

North Tyneside Council Report to Cabinet Member for Environment and Transport Date: 3 October 2019

Consultation
Response – electric
vehicle chargepoints
at buildings

Portfolio(s): Environment and Transport

Cabinet Member(s): Councillor C
Johnson

Report from Service Area: Environment, Housing and Leisure

Responsible Officer: Phil Scott, Head of Environment,
Housing and Leisure (Tel: 0191 643 7295)

Wards affected: All

PART 1

1.1 Executive Summary:

This report seeks the approval of the Cabinet Member for Environment and Transport to submit a response, attached as Appendix 1, to the Government's public consultation on electric vehicle (EV) charging in residential and non-residential buildings.

1.2 Recommendation(s):

It is recommended that the Cabinet Member for Environment and Transport:

- (1) notes the contents of the report;
- (2) agrees that the Authority should respond to the consultation; and
- (3) approves the draft response attached as Appendix 1 and, in consultation with the Head of Environment, Housing and Leisure, makes any final amendments to the draft response before the submission of the final response to the consultation.

1.3 Forward Plan:

Twenty eight days notice of this report has been given and it first appeared on the Forward Plan that was published on 30 August 2019.

1.4 Council Plan and Policy Framework

This report is relevant to the following priorities set out in the 'Our North Tyneside' Council Plan 2018-2020:

- Offer a good choice of quality housing
- Provide a clean, green, healthy, attractive, safe and sustainable environment
- Have effective transport and physical infrastructure

1.5 Information:

1.5.1 Background

The 2018-2020 Our North Tyneside Plan sets out the Authority's intention to offer a good choice of quality housing, provide a clean, healthy and sustainable environment and have effective transport and physical infrastructure.

It is noted in the North Tyneside Local Plan that the provision of EV charging infrastructure helps to encourage more sustainable transport: it is also stated that the Authority may require the provision of EV chargepoints at new developments (policy DM 7.4).

The North Tyneside Transport Strategy makes clear that the Authority is committed to supporting modal shift away from car travel, and moves to encourage the use of ultra low-emission vehicles rather than conventional petrol or diesel vehicles, so as to improve environmental sustainability and local air quality.

Following a decision of Full Council on 25 July 2019, the Authority declared a Climate Emergency, and seeks to halve its own and the Borough's carbon footprint by 2023 and commits that itself and the Borough will be carbon neutral by 2050 in line with the national target. Decarbonising the Authority's estate is essential to delivering this priority: the Authority will continue to reduce the size of its estate where appropriate; invest in energy efficient technologies; use less carbon intensive sources of heat and power; and generate its own clean energy through renewable energy technology. This approach is also aligned to the North Tyneside Transport Strategy by supporting greater use of low emission vehicles by the Authority's fleet, staff and visitors.

1.5.2 Objectives of the Government's Road to Zero strategy

The Department for Transport's (DfT) Road to Zero strategy seeks to put the UK at the forefront of the design and manufacturing of ultra low-emission vehicles. It sets out the Government's ambitions in this area, including:

- i. to see at least 50%, and as many as 70%, of new car sales and up to 40% of new van sales being ultra low-emission by 2030; and
- ii. to ensure that houses built in the coming years are EV ready, with the intention that all new homes, where appropriate, should have a chargepoint available.

The strategy seeks to build on the Government's existing commitments in the Industrial Strategy, the Automotive Sector Deal, the UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations ('the NO₂ Plan') and the Clean Growth Strategy to build an environment and an economy fit for the future

1.5.3 The Government consultation document

On 15 July 2019, the Government commenced a public consultation on proposals for EV chargepoints at buildings.

The consultation document observes that a lack of chargepoints is frequently cited as a reason why some people do not consider purchasing an EV. It states that the Government wishes to see more EV chargepoints at locations such as supermarkets, workplaces and service stations, but that charging at home will be the most convenient option for EV users who have a suitable parking space.

It goes on to note that charging at home and overnight can be cheaper for users and has wider benefits as there is less demand on the electricity system from other uses at such times, which helps to minimise the use of carbon-emitting forms of electricity generation. It further observes that installing EV charging infrastructure retrospectively is more expensive, and can be disruptive, compared with providing such infrastructure when homes are built.

The Government therefore invites views on its proposals to:

- i. alter building regulations for new residential buildings to include requirements for EV chargepoints;
- ii. alter building regulations for new non-residential buildings to include requirements for EV chargepoint infrastructure; and
- iii. introduce a requirement for existing non-residential buildings to have EV chargepoints.

This would transpose the requirements of the European Union Energy Performance of Buildings Directive into UK law and would exceed these requirements in some respects.

The consultation relates to charging infrastructure which can be used by EVs and 'plug-in' hybrid vehicles: it does not cover other types of ultra low-emission vehicles, such as hydrogen fuel cell vehicles, which are refuelled in a similar manner to petrol or diesel vehicles.

1.6 **Decision options:**

The following decision options are available for consideration by the Cabinet Member for Environment and Transport:

Option 1

Decide that a response to the consultation be submitted and approve the proposed course of action set out at 1.2 to allow the response to be submitted.

Option 2

Decide not to submit a response to the consultation.

Option 1 is the recommended option.

1.7 **Reasons for recommended option:**

Option 1 is recommended as this will allow the Authority to contribute to the Government's public consultation on EV charging in residential and non-residential buildings.

1.8 Appendices:

Appendix 1 Proposed North Tyneside Council response to the consultation

1.9 Contact officers:

Colin MacDonald, Senior Manager Technical and Regulatory Services (0191) 643 6620
John Cram, Integrated Transport Officer (0191) 643 6122
Cathy Davison, Principal Accountant Investment (Capital) and Revenue, 0191 643 5727

1.10 Background information:

The following background papers/information have been used in the compilation of this report and are available at the office of the author:

- 1) Government [consultation document](#) 'Electric Vehicle charging in residential and non-residential buildings'
- 2) Department for Transport strategy '[The Road to Zero](#) – next steps towards cleaner road transport and delivering our Industrial Strategy'
- 3) [North Tyneside Transport Strategy](#)

PART 2 – COMPLIANCE WITH PRINCIPLES OF DECISION MAKING

2.1 Finance and other resources

There are no financial implications directly arising from this report in terms of responding to the consultation. There may be financial implications arising in the future from measures relating to the Government's proposals (alterations to building regulations and new requirements relating to existing non-residential buildings) being implemented in North Tyneside and if so these will be reported to Council / Cabinet, as appropriate, at the time, for a decision before any expenditure is incurred.

2.2 Legal

There are no legal implications directly arising from this report. The report relates to a consultation document in which the Government proposes to alter the Building Regulations 2010 and to transpose other requirements of the EPBD (the European Union Energy Performance of Buildings Directive) through s.2(2) of the European Communities Act 1972.

2.3 Consultation/community engagement

2.3.1 Internal consultation

Internal consultation has taken place involving the Cabinet Member for Environment and Transport, the Deputy Mayor and the Head of Environment, Housing and Leisure.

2.3.2 Community engagement

Any person may respond to the Government consultation.

2.4 Human rights

The proposals within this report do not have direct implications in respect of the Human Rights Act 1998.

2.5 Equalities and diversity

There are no adverse equalities or diversity issues arising from this report.

2.6 Risk management

There are no risk management implications directly arising from this report.

2.7 Crime and disorder

There are no crime and disorder implications directly arising from this report.

2.8 Environment and sustainability

Although there are no direct environment and sustainability implications from approving this report, the delivery of the Government's proposals, by introducing further measures to support the adoption of EVs in place of petrol or diesel vehicles, would be expected to improve the environment and sustainability of North Tyneside.

PART 3 - SIGN OFF

- Chief Executive
- Head of Service
- Mayor/Cabinet Member(s)
- Chief Finance Officer
- Monitoring Officer
- Head of Corporate Strategy and Customer Service

APPENDIX 1: North Tyneside Council response to the Government's consultation on electric vehicle (EV) charging in residential and non-residential buildings

October 2019

Introduction

This is the response of North Tyneside Council ("the Authority") to the Government's consultation on electric vehicle (EV) charging in residential and non-residential buildings, which is being undertaken by the Department for Transport (DfT) and the Office for Low Emission Vehicles (OLEV).

[Note. North Tyneside's Cabinet Member delegated decision to submit a response to the consultation was taken on 3 October 2019. Since such decisions may be subject to a 'call-in' process, this response should be treated formally as a draft until confirmation is received in due course.]

Initial remarks

The Authority welcomes the Government's publication for consultation of the proposals.

Chapter 1 – Introduction

No questions relate to this chapter.

Chapter 2 – The installation of electric vehicle chargepoints in buildings

No questions relate to this chapter.

Chapter 3 – Building Regulations changes: New residential buildings and residential buildings undergoing major renovation

Q1: Do you agree with our proposed policy position? Please note that we are legally obliged to transpose the EPBD minimum requirements for residential buildings with more than 10 parking spaces.

Q2: If no, please specify why, including what requirement you think would be suitable.

A1: Yes, the Authority agrees that the proposed requirement for the installation of a chargepoint in new dwellings should be mandatory and apply consistently across England. Furthermore, the Authority suggests that the Government should strengthen the proposed requirement for buildings undergoing renovation, i.e. every residential building undergoing major renovations with more than 10 car parking spaces should be required to install a chargepoint, in addition to the proposed cable routes.

Q3: Do you agree that the proposed Building Regulation should mandate the introduction of electric vehicle charging points rather than set them as optional?

Q4: If you disagree, please explain why

A3: Yes

Q5: What other issues do you think, relevant to using Building Regulations to set standards for the provision and safety of electric vehicle chargepoints, we should consider?

A5: The Authority invites the Government to consider the following issues:

- a. It would be preferable if the requirements took account of all parking areas used by a building, rather than only those adjacent to the building: the Authority encourages the Government to give active consideration to including such an enhanced requirement in its proposals.

- b. Subsequent maintenance of the EV charging infrastructure should be explicitly required in the Government's proposals: the Government should seek to ensure that chargepoints, once installed, are maintained in fully functioning condition.
- c. The Government should note that a requirement for subsequent maintenance would also support fire safety, since poorly maintained electrical equipment can be a fire hazard.
- d. To ensure that applicants are fully informed, the Government should publish information which clarifies the implications for business rates of installing EV chargepoints (as the installation of other technologies on buildings, e.g. solar photovoltaic panels, can affect the level of business rates payable).

Q6: Do you agree that the government should mandate electric vehicle charging for all new dwellings with an associated car parking space (including both multi-dwelling and single-dwelling buildings)?

Q7: If no, please explain what you think would be the appropriate scope of the requirements.

A6: Yes

Q8: Do you agree the requirements should be for one chargepoint per dwelling rather than for every parking space associated with the building?

Q9: If not, please explain what you think would be the appropriate requirement.

A8: The requirement should ensure that several vehicles could effectively be charged simultaneously, i.e. the Government should either require several chargepoints per dwelling (pro rata to the number of parking spaces), or if only one chargepoint is specified, it should be a requirement that it is capable of charging several vehicles simultaneously and has sufficient capacity to provide a charge of at least 7kW to each of several vehicles simultaneously.

Q10: Should the proposed Building Regulation requirement for electric vehicle chargepoint infrastructure apply where the building has undergone a material change of use as defined in paragraph a) or b) of Regulation 5 of the Building Regulations 2010?

Q11: If you disagree, please explain why.

A10: Yes

Q12: Should the proposed Building Regulation requirement to install an electric vehicle chargepoint in every new home also apply to residential buildings undergoing a major renovation?

A12: Yes

Q13: If so, do you think the requirement should apply only to residential buildings undergoing major renovation with more than 10 car parking spaces?

Q14: Please provide an explanation for your answer, including any evidence or costings if relevant.

A13: No.

A14: While the document refers to Government's concerns regarding the potential for this to increase the capital cost of major renovations (sec 3.26), it also states that it would look to mitigate this by applying limitations (sec 3.27). As such, it would be appropriate for the threshold to be set at a lower level than 10 car parking spaces. In addition, it would be preferable if the requirement took account of all parking areas used by a building, rather than those adjacent to the building: the Authority encourages the Government to give active consideration to including such an enhanced requirement in its proposals.

Chapter 4 – Building Regulations changes: New non-residential buildings and non-residential buildings undergoing major renovation

Q15: Do you agree with our proposed policy position? Please note that the proposed requirement is a minimum requirement that the government is legally obliged to transpose under the EPBD.

Q16: If no, please specify why, including what alternative requirement you think would be suitable.

A15: Regarding cable routes, the Authority agrees that such buildings should have cable routes for one in five spaces. Regarding chargepoints, it is unclear whether the Government proposes one chargepoint per five spaces, or one chargepoint overall. The Authority's view is that the Government should apply a scale under which more car parking spaces implies more chargepoints. This would reflect the fact that one chargepoint would be insufficient for many larger buildings. The Government should also give consideration to setting more stringent requirements for new buildings compared with those undergoing major renovation, given the relative ease of providing chargepoints at a new building compared with installing these in the course of renovation work.

Chapter 5 – Existing non-residential buildings

Q17: Do you agree that one chargepoint per existing building with more than 20 car parking spaces is a suitable minimum requirement to transpose the EPBD?

Q18: If you disagree, please explain why.

A17: The Authority's view is that the Government should apply a scale under which more car parking spaces implies more chargepoints – this could be expressed as a ratio of one chargepoint for every 20 car parking spaces. The Government should give consideration to varying the number of chargepoints required based on the type of land use, given that usage of chargepoints is likely to be higher for uses which have a turnover of vehicles, e.g. retail uses, rather than those where vehicles are generally parked for a full day.

Q19: How can the government apply these regulations in a way which balances the benefit to EV drivers and the requirements of the EPBD, with the burden on landowners?

A19: The Government should consider possible ways to incentivise landowners to comply as quickly as possible with the requirement.

Q20: Do you agree that the appropriate enforcement regime for this power should set a sliding scale of penalties for non-compliance?

Q21: If you disagree, what do you think would be the appropriate enforcement regime for these requirements?

A20: The Authority would expect the enforcement arrangements to be comparable to those in use for Building Regulations.

Q22: Do you have a view on which organisation should be defined as an enforcement body for compliance with the new regulations for EV charging infrastructure?

A22: The Authority has no view on which organisation should be defined as an enforcement body for this matter. However, if the Government proposes to place any additional requirements on local authorities, it should seek to minimise the costs to local authorities of such additional requirements.

Q23: What steps should we take to mitigate against any potential negative impact of the implementation of these regulations?

A23: The Authority expects the Government to give consideration to which exemptions could be appropriate to minimise any potential negative impact, while maintaining the benefits of EV chargepoints being provided at existing non-residential buildings.

Chapter 6 – Technical specifications for Building Regulation requirements

Q24: Are the definitions in the draft Approved Document accurate, clear and do they provide the intended meaning?

Q25: If you think the definitions could be improved please suggest how.

A24: Yes.

Q26: Do you agree with using the concept "within the site boundary" to define which parking spaces which are in scope of the regulations?

Q27: If not, please explain what you think an appropriate definition would be.

A26: Preferably not.

A27: It would be most appropriate if the guidance could be worded to refer to "car parking relevant to the building", instead of only that car parking which is located "within the site boundary".

Q28: Do you agree that the government should specify a minimum charging power of 7 kW?

Q29: If no, please specify what specification would be suitable and give your reasons.

A28: Yes

Q30: Do you agree that the government should specify that chargepoints installed under the Building Regulations should be at least Mode 3 or equivalent?

Q31: If no, please explain your answer.

A30: Yes

Q32: Do you agree that the government should specify that chargepoints installed under the Building Regulations must be untethered? [i.e. should not have a cable permanently attached to the chargepoint]

Q33: If no, please explain your answer.

A32: The Government should consider amending this proposal.

A33: The proposal that chargepoints should be untethered appears appropriate for certain land use classes, such as residential. However, it is not necessarily so appropriate for other land use classes, such as retail, where users typically stay for a shorter time and where the absence of a cable may be a disincentive to use the chargepoints. Some buildings will also have several chargepoints rather than only one. The Government should consider making a revised proposal which takes account of user needs for different land use classes.

Q34: Do specifications with regards to location of the cabling route as outlined in the draft Approved Document sufficiently consider accessibility requirements?

Q35: Please provide any reasoning, and any details of potential other specifications that would be needed.

A34: Yes

A35: These provide scope to consider all users, since the document is cross-referenced to *Approved Document M – Access for All*.

Q36: Do the proposed accessibility requirements in section 1.24 of the draft Approved Document sufficiently consider accessibility requirements?

Q37: Should we include any additional accessibility requirements?

A34: Yes – these provide scope to consider all users, since the document is cross-referenced to *Approved Document M – Access for All*.

A37: The Authority has no observations to make regarding this question.

Q38: Are the specifications with regards to safety standards as outlined in the draft Approved Document appropriate?

Q39: If no, please specify which further safety specifications we need to include.

A38: Yes, as the document is cross-referenced to *Approved Document P – Electrical Safety*.

Q40: Do you agree that the installation, addition or alteration of dedicated circuits and earthing and bonding arrangements for electric vehicle chargepoints should be notifiable building work?

A40: Yes

Q41: Is the proposed guidance in the draft Approved Document clear and fit for purpose and provide sufficient detail in order to comply with the requirements?

Q42: If you think the guidance could be improved, please suggest how.

A41: Yes.

Q43: The diagrams in the draft Approved Document are illustrative only. Are they accurate and do they provide sufficient detail?

Q44: If you think the diagrams could be improved, please suggest how.

A43: The diagrams provide sufficient detail.

Q45: Does the draft Approved Document meet our proposed policy intent?

Q46: Is there any information missing from the draft Approved Document?

A45: Yes

A46: The Authority has not identified any relevant information as missing.

Chapter 7 – Exemptions

Q47: What is a reasonable transition period between publishing the new regulations and guidance and the requirements coming into force?

A47: The Authority has no observations to make regarding the length of the transition period. However, the Authority suggests that, in the case of submissions which were made before the identified date of 10 March 2021, the Government should set a specific deadline by which the applicant must either secure full delivery of their proposals or alternatively submit a new application under the new Building Regulations. This would prevent a situation where applications submitted under the previous version of the Building Regulations could be delivered many years later in non-amended form.

Q48: Do you think we should apply an exemption to the chargepoint requirement when the grid connection cost is high?

Q49: If no, please explain why including any potential exemption if relevant.

A48: The Authority accepts that there is justification for an exemption where the grid connection cost is particularly high: however, the Government should ensure that the threshold is high enough that it is not routinely triggered, and should ensure that any such exemption is carefully worded so that the responsibility is placed on the developer to demonstrate, with evidence, that the grounds for exemption have been met.

Q50: Does the draft text in the draft Approved Document (section 1.27) capture the intended exemption?

Q51: If no, please suggest an alternative drafting.

A50: The Government should ensure that any such exemption is carefully worded so that the responsibility is placed on the developer to demonstrate, with evidence, that the grounds for exemption have been met.

Q52: What do you think is a reasonable maximum cost for grid connection? Please provide any evidence to support your answer.

A52: The Authority has no observations to make regarding this question.

Q53: Does this exemption sufficiently mitigate any negative impact on housing supply?

A53: While the Authority has no observations regarding the specific question of mitigating negative impact, the Authority would encourage the Government not to make any increase in the scope of the proposed exemption beyond what is currently proposed.

Q54: Are there any other technical feasibility considerations that should be taken into account when determining the application of the requirements?

Q55: If yes, please outline what these technical considerations should be, including any supporting evidence.

A54: The Authority has no observations to make regarding this question.

Q56: Should we apply an exemption to the requirements for material change of use in residential buildings in cases where there is adequate spare capacity in the incoming electrical supply to the car park?

Q57: If you disagree, please explain why.

A56: The Government should carefully examine the likely frequency with which the proposed exemption could be used, and should take a cautious approach to setting any exemptions which could be routinely triggered.

Q58: Do you agree that we should apply an exemption for listed buildings and buildings in conservation areas as suggested above?

Q59: If you disagree, please explain why.

A58: No – see detail in answer A59

A59: In the case of listed buildings an exemption is reasonable in principle, however it should be worded so that it applies only in cases when every reasonable effort has been made to find a means of complying with the requirements. In the case of buildings in conservation areas it would not be

appropriate to apply a general exemption, as this would create a broad category of exemption which could be routinely triggered.

Q60: Should we apply an exemption to the requirements for major renovations in residential buildings where the cost of installing the cable routes exceeds 7 per cent of the total cost of the major renovation?

Q61: If you disagree, please explain why.

A60: No

A61: It is reasonable to apply an exemption based on percentage of total cost. However, 7% appears to be a low threshold and seems likely to lead to the exemption being routinely triggered. Moreover, the document includes no supporting evidence to justify the choice of the proposed 7% threshold. The Government should set this threshold at a higher level and provide justification, based on supporting evidence, for the chosen threshold.

Q62: Should we apply an exemption to the requirements for major renovations in residential buildings in cases where there is adequate spare capacity in the incoming electrical supply to the car park?

Q63: If you disagree, please explain why.

A62: No – see detail in answer A63

A63: The use of the word “adequate” is insufficiently precise and seems likely to lead to the exemption being routinely triggered. The Government should set a carefully worded exemption which ensures that it applies only in exceptional cases.

Q64: Should we apply an exemption for the requirement for new non-residential buildings and non-residential buildings undergoing major renovations to small and medium enterprises?

Q65: If you disagree, please explain why.

A64: No

A65: The document states that such an exemption would be unprecedented and difficult to enforce in practice (sec 7.15).

Q66: Should we apply an exemption to the requirements for major renovations in non-residential buildings where the cost of installing the cable routes and chargepoint exceeds 7 per cent of the total cost of the major renovation?

Q67: If you disagree, please explain why.

A66: No

A67: It is reasonable to apply an exemption based on percentage of total cost. However, 7% appears to be a low threshold and seems likely to lead to the exemption being routinely triggered. Moreover, the document includes no supporting evidence to justify the choice of the proposed 7% threshold. The Government should set this threshold at a higher level and provide justification, based on supporting evidence, for the chosen threshold.

Q68: Should we apply an exemption to the requirement for existing non-residential buildings to small and medium enterprises?

Q69: If you disagree, please explain why.

A68: See detail in answer A69

A69: Further consideration should be given to the options available to the Government in respect of this matter – the proposed blanket exemption for small and medium-sized enterprises (SMEs) could lead to large numbers of buildings being exempt and thereby weaken the effectiveness of the proposals.

Chapter 8 – Evidence and Analysis

Q70: Do you agree with the assumptions, costs and impacts set out in the Impact Assessment?

Q71: If you do not agree, please provide supporting evidence.

Q72: How are these costs likely to change over time?

Q73: What are the likely cost reductions from economies of scale?

Q74: Are these cost reductions likely to be relevant for both installation and hardware costs?

Q75: Are there any groups who would be impacted by these regulations that have not been captured by this assessment?

Q76: Would multiple single-occupancy developments (such as housing estates) be able to take advantage of economies of scale savings for chargepoint installation?

Q77: What are the likely technological learning rates that chargepoint hardware would experience?

Q78: Are you aware of a more suitable methodology for capturing the variation in grid connection costs?

Q79: Does the assessment of cost incidence seem accurate?

Q80: Are there likely to be disruption costs in a retrofit scenario, and if so how large are these likely to be?

Q81: Have we captured all the benefits, and if not, can you suggest any additional benefits?

Q82: What will be the impact on housing supply of introducing a requirement for chargepoint infrastructure on new dwellings?

A70-A82: The Authority has no observations to make regarding these questions.