# Electric Vehicle Charging Infrastructure for new development Supplementary Planning Document

Southend Borough Council

2021

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## Introduction

A net zero emissions target for 2050 is now UK law<sup>1</sup> and the government recently announced an ambition to cut carbon emissions by 78% compared to 1990 levels by 2035. Net Zero means balancing out any greenhouse gas emissions produced by industry, transport or other sources by removing an equivalent amount from the atmosphere.

A Local Climate Impacts Profile undertaken in 2010 found that the Borough is likely to be affected in the future by having warmer and wetter winters; hotter and drier summers; an increased risk of coastal erosion; and more severe weather, such as coastal flooding and flash floods. Air quality is also a problem with two Air Quality Management Areas designated along the A127 at The Bell junction and East Street/West Road junction.

17% of carbon emissions in the Borough are from transport (industries and households). Reducing carbon emissions arising from use of petrol and diesel vehicles will therefore have positive local effects as well as making a contribution to UK and global targets, and supporting the use of electric vehicles (EV) within Southend will help to reduce carbon emissions from vehicle use within the town. It will also have the benefit of improving local air quality, particularly along the main road corridors and town centres.

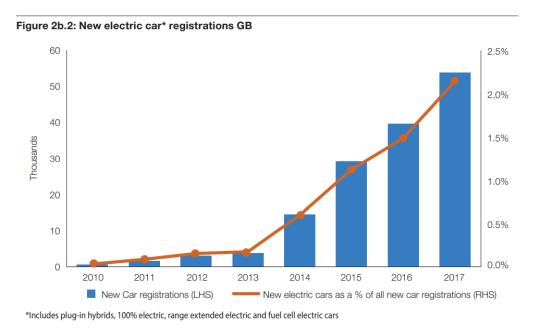
At the end of 2018, just 0.5% of vehicles licensed in the UK were ultra-low emission vehicles (battery electric, plug-in hybrid electric and fuel cell electric vehicles). However, numbers of electric vehicles are increasing, with one in every 47 new cars registered in the UK now plug-in, and one in every 36 for London<sup>2</sup>, against a decline overall in new UK vehicle registrations<sup>3</sup>. Figure 1 below from the Department for Transport's Road to Zero Strategy<sup>4</sup> shows this increase.

<sup>&</sup>lt;sup>1</sup> Climate Change Act 2008 and (2050 Target Amendment) Order 2019

<sup>&</sup>lt;sup>2</sup> Londons EV Infrastructure Taskforce Delivery Plan Executive Summary (tfl.gov.uk)

<sup>&</sup>lt;sup>3</sup> <u>New car registrations drop 35.5% but electric demand continues to rise | Latest news (smarttransport.org.uk)</u>

<sup>&</sup>lt;sup>4</sup> The Road to Zero (publishing.service.gov.uk)

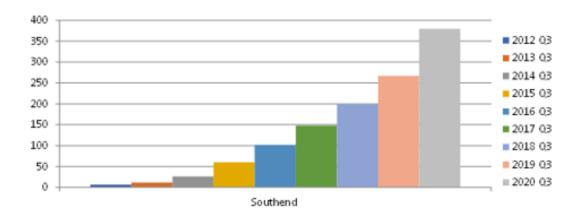


#### Figure 1: New Electric Car Registrations in Great Britain

Source: DfT, Vehicle Licensing Statistics, 2018 - table VEH0253.

The number of EV registrations in Southend is also rising, albeit from a low base. Figure 2 below shows the total number of electric vehicles registered in the Borough at Quarter 3 each year from 2012 to 2020 (e.g. between October and December each year).

#### Figure 2: Electric Vehicle Registrations in Southend



Southend Council announced a Carbon Emergency in September 2019, and in January 2021 published its Green City Action Plan<sup>5</sup>, setting out a five year plan to work towards net zero carbon emissions. Promoting low-carbon vehicles by rolling out electric vehicle charging infrastructure, is a priority action for the Council within the plan.

The Local Transport Plan 3 Policy 3 for better managed vehicle parking also highlights the need to include electric vehicles within parking strategies.<sup>6</sup>

Southend 2050 is the Borough's ambition for the future, developed with extensive conversations with those that live, work, visit, do business and study in Southend-on-Sea. The ambition is grounded in the values of Southenders, setting out what Southend-on-Sea should look like in 2050 and the steps needed now, and in the coming years, to achieve this. It is bold and challenging and will need all elements of the community to work together to make it a reality.

One of the 2050 outcomes identified is that we act as a sustainable and Green City embracing the challenges of the Climate Change Emergency Declaration made in 2019.

This Supplementary Planning Document sets out the Council's requirements for electric vehicle charging infrastructure in new development, and complements other actions being taken by the Council to decarbonise the economy and support our 2050 ambition, such as the creation of additional public electric vehicle charging points.

<sup>&</sup>lt;sup>5</sup> <u>Microsoft Word - Final Draft Green City Action Plan December 2020.docx (southend.gov.uk)</u>

<sup>&</sup>lt;sup>6</sup> <u>Microsoft Word - Implementation plan final March 2015 (southend.gov.uk)</u>

## **Direction of government policy**

The Road to Zero Strategy (DfT, 2018) sets out new measures to clean up road transport and promote use of zero emission road vehicles, and the Transport Decarbonisation Plan (2020) highlights the important role transport plays in reaching net zero, including promoting public transport and active travel, zero emission road vehicles, more sustainable delivery systems and development of new technologies and innovation.

In 2019 the government consulted on changes to building regulations<sup>7</sup>, which would require EV charging points for new dwelling with an associated car parking space, and non-residential development with more than 10 parking spaces to have at least one chargepoint and cabling routes for one in five spaces. In addition, the Energy White Paper<sup>8</sup> published in October 2020 stated the government's intention for all new homes, where appropriate, to have a charge point available.

More recently the government has committed to end the sale of new petrol and diesel cars by 2030, and its Net Zero Strategy:Build Back Greener,<sup>9</sup> stated that regulations would be brought forward by the end of 2021 to enable 'Smart Charging' to help move demand for electricity away from peak times and help consumers benefit from lower cost off-peak electricity.

## **Southend Planning Policy**

Local planning authorities have a duty under Section 19(1)(a) of the 2004 Planning and Compulsory Purchase Act (as amended by the 2008 Planning Act) to ensure that, taken as a whole, local plan policy is designed to secure that the development and use of land in its administrative area contributes to the mitigation of, and adaptation to, climate change. Adopted development plan policies relating to electric vehicle charging points are set out below.

DPD Policy DM15 (Sustainable Transport Management) of the Development Management DPD<sup>10</sup> (2015) states "the provision of facilities for charging electric vehicles and other ultra-low emission vehicles will be encouraged wherever practical and feasible."

The Southend Central Seafront Area Action Plan (SCAAP) (2018)<sup>11</sup> Policy DS5 (Transport, Access and Public Realm) requires that developments within the SCAAP must "have regard to Policy DM15 of the Development Management Document, particularly in relation to sustainable transport measures, travel plans, transport assessments, parking standards and the provision of facilities for charging electric

<sup>&</sup>lt;sup>7</sup> Electric vehicle charging in residential and non-residential buildings (publishing.service.gov.uk)

<sup>&</sup>lt;sup>8</sup> Reducing emissions from road transport: Road to Zero Strategy - GOV.UK (www.gov.uk)

<sup>&</sup>lt;sup>9</sup> <u>Net Zero Strategy: Build Back Greener - October 2021 (publishing.service.gov.uk)</u>

<sup>&</sup>lt;sup>10</sup> <u>Development Management Document - Adopted – Development Management (DPD) – Southend-on-Sea</u> Borough Council

<sup>&</sup>lt;sup>11</sup> Southend Central Area Action Plan (SCAAP) – Southend-on-Sea Borough Council

vehicles and other ultra-low emission vehicles." This is an extensive area covering Southend High Street and its environs and the Central Seafront.

The Local Transport Plan 3 Implementation Plan<sup>12</sup> also states that the use of vehicles and modes that either emit low or zero levels of carbon dioxide, such as electric vehicles, bio-fuel etc will be promoted by both new developments and the Council.

A new local plan is being prepared and public consultation was carried out in Spring 2019 on an Issues and Options document. Consultation responses supported planning policies to the increase the use of electric vehicles in Southend as part of measures to mitigate and adapt to climate change.<sup>13</sup>

## Southend Electric Vehicle Strategy 2021-2030

Electric vehicles offer an excellent opportunity to address the declared climate emergency and ambition to achieve net zero emissions by 2030, and bring potential benefits to residents, businesses and visitors.

The Council wants to encourage the take up of EV amongst residents, including those without access to off-street car parking. The strategy provides the foundation to support a publicly accessible charging network which can be developed as and when funding opportunities become available, based on the following aims:

- Provide a sufficient and adequate charging infrastructure in place to support the anticipated growth in use of electric vehicles
- Ensure that renewable energy sources will be used for all charging points provided by the Council
- Assist in providing charging infrastructure to support at least a majority of all new cars in the Borough being electric by 2030
- Adopt electric vehicles for all service provisions and use in Council business and require use of electric vehicles through procurement policies for all business and sub-contractors
- Introduce electric vehicles through a 3 stage approach: car parks, forecourts and residential

It is the Council's ambition to use its own land where possible and to work with landowners to identify suitable locations to contribute to both strategic and local provision of charging points.

<sup>&</sup>lt;sup>12</sup> Microsoft Word - Implementation plan final March 2015 (southend.gov.uk)

<sup>&</sup>lt;sup>13</sup> Issues and options reports | Southend Local Plan

## EV charging infrastructure in new developments

#### **Residential Buildings**

Every new residential building with an associated car parking space to have a charge point (active provision). This requirement applies to buildings undergoing a material change of use to create a dwelling.

Where there are more than 10 car parking spaces associated with the building, a minimum of one charge point should be installed for each dwelling, with enabling infrastructure (passive provision) for each remaining space.

#### **Non-Residential Buildings**

A progressive standard is proposed for commercial developments, to reflect the Council's 2050 ambition to become a Green City and support use of electric vehicles. The standard will be gradually increased from adoption of the SPD up to 2025.

Table 1: requirements for non-residential buildings

| Requirement for non-              | Proportion of Active | Proportion of Passive |
|-----------------------------------|----------------------|-----------------------|
| residential redevelopments        | Spaces               | Spaces                |
| From adoption of SPD              | 20%                  | 80%                   |
| From 1 <sup>st</sup> January 2023 | 30%                  | 70%                   |
| From 1 <sup>st</sup> January 2025 | 40%                  | 60%                   |
|                                   |                      |                       |

#### **Active Provision and Passive Provision**

Active provision means an electric vehicle charge point with a minimum power rating output of 7kW, fitted with a universal socket that can charge all types of electric vehicle currently on the market and meet relevant safety and accessibility requirements.

Passive provision means ducting infrastructure to enable a future connection location for an electric vehicle charge point. A future connection location may be positioned to serve more than one parking space provided that the enabling infrastructure is adequate for the future installation of electric vehicle charge points which enable each space to be used simultaneously for recharging e.g., a charge point with multiple outlets).

#### Applying the standards

Applications for mixed use developments will be considered on a case-by-case basis but as a general principle where car parking is allocated solely in association with residential properties the residential standard will apply.

The Council will work with developers to encourage higher provision of EV charge points through planning conditions or legal agreements, and to develop an appropriate parking management strategy for the scheme, including trigger points for conversion of passive spaces over the longer term.

All car parking spaces designated for disabled parking should have an EV charge point.

All car club car parking spaces should have an EV charge point.

Where no car parking spaces are to be provided there is no requirement to install an electric vehicle charge point.

#### Example 1 – Residential development

A proposal for 2 dwellings and 4 car parking spaces will be required to provide 2 charge points.

#### Example 2 – Residential development

A proposal for 6 dwellings and 12 car parking spaces will be required to provide 6 charge points and passive provision for the remaining 6 spaces.

#### Example 3 – Non-Residential Development

A proposal for non-residential development with 18 car parking spaces will be required to provide:

4 EV charging points and 14 spaces with passive provision if permitted prior to  $1^{st}$  January 2023

5 EV charging points and 13 spaces with passive provision if scheme permitted between 1<sup>st</sup> January 2023 and 31<sup>st</sup> December 2024

7 EV charging points and 11 spaces with passive provision if scheme permitted after 1<sup>st</sup> January 2025.

| On adoption of       | 20% Active | 3.6 spaces | 80% Passive | 14.4  |
|----------------------|------------|------------|-------------|-------|
| SPD                  | Provision  |            | Provision   |       |
| From 1 <sup>st</sup> | 30% Active | 5.45       | 70% Passive | 12.55 |
| January 2023         | Provision  | spaces     | Provision   |       |
| From 1 <sup>st</sup> | 40% Active | 7.2 spaces | 60% Passive | 10.8  |
| January 2025         | Provision  |            | Provision   |       |

#### **Example 4 – Mixed Use Development**

A proposal for a restaurant with 6 car parking spaces and 2 residential units with 2 parking spaces will be required to provide:

| Standard             | Residential | Commercial |        |             |     |
|----------------------|-------------|------------|--------|-------------|-----|
| On adoption          | 2 EV        | 20% Active | 1.2    | 80% Passive | 4.8 |
| of SPD               | charging    | Provision  | spaces | Provision   |     |
|                      | points      |            |        |             |     |
| From 1 <sup>st</sup> | 2 EV        | 30% Active | 1.8    | 70% Passive | 4.2 |
| January 2023         | charging    | Provision  | spaces | Provision   |     |
|                      | points      |            |        |             |     |
| From 1 <sup>st</sup> | 2 EV        | 40% Active | 2.4    | 60% Passive | 3.6 |
| January 2025         | charging    | Provision  | spaces | Provision   |     |
|                      | points      |            |        |             |     |

2 residential EV charging points, 1 non-residential EV charging point and 5 spaces with passive provision if permitted prior to 1<sup>st</sup> January 2023

2 residential EV charging points, 2 non-residential EV charging points and 4 spaces with passive provision if scheme permitted between 1<sup>st</sup> January 2023 and 31<sup>st</sup> December 2024

2 residential EV charging points, 2 non-residential EV charging points and 4 spaces with passive provision if scheme permitted after 1<sup>st</sup> January 2025.

Note: Spaces should be rounded up to the nearest whole number e.g. 3.6 spaces would be rounded up to 4 spaces, 14.4 would be rounded down to 14 spaces.

This SPD should be read in conjunction with the parking standards set out in Appendix 6 to the Development Management DPD<sup>14</sup> (2015).

#### Use of on-site renewable energy generation for EV charging

Policy KP2 of the Southend Core Strategy (2007) seeks the reduction in the use of energy and other resources in new development and promotes on-site energy generation from renewable options and/or decentralised renewable or low carbon sources.

Policy DM2 of the Southend Development Management Document (2015) requires development proposals to contribute to minimising energy demand and carbon dioxide emission in accordance with the energy hierarchy. This includes conversions, extensions and/or alterations of existing buildings.

Where development schemes include on-site renewable energy generation, this should be harnessed to power any electric vehicle charging points provided, unless it can be clearly demonstrated that this is not technically feasible.

<sup>&</sup>lt;sup>14</sup> <u>Development Management Document - Adopted – Development Management (DPD) – Southend-on-Sea</u> <u>Borough Council</u>

## Figure 2: Frequently Asked Questions

| Questions   | Answers   |
|---|---|
| Is the new building a dwelling or a building containing dwellings?                      | If yes, the policy applies and the<br>number of charging points should be<br>calculated using the residential standard  |
| Does the building have at least one<br>associated parking space for the<br>dwelling(s)? | If no, the policy does not apply.   |
| What if the site can't accommodate any EV charging points for the car parking proposed? | The applicant will be required to<br>demonstrate that it is not technically<br>feasible to accommodate any EV<br>charge points required.  |
| What standards apply for mixed use development?   | Applications for mixed use<br>developments will be considered on a<br>case-by-case basis but as a general<br>principle where car parking is allocated<br>solely in association with residential<br>properties the residential standard will<br>apply to those spaces. |
| How will I calculate how many spaces are required for non-residential uses?             | Spaces should be rounded up to the<br>nearest whole number e.g., 3.6 spaces<br>would be rounded up to 4 spaces, 14.4<br>would be rounded down to 14 spaces  |
| What about car parking provision for disabled people?                                   | All car parking spaces designated for disabled parking should have an EV charge point.  |
| How do I know what standards will be applied for my non-residential development?        | The application will be determined in<br>relation to the standards in place on the<br>date the planning application is<br>approved, as set out in Table 1   |