

Local measures to encourage the uptake of low emission vehicles

GOOD PRACTICE GUIDE SUMMARY

Prepared by Urban Foresight



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1. Introduction

The adoption of Low Emission Vehicles (LEVs) has a significant role in improving local air quality, tackling climate change and developing more integrated and sustainable transport systems. Local authorities have an immense opportunity in influencing the uptake of both private individual purchasers and large business fleets, in conjunction with facilitating the provision of new types of vehicle infrastructure. Action taken at the local level can help to make LEVs more convenient, cost effective or desirable to use than higher-emitting vehicles. The provision of incentives can have a beneficial impact on encouraging the shift to cleaner vehicles. There are immense opportunities to exploit local policy measures to stimulate the take-up of LEVs, and facilitate the development of infrastructure for alternatively fuelled vehicles.

This '**Good Practice Guide: Local Measures to Encourage the Uptake of Low Emission Vehicles**' aims to help local authorities understand a broad range of policy measures and initiatives promote the uptake of low emission vehicles (LEVs) – specifically light duty vehicles (LDVs) covering cars, taxis and vans up to 3.5 tonnes. This guide covered 12 distinct areas including planning, procurement, taxis and private fire vehicles, parking and infrastructure provision. Examples of successful private public partnerships are explained in combination with case studies of good practice in the UK and internationally.

Currently the market for a variety of LEVs such as battery electric and plug-in hybrids, is at its early stages and requires national and local incentives to stimulate consumer demand and increase vehicle numbers. In order to achieve more rapid emissions reductions, it recommended that local authorities encourage the most efficient and least polluting vehicles run on fossil fuels by adopting policies that prescribe the latest European engine emission and CO₂ emission standards. It is essential that policies are reviewed and update as stricter regulation are introduced.

A recommendation from this guide is that policy measures implemented at the local level are consistent with each other, so as to create complementarity between areas and not confusion. If people wish to drive from city to city they need clarity about where they can and can't drive and park, and therefore it is important that local authorities harmonise their efforts to prevent a patchwork of measures from developing. It is hoped that local authorities can offer consistent benefits to individuals and companies which will give LEV driver the peace of mind and confidence they need to make the switch.

2. Overarching Frameworks and Cross-Cutting Themes

Actions taken at the local level are greatly influenced by the overarching frameworks set by the European Commission, UK government and devolved administrations.

The European Parliament and the Council of the European Union have set mandatory fleet average CO₂ emission targets that new cars and vans have to meet in 2020. For new cars an ambitious target of 95 g/km for 2020 and for light commercial vehicles 147g/km CO₂ (fleet averages). European emission standards (Euro Standards) have been set to control air pollution emissions such as NO_x, PM and CO.

At a national level there are a broad range of policies related to encouraging the shift to low emission vehicles. Table 1 provides an overview of the national policy framework related to LEVs.

Table 1: National policy framework related to LEVs

Transport	Planning	Air Quality	Climate Change	Procurement
Local Transport Act 2008	National Planning Policy Framework	Environment Act 1995 The Air Quality Standards Regulations 2010 Mayor's Air Quality Strategy 2010	Climate Change Act 2008	The Government Buying Standards For Transport (Vehicles) 2012
Road Traffic Regulation Act 1984	Permitted Development Rights 2011	Local Government Act 2000	Fuel economy labelling and CO ₂ emission based car taxation	Cleaner Road Transport Vehicles Regulations 2011
Road Vehicle (Construction and Use) Regulation 1986	Section 106 of Town and Country Planning Act 1990/ Section 75 of Town and Country Planning (Scotland) Act 1997	Driving the future today: a strategy for ultra-low emission vehicles in the UK: £500 million funding package to support uptake of ULEVs from 2015 to 2020 – grants for cars, taxis, vans, buses, motorcycles and infrastructure		
Localism Bill 2010-11	Community Infrastructure Levy (CIL) 2010	Health and Social Care Act 2012		
Local Transport White Paper 2011				

Defining a 'Low' Emission Vehicle

There is no formal definition as to what constitutes a 'low' emission vehicle. Local authorities often do not articulate specifically what is covered in their understanding of LEVs when setting strategies. With local authorities using different terminology, harmonising approaches across the UK is difficult.

Local authorities can define LEVs by using Euro standards set for various air pollutants including NO_x and PM.

The Euro 6 standard applies to all new car registrations from 1st September 2015 and will apply to all vans by 1st September 2016. The introduction of Euro 6 shows a large reduction in NOx emissions compared to Euro 5; this is particularly relevant given the challenges which the UK faces with achieving the EU Limit Value for NO₂.

Most approaches taken by local authorities discussed in the guide follow either **CO₂ emission standards** or **Euro standards for air quality**.

A number of factors need to be considered when defining what constitutes an LEV:

- a. Definitions often follow either Euro standards or CO₂ emission standards.
- b. **LEVs are not just alternative fuels and plug-ins**; efficient conventional internal combustion engines can also be considered low carbon and upgrading vehicles to a higher Euro standard can improve air quality.
- c. Emission limits are not set, they will depend on:
 - i. The policy instrument in question.
 - ii. The level of ambition.
 - iii. The point in time at which they were implemented.
- d. Local authorities should strive to set complimentary emission standards to avoid confusion about what criteria apply across different cities and policies.
- e. Emission standards **apply to new vehicles**, but given that the average age of a car in the UK is 7 years old, local authorities need to be mindful that **there is a lag** between the newest vehicles and the average fleet.

It is important to highlight emission targets and standards for LEVs are not static; regular periodic reviews will be required to ensure that developments are taken account of.

Implementation

There are a large number of local transport/development/air quality plans, low emission strategies and climate change action plans that have been created by local authorities. These are key mechanism to encourage the adoption of low emission vehicles and infrastructure. A variety factors can contribute to the effective implementation of these different strategies:

- **Integrating policy:** Policy cross-over between policy areas such as planning, parking, infrastructure development.
- **Identifying a champion:** The most successful LEV initiatives occurred when the same individual saw the process through from the inception of policy through to final implementation.
- **Long term savings/benefits:** Focus on air quality and health improvements, essential for projects with high capital costs.
- **Collaboration and knowledge-sharing:** This can support the effective implementation of measures, including cooperation within and between local authorities, extending to the value of engaging with government, the private sector (including local businesses) and existing networks.
- **Mobilising local stakeholders:** Local authorities also have an important role in supporting, coordinating and mobilising local stakeholders from across the public and private sectors to encourage uptake of LEVs.
- **Public Private Partnerships** can provide local authorities with access to capital, expertise and manpower to implement measures to promote LEVs.

3. Planning

Planning can facilitate development of the LEV market by supporting parking policy, introducing car clubs and installing infrastructure for a range of alternative fuels, including electricity, CNG, biomethane and hydrogen.

Overview

A range of local authority measures to encourage uptake of LEVs that relate directly with planning is outlined below:

Measure	Details
Planning conditions in development frameworks.	Specify a minimum requirement for provision of LEV spaces (and associated infrastructure) in new developments.
(U)LEV specifications in building codes.	Specify the need for (U)LEV vehicle readiness in new and renovated buildings.
Permitted development rights for charging infrastructure.	Electric vehicle charge point installation designated as a permitted development right.
Infrastructure installation in rental properties.	Makes a term in a lease, contract, security instrument, or similar void to be unenforceable if it prohibits or unreasonably restricts the installation of electric vehicle charging in a lessee's designated parking space.
Developer contributions	Planning obligations (section 106/section 75), community infrastructure levy and highway contributions.
Local Development Orders securing land for infrastructure.	Using Local Development Orders to secure land for infrastructure.

Implementation

The various methods used to implement the measures listed above include:

- **Planning and building regulations:** These can be used to encourage the routine installation of charging infrastructure in new developments, offering considerable savings over the cost of retrofitting such infrastructure.
- **Planning gain agreements:** These are by far the most widely-used tools. These agreements can be used for a wide range of purposes, including governing large developments, mitigating the impact of development, and for environmental improvements in the urban environment.
- **Supplementary Planning Guidance:** Provisions can be made for LEV measures as part of a Local Development Plan, or added on to planning conditions and enforced via planning permission.
- **Low emission zones:** These can be enforced using planning gain conditions. In such instances, developers would receive permission under a set of conditions and they would be required to produce compliant plans and documentation to discharge these requirements.
- The Town and Country Planning (General Permitted Development) (Amendment) (England) Order 2011 has been amended to introduce **permitted development rights** for electric vehicle charging points in off-street public and private car parking area.

Case Studies

- Introduction of low emission zones through planning by Greenwich Borough Council
- New residential constructions required electrical circuit for home charging in Vancouver.
- All new parking spaces will be electric vehicle ready in Westminster.
- Community stadium secures funding for EV charging for bikes and cars in York.
- Changes to laws in Hawaii around EV charging in parking havs.

4. Procurement

Local authorities across the UK have large fleets of vehicles, many of which present immediate opportunities for LEV uptake. There is significant potential for local authorities to lead by example in the procurement of LEVs and demonstrate the viability of such vehicles to the wider community and local businesses alike. Through procurement of LEVs, local authorities and public sector organisations can implement wider policy objectives, while also achieving economic and environmental improvements in their fleet operations.

Overview

A range of procurement-related measures available to local government, outlined below:

Measure	Details
Procurement of LEVs.	Local authorities purchase LEVs for use in their own fleet.
Financing and contracting models for fleets.	New public-private partnerships to provide resources and expertise to reduce operating costs and emissions in fleets.
Setting LEV standards for procurement of transport services for local government.	Procurement contracts specify/encourage the provision of LEVs for staff transport, logistics services, and public services from private hire firms and car clubs.
Setting LEV standards for procurement of municipal services.	Procurement contracts specify/encourage the provision of LEVs for municipal services such as refuse collection, street sweeping and outsourced public services.
LEV-preferred personal leases.	Employees that are entitled to subsidised leases are encouraged to select LEVs.

Implementation

Fleet Strategies or **Sustainable Procurement Strategies** are particularly important in this area, as well as broader low emissions strategies. For lower tier authorities, it may be helpful for upper tier transport strategies to be consulted for guidance. It is important to consult EU law in this area.

The commitment and buy-in of fleet management staff at local authorities is important for recognising the business case for LEVs and ULEVs.

Case Studies

- ULEV procurement policy for light duty vehicles in Dundee.
- Camden Council's Air Quality Plan and Green Fleet Procurement Policy.
- Berlin's police force switching to LEVs.
- Preferential treatment for contractor bids involving LEVs in Madrid.
- Public and private sector procurement policies in Stockholm.
- Definitions and specifications for LEVs in Sefton and Leicester Council's procurement policies.

5. Infrastructure Provision

Local authorities have an important role in providing infrastructure to serve taxi and van fleets. Measures relating to infrastructure provision are generally implemented at local authority level via a combination of the Planning, Parking, Environmental and Transport teams.

Overview

A range of infrastructure provision-related measures available to local government is outlined below:

Measure	Details
Discounted electricity for recharging.	Electric vehicle drivers have access to recharging at reduced cost/free.
Access to refuelling/recharging infrastructure.	Infrastructure is provided for a range of LEVs as they enter the market.
Grants/loans.	Grants or loans to local businesses to support installation of recharging/refuelling infrastructure.

Implementation

- **Traffic Orders** are a key mechanism for infrastructure provision.
- Permitted development rights can make it easier to install charging points.
- Through the New Road and Street Works Act (1991) it is possible to provide notification of prior approval for setting up charge points, rather than necessitating full planning applications.
- Public-private partnerships.
- Target National Funding Schemes: Local Implementation Plans and Local Transport Plans can be leveraged for infrastructure development, as can air quality grant funding.

Case Studies

Main Case study focuses on Bristol and Source West: Network of Electric Vehicle Charging.

Others include:

- Bristol and Source West: Network of electric vehicle charging points
- Biomethane refuelling station at Camden Council depot.
- Electric van and truck fast-charging in Camden Council depot.
- Strategic Infrastructure Planning by Birmingham City Council.

6. Education and Communication

Local authorities have a central role in building confidence and awareness in LEV technologies. This requires engagement with individuals, organisations and key influencers in the public and private sector.

Overview

Key education and communication-related measures available to local government are outlined below:

Measure	Details
Educational and promotional activities.	Awareness campaigns/events to promote the benefits of LEVs.
Advisory services.	Providing tools and information on the use of LEVs.
'One-stop shop'/promotion office.	A single physical location to access more information, advice, guidance, permits and access cards for infrastructure.
Information exchange.	Measures to share/access information internally and externally to a local authority.
Demonstration	Offering 'try and drive' experiences for local businesses and the public.

Implementation

Many local authorities also have well **established communications channels** and expertise that can be used to disseminate messaging on LEVs. This is often linked to awareness raising work linked to air quality and sustainable travel. Other ways to engage with the public and private sectors include:

- Using publically available education resources e.g. OLEV, Energy Savings Trust, manufacturers and the Low Carbon Vehicle Partnership.
- Focus on specific user groups e.g. schools bus operators, taxi operators.
- Engage with large public sector bodies such as the NHS.
- Peers and trusted advocates can be key in influencing people's behaviour
- Green driving courses for staff, branded LEVs; partnership with vehicle manufacturers and websites providing advice and technical information.

Case Studies

- School workshops in Fife to promote links between renewable energy and transport; reference to EVs.
- EV roadshow run by Scottish Borders Council.
- LEVs showcase event in Camden highlighting cost and environmental benefits.
- Raising awareness in schools by the London Hydrogen Partnership.
- EV car rally in Sweden for LEVs.
- Holland runs an Electric Vehicle Centre offering companies and individuals test drive a range of EVs.
- Free electric vehicle trails for businesses in Westminster and Camden.

7. Road Charging and Access

An important incentive to encourage drivers to opt for a LEV is to enable them to save time. Giving them access to dedicated road space, such as bus corridors or high occupancy vehicle lanes, can speed up travel time by avoiding congestion.

Overview

The table below summarises the various road charging and access measures considered in this chapter:

Measure	Details
Access to bus lanes/corridors.	LEVs given permission to drive in bus lanes/corridors.
Access to high occupancy vehicle lanes	LEVs given access to high occupancy vehicle lanes even with a single driver.
Low emission zones/ultra-low emission zones and exemption from congestion charges.	Charges/restrictions on high emitting vehicles accessing areas of city/discounts or no charge for LEVs.
Discounted road charges or tolls for bridges/tunnels.	Discounts or no charge for LEVs where conventional vehicles are charged.

Implementation

Measures that can be used to implement greater access and discounts to LEV users include:

- **Traffic Orders:** regulate, restrict or prohibit the use of a road or any part of the width of a road by vehicular traffic.
- **Rising bollards:** Road access restrictions may also be enforced by the installation of rising bollards to allow freight delivery and/or LEV-only access at certain times of the day.
- **Bus Lane Access:** Provide LEVs with access to bus lanes.
- **Use Enforcement infrastructure:** using existing CCTV infrastructure may make it easier to win approval for changes to existing traffic controls.
- **Low Emission Zones:** Impose charges or restrict access from areas of high emission emitting vehicles using Euro Standard entry requirements.
- **Toll Roads:** Reduced or free use of toll roads for LEVs.

Case Studies

- Electric vehicles in Germany receive gain access to a number of privileges through special number plates.
- Green license plates for LEVs in Canada.
- London Congestion Charging scheme Ultra Low Emission Discount offers 100% discount to cars or vans which emit <75g/km and Euro 5.
- London Low Emission Zone and Ultra Low Emission Zone linked to emission standards
- Window Stickers in California for PHEV and EV driving in high occupancy vehicle lanes.
- Access to low emission zones using colour coded car stickers in Germany
- Electric freight distribution in Utrecht.
- EV to have access to bus lanes in Oslo and are exempt from toll road charges
- MPG related discounts for toll roads in New Jersey.

8. Parking

Parking is an important policy area for incentivising LEV uptake because it has a direct impact on drivers' behaviour and choices. Parking is an important policy area for incentivising LEV uptake because it has a direct impact on drivers' behaviour and choices.

There is much that can be done by local authorities in this area because parking policy is administered at the local level. An overarching objective for such measures, however, is that parking policy is consistent and contributes to overall transport policy.

Overview

A range of parking-related measures available to local government is outlined in the table below:

Measure	Details
Discounted on- and off-street parking for LEVs.	LEVs permitted to use public parking facilities free or at a reduced cost.
Dedicated LEV parking (not including recharging).	LEV-only car parking spaces that do not include charge points.
Discounted residential parking permits for LEVs.	Cost of parking permit reduced or waived for LEV owners.
Reduced waiting time for parking permits for LEVs.	Priority for parking permit applications given to LEV cars.
Reduced parking spaces for high emission vehicles.	Parking for conventional vehicles reduced.
Workplace parking levy.	Local authorities can charge businesses for every employee who parks in the area.
Dedicated parking for LEV car club vehicles.	Allocating parking for sole use by LEV car clubs.

Implementation

Local authorities are responsible for different elements of parking policy including restrictions, tariff rates, penalties, public communication and signage, so there is much autonomy in the approach that can be taken to incentivise the uptake of LEVs by the council. The most effective measures that local authorities can use include:

- **Traffic Orders:** Traffic Orders can apply at all times or during specific periods, and certain classes of traffic may be exempted.
- **Planning Gain:** If parking measures are related to a planning application, then the process would involve the use of planning gain.
- **Use DfT Guidance:** Each local authority is provided with guidance on parking and traffic management duties from the Department for Transport under the Road Traffic Regulation Act 1984.
- **Workplace Parking Levy:** Under the Transport Act 2000, local traffic authorities in England and Wales (outside London) may introduce Workplace Parking Levy by way of a licensing scheme.

Case Studies

- Green Parking Permits for EV, hybrid and LPG vehicles.
- Dedicated LEV spaces in Oslo and Bury St. Edmunds.
- Free parking in Westminster and Barcelona.
- Free resident parking permits in Islington, Brighton, Stockport and Hove and Newcastle.
- CO₂ emissions based parking charge system in Hackney, Greenwich Edinburgh and York offering reduced fees for lower emissions cars.
- Reduced waiting times for parking permits for EV drivers in Amsterdam.
- Annual parking season ticket for free or discounted for LEVs in Kirklees.

9. Car Clubs

Recent years has seen a significant increase in car club membership across the UK. Facilitating the sign-up of businesses and individuals to car clubs can help reduce the numbers of vehicles travelling into a town or city, which in turn supports objectives on air quality and congestion.

Overview

Measure	Details
Dedicated parking bays for low emission car club vehicles.	Parking spaces for back-to-base car club operators designated for exclusive use for LEVs.
LEV-based car clubs.	Encouraging the development of car clubs where the fleet is made up largely/entirely of LEVs.

Implementation

Facilitating the establishment of LEV-based car clubs should not require any changes to policy, as **Air Quality Action Plans** and **Local Transport Plans** would contain the necessary provisions. However, where any legislative changes might be required, **the Traffic Management Act, Traffic Orders** and **Local Implementation Plans/Local Development Plans** may be of wider relevance.

Local Authorities may also take into account the following when setting up initiatives to encourage car clubs to use LEVs:

- ISO14000 standards as a benchmark to procure goods.
- The European Directive on Public Sector Vehicles Emissions Standards/ Clean Vehicles Directive and EU legislation on open procurement.

Car clubs could also work with developers to write access provision for the schemes into planning gain requirements.

Where LEV-based car clubs are promoted, parking bays are often part of the package of measures a local authority supports. A further common theme is that public-private partnerships often play a major role in facilitating the development of car clubs.

Case Studies

- Paris's electric car club: AUTOLIB'
- Switch from conventional to club car parking spaces in Camden.
- EV car clubs in Dundee and Aberdeen.
- NHS electric car club in Derbyshire.
- A 'Car Sharing Market Guide' from Travelwise Merseyside.
- The 'Car Club Strategy for London' action plan.

10. Taxis and Private Hire Vehicles

The taxi fleet in any given local area contributes significantly to the total vehicle miles travelled, with many short journeys concentrated in a small area. They are therefore a key source of air pollutants in many towns and cities.

Overview

Either by offering reduced licence fees for low emission taxis, relaxing licence caps for firms that employ less impactful vehicles, or offering rebates to firms or drivers to reduce the initial outlay costs for upgrading to a LEV, there are multiple ways through which a local authority can facilitate the switch to a cleaner taxi fleet:

Measure	Details
Reduced fees for taxi and private hire licenses.	Taxi and private hire firms pay less for licensing LEVs.
Flexible licensing caps.	The cap on Hackney carriage licenses in a given area or awarded to a particular company could be altered for LEVs.
Taxi emission standards.	A requirement for a particular amount of LEVs in any given fleet to meet a particular emission standard.
Dedicated LEV taxi ranks.	Taxi ranks set aside for exclusive use by LEVs.
Rebates and other financial incentives.	Financial incentives to encourage purchase of LEV taxis.

Implementation

Policy implementation in this area is relatively straightforward. **Taxi licensing regulations** are the primary means of implementation, and local authority licensing departments can set emissions thresholds, licenses and types of vehicles to be used. Other methods include:

- **Lower Licensing Fees:** Councils can differentiate the licensing fees charged to drivers or firms and offer a lower rate for LEVs.
- **Removing the Cap on Licences:** Similarly, councils can remove or alter the cap placed on the number of licenses available in the local area.

Case Studies

- Encouraging LEV taxis in York through half price licencing and offering drivers £3000 towards the cost of a new or used LEV.
- Reduced license fees in Wigan and Brussels.
- Emission standards specifications for taxis in London.
- Rebates and subsidies in Madrid based on CO₂ emissions standards.
- Dedicated taxi ranks foe EVs in Liverpool and provision of rapid charging infrastructure.
- Private taxi hire adopting EV, LPG and hybrids in Northumberland and Newcastle.
- LPG taxi conversions in Birmingham.

11. Integration with the wider transport network

Local authorities can promote LEVs as part of a more integrated transport network to help realise broader sustainable transport strategy goals. By enabling access to parking and infrastructure for LEVs alongside public transport, bike and car sharing schemes, drivers are given options to make journeys in their own vehicles part of an integrated mobility network.

Overview

A range of measures to integrate LEVs into the wider transport available to local government is outlined below:

Measure	Details
Discounted and integrated travel.	One integrated payment card for parking, park and ride, vehicle refuelling/charging, car sharing, bike hire and public transport.
Discounted parking fee at park and ride sites.	LEVs permitted to park at park and ride sites for free or at a reduced cost.
Discounted recharging/refuelling at park and ride sites.	LEVs permitted to recharge/refuel at park and ride sites for free or at a reduced cost.
Discounted car ferry tariff.	LEVs permitted to travel for free/at reduced cost on car ferries.
Freight consolidation centres.	The use of LEV vans are facilitated for the movement of urban freight and logistics.

Implementation

Because of the **wide-ranging implications** of measures in this area, there are a number of related strategies and implementation mechanisms that can be used:

- Local Transport Plans, Local Implementation Plans and City Deal Bids which fit with the overall transport strategy for an area.
- Passenger Transport Executives can provide funding for subsidised or free park and ride facilities for LEVs.
- **Demonstrate Economic Benefits:** The ability to demonstrate that economic development benefits will be delivered by any given initiative is key to the successful delivery of any such measures.

Case studies

- Hanover's Integrated Transport Services linking car clubs, public transport and taxi options running hybrid vehicles
- A chip card for public charging and access to public transport for EV drivers in Italy.
- A key for access to a range of rental vehicles in Frankfurt.
- The multi-modal navigation system in Tokyo.
- Discounted park and ride in Taunton and Coventry.
- Discounted Car Ferries for EVs in Norway.
- Freight consolidation incorporating LEVs in Bristol and Bath.

12. Pilots and trails

Supporting or engaging in pilots or trails is a way for local authorities to raise the profile of LEVs, as well as understand the long-term implications of new fuels and technologies. Local authorities in the UK have the opportunity to undertake their own demonstration trials, as well as participate in national and European pilot programmes.

Pilot and trial projects can also be useful in changing the perception of parties less receptive to implementing LEV measures, play a role in supporting investment in new technology and create new entrepreneurial opportunities for local businesses.

Overview

Two key measures relating to pilots and trials available to local government are outlined below;

Measure	Details
Local authority trials of new technologies and business models.	The local authority itself invests in and trials new technologies and business models.
Facilitating local demonstration projects and trials.	The role of local authorities in supporting the development of pilots and demonstrations.

Implementation

Identifying potential **funding** is perhaps the most important step in establishing demonstration projects. Funding sources are going to be scheme dependent. The government and linked agencies such as Innovate UK have also developed programmes and challenges to encourage the development and uptake of LEVs.

- **Partnerships:** This includes working with other local authorities and/or other public and private partners, such as OEMs, technology providers, energy/fuel suppliers, universities and local businesses.
- **Large scope:** The level of implementation and parties involved can be diverse and may include local authority transport departments, councillors and fleet managers, as well as external agencies including taxi operators and vehicle manufacturers and fuel suppliers.
- **Project Champions:** Dedicated, ambitious staff can be particularly important to develop and secure funding, drive an initiative and lead implementation.

Case Studies

The main case study looks at Biomethane trials in Stockholm.

Other examples include:

- EV trails by the Cross River Partnership in London.
- Biomethane waste collection vehicle trail in Camden.
- The Hydrogen Highway in California.
- Hydrogen Infrastructure for Transport in Rotterdam, Denmark and London.

13. Financial Measures

Local authorities have access to a number of financial measures to encourage adoption of LEVs.

This includes: the taxes that they collect and administer from both their residents and local businesses; the charges that they make for public amenities and services; and the benefits that they offer to their workforce.

Overview

The financial measures available to local government considered in this chapter are summarised below:

Measure	Details
Business rate relief.	Businesses are eligible for business rate relief based on contributions to environmental and air quality objectives
Finance and grants.	Finance and incentives offered by Economic Development Offices to support LEV uptake by businesses.
Discounts for local public services.	Discounts provided to LEV drivers in using public services, public transport, leisure facilities or cultural facilities.
Salary sacrifice schemes.	Employees to give up part of their salary under their terms of employment, in return for their employer providing the employee with a LEV.

Implementation

Methods of implementation include:

- **Business Rates/Relief:** Extend business rates to recognise commitments to reduce vehicle emissions, based on a similar methods as the living wage accreditation.
- **Finance and Grants:** Using finance with agreement from an Economic Development Office could be used to give businesses the training or financial support to invest in LEVs.
- **Discounted public services:** Local services smart cards can be an extension or complementary approach to integrating LEVs into the wider transport network.

Case Studies

The main case study for financial measures focuses on Caerphilly Council's salary sacrifice scheme as part of an initiative lead by North Yorkshire Council.

14. Economic Development and Tourism

For many public sector organisations, links to economic development can be an important justification for any new investments or policy commitments. Investments in LEVs can offer such benefits. Areas where this is perhaps most apparent is related to tourism and regeneration projects.

Overview:

The measures considered in this chapter broadly correspond with the two areas below:

Measure	Detail
Links to economic development and regeneration.	Using LEVs as a centrepiece for industrial development and community regeneration.
Links to tourism.	Encouraging tourists to use LEVs in the area.
Business support.	Provision of business support services to help organisations to capitalise on commercial opportunities related to LEVs.

Implementation

The level at which such measures can be implemented, and the responsible departments, very much depend on the nature of the initiative or programme and the links that would need to be established to carry it out.

- **Local Authority Departments involved:** Tourism, Economic Development, Planning, Transport (especially Sustainable Transport) and Communications.
- **Commercial Stakeholders:** the wider business community is also likely to contribute to such measures including transport operators, property developers, estate managers and owners of commercial developments.
- **High-level frameworks:** the broad-ranging scope, work in this area will often be guided by high-level overarching frameworks such as tourism strategies or development plans
- Organisations such as Local Enterprise Partnerships and departments for Regeneration, Enterprise and Skills may also have a role to play, to ensure effective delivery.

Case Studies

The main focus for economic development is on Sunderland's ambition to become a hub for the low carbon economy.

- Small electric car used for tourist transportation in the Lake District
- Drive Electric Las Vegas focused on using electric transport to enhance economic growth and employment.
- Eco Travel Network in the Brecon Beacons National Park offering electric vehicles for hire.
- Sightseeing electric rental vehicles in Japan.
- Restrictions on non-electric vehicles in resort town of Zermatt in Switzerland.

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