

COMMITTEE	Communities Scrutiny Committee
DATE OF MEETING	5 October 2023
TITLE	Introducing public charging points for electric vehicles
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CABINET MEMBER	Councillor Dafydd Meurig
PURPOSE	Update Members of the Scrutiny Committee on the progress and plans for the introduction of public charging points

1. BACKGROUND

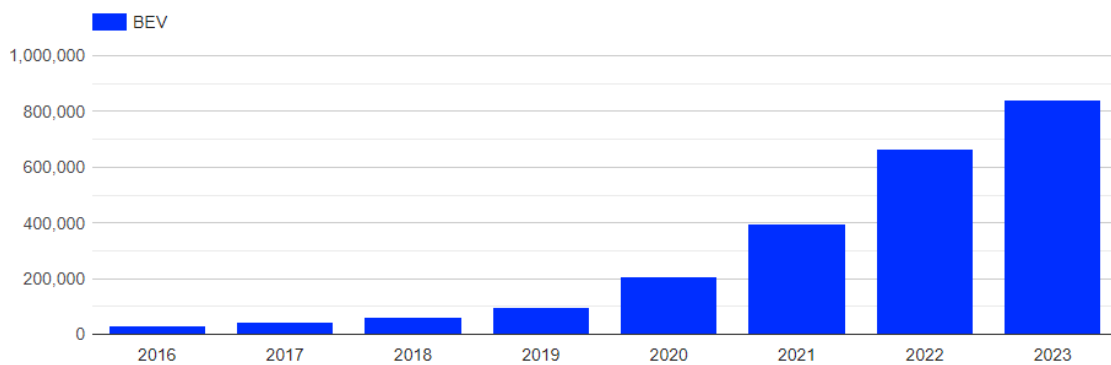
- 1.1 Providing a network of electric vehicle charging points for the residents of Gwynedd is one of the actions included in the Council's Climate and Nature Emergency Plan 2022/23 – 2029/30 which was adopted in March of last year.
- 1.2 The aim is to encourage sustainable travel in the county and facilitate the use of electric vehicles for local residents and visitors to the county to travel to all parts of Gwynedd.
- 1.3 The £1.3 million plan is funded through a contribution of £400,000 from the Council and £900,000 from the Welsh Government which contributes to the [Electric vehicle charging strategy for Wales](#).
- 1.4 The Council is developing a network of over a hundred charging points for electric vehicles across Gwynedd. The timeframe for the various charging points to become operational varies and a map showing where the charging stations are intended to be introduced in the county can be seen in Appendix A.

2. THE CURRENT CONTEXT

- 2.1 The UK Government has noted that the sale of new petrol and diesel vehicles will come to an end in future, with the latest deadline announced as 2035.
- 2.2 There is no doubt that this far-reaching change highlights the need to move towards de-carbonising the transport sector over the next few years.
- 2.3 Ensuring that there is a suitable provision of charging points that will meet the needs of the residents of Gwynedd and people who visit our communities is essential. It is, however, important to note that this is a significant change, the likes of which has not been seen for generations in the transport sector.
- 2.4 At the moment, there is a gap in the private provision of vehicle charging points in Gwynedd, and this reflects the situation in several rural areas throughout the country.

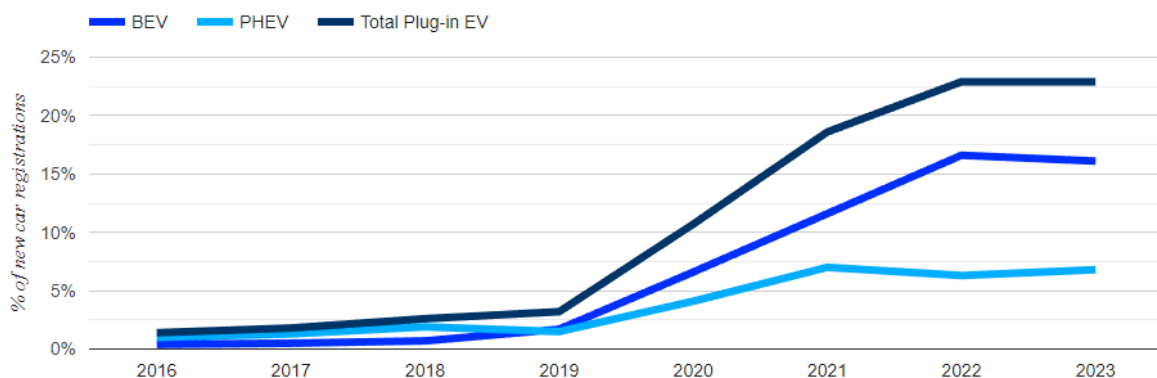
- 2.5 The work of providing charging points on Council sites aims to fill the gap, ensuring that there is suitable provision for the people of Gwynedd and those who travel through the county or visit for a period.
- 2.6 Figures recently published by the DVLA indicate that there were 2,956 low emission vehicles registered in Gwynedd in March 2023, which means that 4% of vehicles in the county are low emission ones. This shows an increase of over 80% compared to the previous year.
- 2.7 There has been a significant increase in the number of electric cars across the United Kingdom, and particularly so over the last two years as can be seen in figures by the Society of Motor Manufacturers and Traders (SMMT) in Figure 1.

Figure 1: Number of electric cars (BEV) on roads in UK (July 2023)



- 2.8 When considering the use of electric and hybrid vehicles, it can now be seen that these vehicles account for almost a quarter of new vehicles that are registered in the UK, which is a significant increase over the last five years.

Figure 2: Percentage of new cars that are electric (BEV) and hybrid cars (PHEV - plug in) registered in the United Kingdom.



- 2.9 There are three main aspects to introducing charging points: charging at home, charging on the road or charging at destinations or workplaces.

- 2.10 According to a recent survey, 93% of current electric vehicle drivers can charge their car at home overnight. Of course, it is much more convenient for a resident who has an appropriate off-road space to charge their vehicle, but a comprehensive strategy will need to be adopted to ensure that a resident without a parking space is able to charge overnight.
- 2.11 When undertaking a long journey beyond the county, it may be necessary to charge the electric vehicle on the way. To address that need, the Council has collaborated with Transport for Wales to develop a work programme to introduce a series of rapid charging points, with power of 50KW, in several locations throughout the county.
- 2.12 While visitors or residents are visiting a destination or attending the workplace, the time when the vehicle is idle can be used to recharge. For this purpose, the Council has identified several locations across the county where it is possible to introduce provision in areas where it is anticipated that there will be a demand for that service.

3. PROGRESS TO DATE

- 3.1 The Council carried out an engagement exercise to receive observations from residents about locations where they would like to see charging points being introduced for public use.
- 3.2 In addition, the Council collaborated with Scottish Power to identify the places where charging points could be installed over the next few years. The information gathered has helped with the work of deciding on a network of charging points, taking into consideration where the demand and need for them is high.
- 3.3 The intention is to introduce over 100 charging points in public car parks or on land for which the Council is responsible. A total of 25 sites have been identified on the programme which includes sites where the Council has been working closely with Transport for Wales to introduce the service.
- 3.4 A variety of charging point types are being provided to meet the diverse needs of electric vehicle users – 7kW (3.5 hours*), 50kW (40 minutes*), 150kW (15 minutes*). **Estimated charging time to travel 100 miles.*
- 3.5 The Council uses the expertise of our street lighting service to install the chargers but is dependent on specialist providers to ensure that the charging points are connected and ready for the public to use. There has been some delay in some locations to connect the chargers to the supply and receive a relevant certificate to confirm that the charger can be used by the public.
- 3.6 Work is proceeding to provide the network of charging points and officers are discussing with providers to try to ensure that the chargers are operational as soon as possible. As the situation varies in different sites, the timeframe for the chargers to be operational differs.

- 3.7 Before a charging point becomes operational, work must be undertaken to install an electricity supply and meter, to secure an electrical certificate and the necessary commissioning work required. Work continues with the suppliers to ensure that all sites are operational as soon as possible with an outline of the latest timeframe for each location to be found in Appendix 2.
- 3.8 At the moment, 16 public charging points (7kW) are operational by the Council in 4 workplace or destination locations (Dolgellau, Bala, Pwllheli and Intec Bangor), with the intention of 6 other sites becoming operational during the autumn.
- 3.9 In addition, 7 chargers (50kW) have been installed at 4 other Council sites (Bala, Dolgellau, Blaenau Ffestiniog and Porthmadog) in collaboration with Transport for Wales. These chargers allow electric vehicle users to charge during a journey.
- 3.10 Therefore, of the 25 sites that are scheduled for the installation of charging points, chargers have been installed in 16 of them to date, with machines operational in 8 of the sites.

4. INITIAL RESPONSE

- 4.1 Although it is early days in terms of the use of the charging points, there is an effort to secure user feedback to be able to monitor and consider any requirements to improve for the future.
- 4.2 The response so far to the 50kW charging points that have been installed in collaboration with Transport for Wales is positive, with each of them displaying feedback of 4.5 out of 5.
- 4.3 Over the summer, there has been positive use of the rapid chargers, with figures showing 1,311 uses of the chargers by 111 different users between 26 July and 25 August. This equated to 18.3 tonnes of carbon savings.
- 4.4 There is not as much specific feedback so far on the 7kW charging points which became operational during the summer holidays. However, some comments indicate that there is a lack of facility to pay by card as the provision is currently only by a smartphone app.
- 4.5 This is a matter that the Council is discussing with the company that has installed the charging points to make the experience as easy as possible for the users. At present, it is only possible to use and pay for the service by using a smartphone app and officers are keen to expand the capacity for users to be able to pay by also using a bank card.
- 4.6 There is a dedicated page on the Council's website www.gwynedd.llyw.cymru/charging outlining the charging points and will work will take place to update the information and promote the facilities as more charging points become operational.

5. THE NEXT STEPS

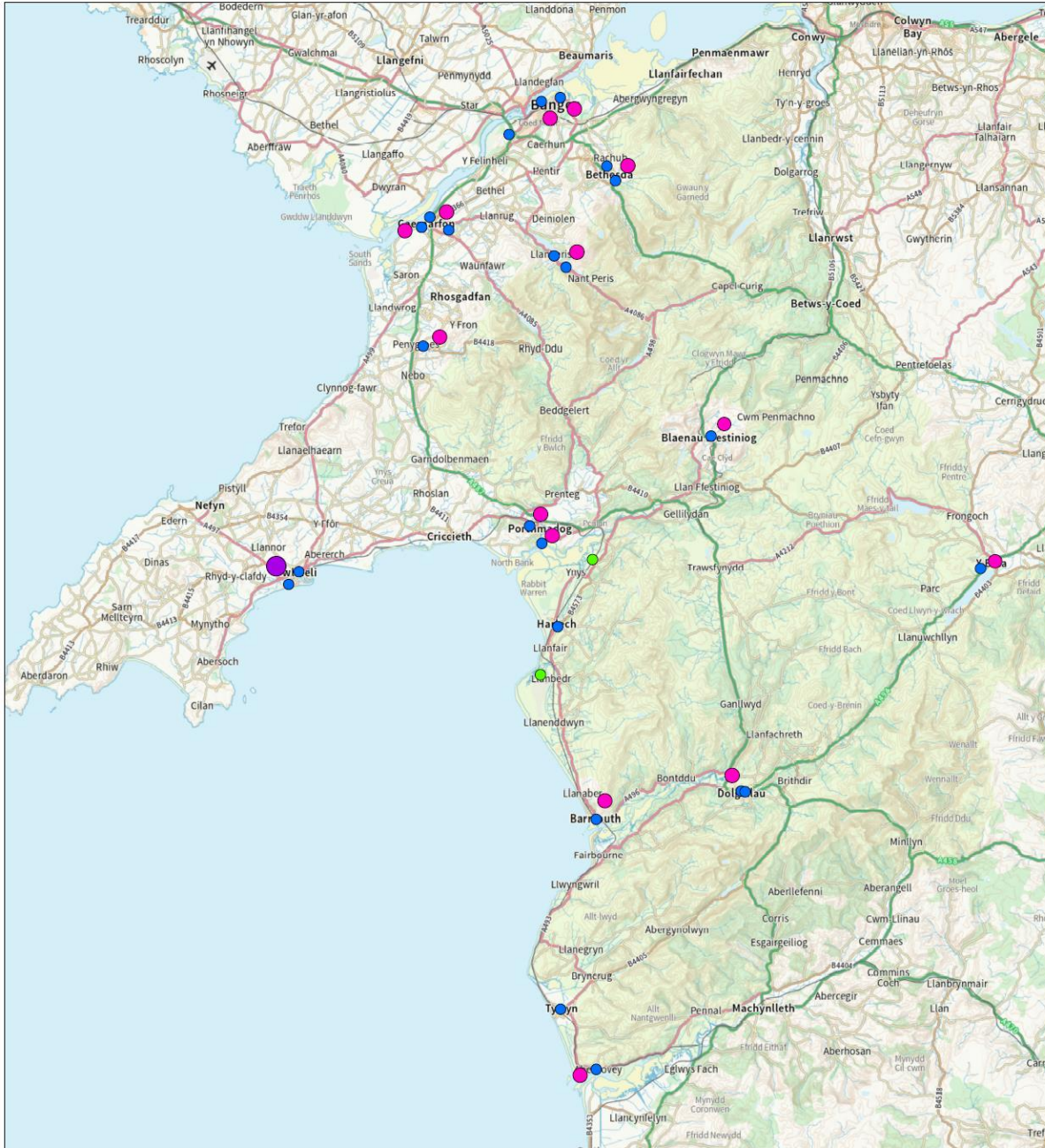
- 5.1 Work will continue with the current programme to introduce more charging points in locations across the county over the next few months as outlined in the programme in Appendix 2.
- 5.2 We will also begin work to consider the strategy for home charging, identifying what are the main obstacles for Gwynedd residents to charge their cars from home, and will collaborate with communities to identify the need for a charging service within their communities.
- 5.3 Of course, beyond the charging provision that the Council offers, there are options from other providers, including the private sector.
- 5.4 As has been noted, at present the charging points offered by the private sector without the cooperation of the public sector are slow to develop.
- 5.5 We are currently focused on developing a network of charging points on Council lands. However, we will monitor any developments by private businesses to consider the need to offer more charging points, and whether there is potential to collaborate with the private sector and any other potential partners in the future.
- 5.6 As part of the work of installing the charging point network in public car parks, officers will also consider payment arrangements for the service and attempt to ensure that using the Council's machines is as easy as possible for the users.
- 5.7 We are also working closely with the Council's Property Service to identify the capacity to introduce charging stations for Cyngor Gwynedd staff with locations in Ffordd y Cob, Pwllheli; Penarlâg, Dolgellau and the Headquarters in Caernarfon, under consideration.

6. TO CONCLUDE

- 6.1 The report is submitted to the Communities Scrutiny Committee as an update on the work that has been achieved thus far in developing a charging point network, and what is planned over the next period.

Appendix A

Rhwydwaith Gwefru Gwynedd Gwynedd's Electric Charging Network



- 150KW Charging Point (15min*)
Pwyntiau Gwefru 150kW (15mun*)
- Bwyntiau Gwefru 50kW (40mun*)
50KW Charging Point (40min*)
- Bwyntiau Gwefru 7kW (4 awr*)
7KW Charging Point (4 awr*)

* Amcan amser gwefru i drafaelio 100milltr/ Estimated charging time to travel 100miles



Appendix B – Gwynedd charging locations

Site	Area	Estimated charger switch on time	Number of 7kW Charging Points (3.5 hours*)	Number of 50kW Charging Points (40 minutes*)	Number of 150kW Charging Points (15 minutes*)	Installing the Charger	Action			
							Electricity Supply	Electricity Meter	Electrical Certificate	Commissioning the Charger
Intec, Parc Menai	Bangor	Operational (App only)	4			✓	✓	✓	✓	✓
Ger-y-Llyn Car Park	Llanberis	To be confirmed	4			✓	✗	✗	✗	✗
Arfon Leisure Centre	Caernarfon	October 2023	2	1		✓	✓	✓	✓	✗
Shell Site Car Park	Caernarfon	October 2023	8			✓	✗	✗	✗	✗
Dwyfor Leisure Centre	Pwllheli	Operational (App only)	4			✓	✓	✓	✓	✓
Penmount Car Park	Pwllheli	October 2023	4			✓	✓	✗	✗	✗
Penllyn Leisure Centre	Bala	Operational (App only)	4			✓	✓	✓	✓	✓
Glan Wnion Leisure Centre	Dolgellau	Operational (App only)	4			✓	✓	✓	✓	✓
Bro Dysynni Leisure Centre	Tywyn	October 2023	4			✓	✓	✓	✓	✗
Y Marian Car Park	Dolgellau	Operational (50kW)				✓	✓	✓	✓	✓
		October 2023 (7kW)	4	2		✓	✗	✗	✗	✗
Main Car Park, Aberdyfi	Aberdyfi	To be confirmed	4	1		✓	✗	✗	✗	✗
Bron-y-Graig Uchaf	Harlech	October 2023	4			✓	✓	✗	✗	✗
Diffwys Car Park	Blaenau Ffestiniog	Operational (50kW)				✓	✓	✓	✓	✓
		December 2023 (7kW)	4	2		✓	✗	✗	✗	✗

Bangor Swimming Pool	Bangor	December 2023	2	1		x	✓	✓	x	x
Plas Ffrancon Leisure Centre	Bethesda	February 2024				x	✓	✓	x	x
			2	1						
Kyffin Square Car Park	Bangor	December 2023	4	1		x	✓	x	x	x
Pant Dreiniog Car Park	Bethesda	<i>To be confirmed</i>	2	1		x	x	x	x	x
Dolbadarn Car Park	Llanberis	<i>To be confirmed</i>	6	2		x	x	x	x	x
Balaclava Road Car Park	Caernarfon	December 2023		2		x	x	x	x	x
Glaslyn Leisure Centre	Porthmadog	Operational		2		✓	✓	✓	✓	✓
Llyn Bach Car Park	Porthmadog	<i>To be confirmed</i>	4	1		x	x	x	x	x
Cardiff Road Car Park	Pwllheli	March 2024			2	x	x	x	x	x
Main Car Park, Barmouth	Barmouth	October 2023	8	2		✓	✓	✓	x	x
Plas Silyn Leisure Centre	Penygroes	February 2024	2	1		x	✓	✓	x	x
The Green Car Park	Bala	Operational		1		✓	✓	✓	✓	✓

*Estimated charging time to travel 100 miles.