

Agenda Item No. 7(g)

DERBYSHIRE COUNTY COUNCIL

CABINET

14 September 2017

Report of the Strategic Director – Economy, Transport and Communities

ACTION PLAN FOR REDUCING HARMFUL EMISSIONS: DEVELOPING A STRATEGIC APPROACH TO SUPPORTING INFRASTRUCTURE INVESTMENT AND THE USE OF LOW EMISSION VEHICLES (HIGHWAYS, TRANSPORT AND INFRASTRUCTURE)

- (1) **Purpose of Report** To seek Cabinet approval to develop a strategic approach to the development of policy and subsequent action plans to support appropriate infrastructure investment and encourage the take-up and use of low emission vehicles in Derbyshire.
- (2) **Information and Analysis** Transport is the United Kingdom's largest consumer of energy, accounting for 40% of total consumption (2015 latest figures) and is growing year on year. Within the transport sector, road transport accounts for the largest share of energy consumption at 74% (2015) and almost 30% of the country's total energy consumption.

Much of this is in the form of fossil fuels and, as a result, makes a significant contribution to the emission of carbon and pollutants known to be damaging to health. It is estimated by Public Health England that over 400 deaths per annum in Derbyshire in those aged over 25 are attributable to particulate air pollution and that over 4,000 life years are lost; by comparison, this figure outstrips the number of people killed in road traffic collisions (23 in 2015). This is a major public health issue for the County and the UK and there is a compelling case for seeking to adopt a more strategic and considered approach to addressing the impacts of road transport energy use and reducing emissions.

Cabinet Members may have seen recent media reports of pledges from the mayors of some major cities (Paris, Madrid, Athens and Mexico City) to exclude diesel vehicles from their city centres entirely by 2025. In the UK, emerging Government policy is clearly signalling support and encouragement for low carbon vehicles and UK manufacturers have been keen to raise the profile and marketing of these vehicles with increasing effort in recent months.

Local Government is also demonstrating leadership in this area of policy development; for example, Westminster City Council has announced its intention to place a surcharge on parking for some diesel vehicles and plans are also in place in London to introduce a 'toxicity charge' on the most polluting vehicles by vehicle manufacturers and others to reduce the negative impacts of transport. Grant schemes are also available to encourage the provision of charging points at homes and workplaces. Understandably, the greatest spatial focus of current, relevant investment programmes (for example through the Office for Low Emission Vehicles (OLEV)) is on the UK's larger cities and on initiatives such as Clean Air Zones. However, as part of its wider commitment to tackling climate change and low carbon emissions, the Government has recently announced it is looking to ensure that no new petrol or diesel vehicles enter the market from 2040.

Developing a Strategic Approach

If it is to help deliver this commitment, local government needs to be re-thinking its transport infrastructure investment strategies, working with the energy, regeneration, construction and manufacturing industries in the short to medium term, to ensure the required outcomes can be delivered in the longer term. It could be argued that strong public and sustainable transport networks are easier to implement in cities than in rural counties such as Derbyshire where the issues of time, distance and connectivity are more challenging for many people. However, having regard to the public health and other issues outlined above, it is timely to consider how Derbyshire County Council could develop a more strategic approach to enabling and accelerating its work on infrastructure investment strategy to secure more sustainable networks and reduce emissions.

The Council already has in place a sound platform for developing and strengthening its approach to reducing harmful emissions – and forming the basis for an immediate action plan through the recent Energy Briefing (August 2017) which sets out priority areas including electric vehicles and air quality and energy supply.

Similarly, the current Corporate Environmental Policy makes the following relevant commitments:

- Transport: Reducing the social and environmental impacts of road vehicles on Council business. Encouraging the use of more sustainable modes of transport for all journeys.
- Environmental education: Raising awareness, educating and training employees, and providing information to the public on environmental policies, practices and issues.

The Derbyshire Local Transport Plan, 2011-2016 includes tackling climate change, improving quality of life and promoting a healthy natural environment as two of its five strategic goals. And more specifically, the current Council

Plan, 2017-2018 makes a specific commitment to “explore opportunities to develop low carbon vehicle charging infrastructure across the County”.

There is scope however, to ensure stronger co-ordination between these policy areas to drive forward more strategic decision making, particularly in terms of investment planning, and it is proposed that the Council’s existing Environmental Sustainability Group would be an appropriate arena in which the relevant issues, opportunities (e.g. grant funding, partnership working) and forward strategies could be discussed. This is a senior officer group, able to bring forward appropriate recommendations to Cabinet.

Alongside the development of a more co-ordinated approach is the delivery of specific projects in the short term. Some of the specific areas for detailed work are outlined below:

Developing an Action Plan

a) Electric and Hybrid Vehicles

A number of alternative fuel options are being developed currently for road transport, including electricity, synthetic fuels, biofuels and hydrogen. Toyota UK, based in Derbyshire, is one of the leading manufacturers of alternative fuel vehicles, offers very popular hybrid vehicles and is actively researching the potential for hydrogen vehicles. Based on the current market, though, electricity currently appears to have a clear case for public sector intervention at local level due to the limited distance that battery- powered vehicles can travel and the limited range of vehicles available; this is inevitably constraining take-up by users and requires more concerted efforts locally to provide a good and well-publicised network of charging points. Work on the wider sources of energy inevitably will continue, but most likely in line with emerging market development/ demand. If Derbyshire County Council is committed to encouraging the take-up of electric and hybrid vehicles as part of its early work (given the current level of market development) then an appropriate action plan needs to be established setting out clear proposals for developing a network of ‘rapid’ and ‘long stay’ charging points (e.g. homes and workplaces) and for information provision to existing and potential users. This could link to a network of complementary ‘destination’ charging points which can be used over a period of several hours whilst the vehicle is not needed (e.g. tourist hotspots).

Joint work with planning authorities, energy providers, developers and the construction industries will play an important part in the development and delivery of such a network. The County Council and other local businesses could lead by example in providing charging points at the workplace, e.g. at Markham Vale where long stay charging is already available. In the wider context, other organisations have already set ambitious targets for reducing harmful emissions e.g. Highways England has a target that 95% of its motorway and trunk road network will have a charging point every 20 miles. In

response, the County Council could develop a strategic approach to support the implementation of charging points on or near principal (A) roads (linking to the HE's motorways and trunk roads) and in larger towns, where they would serve denser networks of B and C roads. Early work has suggested that a local network of approximately 30 sites across the County could provide adequate coverage.

Some external funding is currently available for the development of projects through the Derby, Derbyshire, Nottingham and Nottinghamshire (D2N2) European Regional Development Fund (ERDF) low-carbon programmes. The Council has been preparing a draft proposal which would link the provision of charging points to sustainable energy sources and work is ongoing into how grant funding could be matched to existing local resources. Cabinet is asked to approve in principle the submission of bids where this can be achieved.

b) E-bicycles

Electrically-assisted bicycles ('e-bikes') can be regarded as having great potential in helping reduce harmful emissions. The County has a significant profile and reputation for cycling, particularly leisure, and an increasing number of people are using bikes as a commuting option. However, the topography of the County does present barriers to some potential users. E-bikes have an on-board motor which makes it easier to pedal the County's more challenging hills and would potentially, open up the option of commuter cycling to more people. Facilities for secure cycle parking and local power generation will need to be considered as part of wider proposals for infrastructure planning and investment.

In terms of moving forward with the implementation of the strategic approach for electric vehicles and e-bikes, there are a number of opportunities where activity and co-ordination can be focussed. The County Council, working closely with district authorities, is currently reviewing the Derbyshire Infrastructure Investment Plan (DIIP) which sets out the aspirations for major investment linked to development and regeneration proposals. Members will be aware that the County has a significant number of large-scale housing and employment developments coming forward in the next five years and much can be done through the planning and regeneration processes to ensure Derbyshire is, and is known as, a low carbon county. This would have significant benefits for the priority sectors and supply chains, particularly transport equipment manufacturing, and tourism. Locations such as cafes and visitor centres could promote themselves as low carbon offering charging facilities in much the same way as many do already for wi-fi and charging for electronic devices. The DIIP, regeneration framework and planning application processes all provide suitable opportunities in which to develop the relevant policies and approaches to securing appropriate, co-ordinated investment.

c) County Council Vehicle Fleet

In addition to the above, the County Council operates a significant number of vehicles and plant machinery which could potentially use alternative fuel. Consideration would need to be given to the Council's procurement policy (e.g. supporting/ encouraging hybrid vehicles) and the location of suitable infrastructure required to support the shift to low carbon/ low emission vehicles. Opportunities already exist however, (e.g. current review of commissioning and procurement strategies) that would help the Council to explore and develop a more sustainable approach to fleet vehicles, including the possible addition of e-bikes for short-distance work journeys.

d) Passenger Transport

Due to the large number of passenger journeys (85%) being provided by operators on a commercial basis in Derbyshire, there is limited scope for the Council to introduce contractual obligations on operators to switch to lower-emission vehicles. However, through development of the Bus Strategy there will be opportunities to work with commercial operators to influence the vehicle fleet, linked to on-going development of appropriate infrastructure.

Similarly, the Council's ability to influence rolling stock used on rail services within Derbyshire is limited (NB rail is not as problematic as road traffic in that it does not produce emissions in such close proximity to people and over such sustained periods). Some electrification of main line routes is ongoing within the UK but for other lines, the use of 'hybrid' or 'bi-modal' trains present an alternative and are now proposed for the Midland Main Line where the line is not electrified. Given the County Council's role in developing HS2 Growth Strategies for the area and its work in both Midlands Connect and Transport for the North, opportunities to lobby and influence Government policy and work with the rail industry will present themselves over the coming years and will help support delivery of the Council's wider strategy for infrastructure and lowering harmful emissions.

e) Freight

The County experiences a significant amount of freight traffic, particularly road freight. Closer work with the haulage industry is required to understand the issues and requirements before any significant actions can be identified and agreed. It is proposed that work through industry regulators and Midlands Connect would be the most appropriate way of engaging operators in the short to medium term.

f) Supply Chain

Derbyshire manufacturers and suppliers are already involved in some key activities around new fuel technologies. Both e-bicycles and hybrid vehicles are already being manufactured within the County, and Toyota UK is actively exploring the potential of hydrogen as a vehicle fuel. The Council can play an active role in ensuring access to appropriate research and business support

for the local enterprises leading the way towards the uptake of new fuel options.

g) **Understanding Future Markets**

It will be crucial for the County Council to keep under review the case for public sector intervention as it works with partners to ensure at the very least a suitable network of charging points. In the short term, it is recommended that a technical seminar be organised to bring together a wide range of interested parties; these could include charging point and pool car fleet operators, local manufacturers, power suppliers and universities.

Approach to Funding

Some targeted funding is already available to support the development of electric charging infrastructure e.g. OLEV's Clean Air Zone programme, grant schemes for residential road-side parking and EU programmes that support low carbon activity. It is likely that given the Government's – and the vehicle manufacturers' – commitment to reducing emissions, more funding will become available over the coming years. In this regard, the development of a strategic approach to infrastructure investment planning as outlined above will help ensure the Council can maximise opportunities to access and make use of such monies.

In the short term, it is recommended the Council develops a proposal for submission for which capital match funding can be provided through the Local Transport Plan programme, starting in 2017-18, for the purpose of stimulating the take-up of low-emission vehicles (e.g. in providing residential charging points). It is accepted there will be initial challenges in commencing this work, not least the availability of reserved parking spaces, site/ location selection, legal and consultation processes etc, but if the Council and the County is to make progress in tackling this important issue then a starting point needs to be established.

Links to Power Supply

There are a number of initiatives to generate electricity from sustainable sources taking place across the County. Wind turbines and solar farms are already in place and there is genuine scope for the introduction of hydro-electric schemes and for heat exchange from thermal waters. In addition, there are small-scale examples of electric vehicle fleets supplied by renewables. Clearly, it would be advantageous if Derbyshire could offer a good network of charging points and link these to renewable sources. Whilst initially this may need to be restricted to the identification of some pilot projects, as part of the continued development of the Council's strategic approach, it is recommended that opportunities are kept under review.

Monitoring

It is proposed that the development of the strategic approach and associated action plan be undertaken by the corporate Environmental Sustainability Group and that monitoring of progress be linked to agreed performance measures and targets and reported as part of the corporate clinic process.

(3) **Financial Considerations** There are no immediate financial issues arising directly from this report, and future proposals will be set within the agreed strategic approach and linked to the associated action plan. Cabinet should note though that any bids made for external grant will require confirmation by the Section 151 Officer of local match funding being available from existing budgets.

(4) **Property Considerations** A network of charging points for electric and hybrid vehicles is likely to involve a number of negotiations over land. Approval for acquisitions will need to be sought on a case-by-case basis and will be linked to the strategic approach driven by the corporate Environmental Sustainability Group which will ensure liaison with Legal and Property Services as appropriate.

(5) **Social Value Considerations** The greatest social value will be in the overall reduction of harmful emissions and longer term improvement in public health outcomes as a result; this will impact on wider social costs such as health care and quality of the natural environment. In addition, community participation in developing and partaking in schemes such as electric vehicles is likely to enhance local community capacity and wellbeing. Officers have held positive discussions recently with organisations such as the Buxton Town Team over ways in which communities can help to deliver positive outcomes by encouraging behavioural change, complementing the Council's ability to deliver infrastructure.

(6) **Environmental and Health Considerations** As outlined above, the reduction of vehicle emissions through the introduction of less-polluting vehicles is important for the reduction both of fossil fuel consumption and of roadside emissions damaging to human health.

(7) **Transport Considerations** It is not likely that the introduction of electric or hybrid vehicles will have a material influence on journeys made, so should not be detrimental to the ability of people to access jobs and services. E-bikes, as a flexible and increasingly affordable transport option, have some potential to improve personal mobility.

Other Considerations

In preparing this report the relevance of the following factors has been considered: prevention of crime and disorder, legal, equality and diversity, human resources considerations.

(8) **Key Decision** No.

(9) **Call-In** Is it required that call-in be waived in respect of the decisions proposed in the report? No.

(10) **Background Papers** Held on file within the Economy, Transport and Communities Department. Officer contact details - Jim Seymour, extension 38557.

(11) **OFFICER'S RECOMMENDATIONS** That Cabinet:

- 11.1 Agrees that the Council's Environmental Sustainability Group (ESG) develops and brings forward recommendations to Cabinet of a new strategic approach to support infrastructure investment planning and decision making in relation to reducing the harmful emissions of the County's transport networks.
- 11.2 Agrees that an action plan be developed for Cabinet approval covering the key areas for implementation as outlined in this report, and that progress subsequently be monitored and reported through the ESG and Economy, Transport and Communities Service Plan as appropriate.
- 11.3 Notes the potential for external grant funding to be secured for the provision of charging points and approves, in principle, the submission of bids where local match funding is available from existing budgets.
- 11.4 Agrees to host an event with key partners, manufacturers and policy makers to explore the developing market and opportunities for joint working.

Mike Ashworth
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