business by which to gauge future trends. Nonetheless, as there are a far greater number of points installed in car parks than on-street, it seems sensible to suggest that a high proportion of electric vehicle charging point installation undertaken by a local authority might be 10%, whereas a low proportion would be perhaps be 2%.
- Some new installations of electric vehicles will not fall inside the prescribed limits of the permitted development proposals and will still require planning permission. It is assumed that the proportion exceeding the permitted development and advertising consent thresholds will be between 10% and 25%.

- Only a proportion of installations will constitute development - many would be installed within existing internal car parks and therefore result in neither material change to the external appearance of the building nor change of use. It is assumed that the proportion that will constitute development will be between 10% and 30%.
- A number of charging points may be bundled up in a single planning application. It is assumed that between three and five points are bundled in a single planning application.

Grouping the variables which lead to high savings, and those which lead to low savings, generates a spread of number of planning applications (as opposed to charging points), from which costs and benefits can be monetised. Sensitivity analysis detailed below shows how these figures and the costs and benefits stemming from them vary according to the trajectory chosen.

**Table 1: Total number of applications taken out of the planning system under different assumptions assuming a mid-range trajectory for take up of electric vehicles**

	<b>Numbers of planning applications saved (2011- 2020)</b>
<b>Level of savings</b>	
<b>Low</b>	2000
<b>High</b>	13,300

As a stand-alone permission, advertisement consent for the electric vehicle charging point nameplate would typically cost an applicant £335. If, however, an application for planning permission is lodged containing a request for advertisement consent, only the planning application fee is payable (again for this type of minor non-domestic development £170), as opposed to fees for both planning and advertisement consent. The aim of proposals is to harmonise planning and advertisement regimes. Therefore if preferred Option 2 is taken forward the majority of installations would require neither specific planning permission nor advertisement consent.

The fee for specific planning consent is £170. The administrative cost of preparing a planning application is £1450<sup>11</sup>. For every planning permission these proposals remove from the system, applicants would therefore save **£1620**.

Table 2 gives the average annual benefits under assumptions which lead to high savings and those which lead to low savings. These are the undiscounted benefits and have been calculated using a simple average of the total benefits over a ten year period.

**Table 2: Average annual benefits under different assumptions assuming a mid-range trajectory for take up of electric vehicles**

	<b>Average annual benefits</b>
<b>Level of savings</b>	
<b>Low</b>	£330,000
<b>High</b>	£2,200,000

Table 3 below shows Net Present Value for this range of estimated benefits discounted over 10 years. It also includes a mid point ('best' estimate) of the NPV of benefits.

**Table 3: Net Present Value (NPV) of estimated benefits under different assumptions, over 10 years (£m)**

	<b>Net Present Value (£m)</b>
<b>Level of savings</b>	
<b>Low</b>	£2.8
<b>High</b>	£18.9
<b>Mid</b>	£10.9

**Admin burdens:** The savings in admin burdens are derived from the above calculations. They are the avoided costs of completing planning applications (£1,450 per case) multiplied by the mid point trajectory and discounted over ten years. The policy cost saving is calculated in a similar way and focuses on the fees avoided.

<sup>11</sup> Estimated by PwC as part of the administrative burdens exercise

**One-In-One-Out:**

This relates to the regulatory/ deregulatory burden on business. By removing the need for planning permission and introducing permitted development rights, this will ease the regulatory burden on business. Table 2 refers to the average annual benefits of fee and administrative savings for business wishing to install electric vehicle charging points, estimated at £1.27m (ranging from £330,000 to £2.2m).

**Sensitivity Analysis**

The sensitivity analysis is designed to show the impacts on the benefits of the proposals if different assumptions are made about the future take up of electric vehicles. The sensitivity analysis uses the high-end and low-end trajectories provided by the Department for Transport under the same assumptions that have been used to translate number of electric vehicle charging points that will be needed into the number of planning applications actually saved.

**Table 4:** Total number of planning applications taken out of the system under different assumptions, assuming low and high trajectories for take up of electric vehicles.

Level of savings	Numbers of planning applications saved (2011- 2020)	
	Low take up	High take up
Low	700	3,900
High	4,500	25,400

**Table 5:** Average annual benefits under different assumptions assuming low and high trajectories for take up of electric vehicles

Level of savings	Average annual benefits	
	Low take up	High take up
Low	£110,000	£630,000
High	£740,000	£4,100,000

**Monitoring**

As electric vehicle charging points are an emerging and developing technology, monitoring of these proposals is important to ensure that planning regulation reacts effectively to change. We are therefore working with Department for Transport to ensure the effectiveness of these proposals is monitored as part of Department for Transport's monitoring arrangements for incentivising electric vehicle take up. We currently envisage the first round of such monitoring being two years after implementation.

**Specific Tests**

Statutory equality duties

We have undertaken an Equalities Impact Screening and have not identified any adverse impacts upon equalities.

Economic impacts

We do not consider that this proposal would have any adverse impacts on competition.

*Small firms*

We do not consider that this proposal would have any adverse impacts on small firms.

Environmental impacts

Although not the focus of this IA, which concentrates on the benefits/costs as they relate to the planning system, the policy is likely to reduce carbon emissions through increased use of electric vehicles as a replacement for petrol cars. The take-up and replacement ratio of electric vehicles will however depend on many other factors such as cost, subsidy, taste etc.

For illustration though, Department for Transport research suggests that using the current UK power mix (in 2008), electric vehicles could realise up to a 40% benefit in CO2 savings compared with a typical petrol family car in the UK over the full life cycle. Larger emission reductions can be realised over time if the UK moves to lower carbon sources of power generation.

## Social impacts

### *Health and well-being*

As discussed above, this impact assessment focuses on the planning element of this policy. However, the anticipated reduction in carbon emissions through the substitution of petrol cars to electric cars will have a small benefit in terms of health.

### *Human rights*

We do not anticipate the policy option having any adverse impacts on human rights.

### *Justice system*

We do not anticipate the policy option having any adverse impacts on the justice system.

### *Rural proofing*

We do not anticipate the policy option having any adverse impacts on rural proofing.

### *Sustainable development*

We do not anticipate the policy having any adverse impacts on sustainable development.

## Annexes

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added where the Specific Impact Tests yield information relevant to an overall understanding of policy options.

### Annex 1: Post Implementation Review (PIR) Plan

A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

<p><b>Basis of the review:</b> [The basis of the review could be statutory (forming part of the legislation), it could be to review existing policy or there could be a political commitment to review];</p>
<p><b>Review objective:</b> [Is it intended as a proportionate check that regulation is operating as expected to tackle the problem of concern?; or as a wider exploration of the policy approach taken?; or as a link from policy objective to outcome?]</p>
<p><b>Review approach and rationale:</b> [e.g. describe here the review approach (in-depth evaluation, scope review of monitoring data, scan of stakeholder views, etc.) and the rationale that made choosing such an approach]</p>
<p><b>Baseline:</b> [The current (baseline) position against which the change introduced by the legislation can be measured]</p>
<p><b>Success criteria:</b> [Criteria showing achievement of the policy objectives as set out in the final impact assessment; criteria for modifying or replacing the policy if it does not achieve its objectives]</p>
<p><b>Monitoring information arrangements:</b> [Provide further details of the planned/existing arrangements in place that will allow a systematic collection systematic collection of monitoring information for future policy review]</p>
<p><b>Reasons for not planning a PIR:</b> [If there is no plan to do a PIR please provide reasons here] There will not be a formal PIR. Instead, the small number of issues raised at consultation will be addressed separately with relevant partners.</p>