

Title of meeting: Traffic and Transportation Decision Meeting

Date of meeting: 2 December 2021

Subject: On-Street Residential Chargepoint Scheme - Phase 1 end of

trial review

Report by: Tristan Samuels, Director of Regeneration

Wards affected: Central Southsea, Copnor, Drayton & Farlington, Eastney &

Craneswater, Fratton, Hilsea, Milton, Nelson, St Jude, St

Thomas.

Key decision: No

Full Council decision: No

1. Purpose of report

1.1. To provide an end of trial review on the first phase of the On-Street Residential Chargepoint Scheme (ORCS) and recommendations for next steps.

2. Recommendations

It is recommended that the Cabinet Member for Traffic and Transportation:

- 2.1. Approves the extension of the current contract with ubitricity for a period of up to three years) from expiry of the existing contract on 5 March 2022, with authority delegated to the Director of Regeneration to finalise the details of any changes to current terms working closely with finance, procurement and legal;
- 2.2. Approves that the chargepoint infrastructure, which has been identified with current low usage, should be the subject of marketing and promotional activity with a review in six months to determine their future.

3. Background

3.1. In October 2021 a new Portsmouth Transport Strategy (Local Transport Plan 4) was adopted by Full Council¹, setting out the strategic direction for all forms of

¹ https://travel.portsmouth.gov.uk/wp-content/uploads/2021/10/Local-Transport-Plan-2021.pdf



transport in the city over the next seventeen years. One of the strategic objectives of this forward-thinking strategy is to Deliver Cleaner Air and Policy B - Support infrastructure for alternatively fuelled vehicles - demonstrating the need and ambition for delivering electric vehicle (EV) infrastructure.

- 3.2. EV infrastructure provision supports the vision of Imagine Portsmouth² and having a city with easy travel providing EV infrastructure at residents' homes allows them to conveniently charge their vehicles overnight.
- 3.3. The need to deliver infrastructure for lower emission and zero tailpipe emissions, as outlined in the Portsmouth Transport Strategy is urgent. Air pollution continues to be the largest risk to environmental health in the UK. Epidemiological studies have shown that long- term exposure to air pollution reduces life expectancy and exasperates pre-existing conditions such as respiratory and cardiovascular diseases. In Portsmouth in 2018, around 117 premature deaths were attributable to particulate air pollution³.
- 3.4. Due to ongoing high concentrations of nitrogen dioxide Portsmouth City Council (PCC) has been issued with ministerial directions from central government requiring the authority to take measures to bring air pollution to within legal limits in the shortest possible time. The targeted feasibility study carried out, outlined a combination of measures, which would bring forward compliance, one of which was the rollout of electric vehicle charging points.
- 3.5. Furthermore, the UK government recently released a new 'Transport decarbonisation plan' in July 2021⁴. The plan aims to phase out the sale of new diesel and petrol cars by 2030 (as previously published in a delivery plan setting out key milestones in 2021)⁵. and encourages the uptake of electric vehicles (EV) to meet the demand for the users of the UKs charging infrastructure network and to be on a pathway to achieving net zero emissions from the UK car fleet. As also detailed in the governments 'Ten Point Plan for a Green Industrial Revolution', supporting point 4, which is to accelerate the shift to zero emission for vehicles.
- 3.6. To facilitate the progress in the UK's charging infrastructure and improvement towards air quality, the Office for Zero Emission Vehicles (OZEV) formerly known as the Office for Low Emission Vehicles (OLEV), awarded Portsmouth £100K funding towards 75% of the costs to install 36 chargepoints in residential areas through their On-street Residential Chargepoint Scheme (ORCS). OZEV created the fund specifically for residential areas that do not benefit from off-street parking, to enable residents to charge their electric vehicles close to their home, with the purpose of increasing uptake in electric vehicle use. The grant

² https://imagineportsmouth.co.uk/

https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/

⁴ https://www.gov.uk/government/publications/transport-decarbonisation-plan

⁵https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/936567/10_POINT_PLAN_BOOKLET.pdf



funding requires the chargepoints to remain in place for a period of three years until the 5th March 2022.

- 3.7. Building upon Phase 1 of Portsmouth's ORCS, Phase 2 will see a further 62 chargepoints installed in residential areas in winter 2021. These are being delivered with the supplier Joju due to the length in time required to resolve contractual issues with ubitricity at that time.
- 3.8. Residents will be able to use both supplier's charge points as both use standard UK type 2 cables. Type 2 charging cables are the European-standard-plug type used by every new electric car to plug into home wall boxes and most public car chargers. Users would need to access the specific chargepoint following the instructions on the chargepoint.
- 3.9. A further bid for OZEV funding for around 120 chargepoints is being developed for a phase 3 of the scheme. These additional phases are based on residential demand, and the need to continue EV infrastructure roll-out to meet the demand and provide for residents who do not have the benefit of off-street EV charging at home.
- 3.10. Approximately ten rapid chargers for taxis and private hire vehicles (PHVs) are also planned to be installed in early 2022 as approved at Cabinet on 2 November 2021⁶.
- 3.11. Early investigations are underway for the provision of electric vehicle charging infrastructure in council owned off-street car parks following the trial of fast 7kw chargepoints in three pay and display car parks in the city.

4. Portsmouth ORCS Phase 1

- 4.1. All chargepoint locations were selected based on resident requests with differing electric vehicle ownership status. Some residents already owned EVs, some were planning to purchase one as soon as the infrastructure was in place and others would take longer but within the timeframe of the trial from the 5th March 2019 to the 5th March 2022.
- 4.2. The solution brought forward by Portsmouth City Council utilised lamp column electricity supply with the benefits of this solution including:
 - Lower purchase and installation costs than free standing charge points
 - Minimal street clutter and more aesthetically pleasing than other solutions
 - No noise emission from the chargepoint

⁶ Agenda for Cabinet on Tuesday, 2nd November, 2021, 12.00 pm Portsmouth City Council



- Lamp column charge points are easily removed and relocated, should the demand change within the existing area.
- 4.3. The spare capacity within the lamp column electricity supply allows for the chargepoints to provide approximately 5.5kw of electricity for which an average charge cycle for a battery electric vehicle could be expected in six hours (compared to three to four hours for fast or 30 minutes for rapid chargers). Charging times for plugin hybrid vehicles will be less, as the battery size is smaller. With this lower power output, the chargepoints are ideal for residential overnight charging.
- 4.4. The lamp column solution with a lower power output and its current amperage only allows for single chargepoints. It is not currently possible for two vehicles to be plugged in at any one time to distribute multiple charges from one charge point.
- 4.5. At the meeting of the Cabinet Member for Traffic and Transportation on 23rd November 2017⁷, it was approved for designated parking bays to accompany electric vehicle charging infrastructure to ensure that EV users could access the chargepoints.
- 4.6. At the time of installation, not all bays were marked with designated parking bays on the road, as not all requesting residents had purchased their electric vehicle.
- 4.7. The trial has provided chargepoints for both existing EV owners and those with existing plans to convert. It is also thought that there are some residents who never considered an electric vehicle a viable option due to lack of charging infrastructure but found it became an option once infrastructure was installed in their neighbourhood.
- 4.8. On the 24th of January 2019 Traffic & Transportation meeting⁸, approval was given for the installation of charge points. These were installed in March 2019, and a list of locations is provided in Appendix A.
- 4.9. Usage of the chargepoints is monitored across the three-year trial period with the back-office system providing time and duration of both plug in and charging activity and energy consumed at each location. This enables us to understand the utilisation of the chargepoints. It is hoped that installation of electric vehicle charging points will encourage and enable local residents to make the change from their regular petrol or diesel vehicle.

⁷ https://democracy.portsmouth.gov.uk/documents/s17025/Designated Parking Bays.pdf

⁸ https://democracy.portsmouth.gov.uk/documents/s21455/Electric%20Vehicles%20on-street%20residential%20chargepoint%20scheme%20-%20TRO%20120%202018%20report.pdf



- 4.10. The data shows overall high usage of charging infrastructure demonstrating the success of the scheme, which at the time of writing this report had seen 31 full months of operation. Usage statistics are outlined in section five of the report.
- 4.11. The contract with ubitricity for the three-year trial expires on 5th March 2022 and can be extended for up to three years on the same terms and conditions.
- 4.12. In November 2019 Portsmouth City Council were nationally recognised for the scheme winning the E-Mobility progress award in the TRANStech Awards, demonstrating it is innovation and trailblazing approach to electric vehicle charging solutions with the only, pay as you go, lamp-column based on-street resident charging solution, benefitting from designated parking pays.
- 4.13. Scheme improvements which have been made are:
 - Bay marking size was increased to accommodate larger electric vehicles.
 - Supplier customer service improvements have been made and will continue to be reviewed.
- 4.14. Scheme improvements that could be considered in the future include:
 - Marketing and promotion of low usage sites.
 - All aspects of ad-hoc maintenance issues and procedures should be more clearly set out and reviewed.

5. Usage data

5.1. The following section outlines the usage data to date. Tables 1 and 2 show the number of charges and kwh of energy consumption respectively since the installation of the first phase in March 2019. It can be seen there has been a monthly increase until the National Lockdown where levels decrease from March 2020. Following the lifting of restrictions monthly levels in 2021 have increased again with most recent data in September 2021 showing a 24% increase in charges, and 35% increase in kwh of energy used from the previous month of August 2021.



Table 1. Combined total number of charges per month from 2019-2022

	2019/20	2020/21	2021/22	% increase in no. of charges from 2019/20-2021/22
Month	No. of charges	No. of charges	No. of charges	
March	*	384	486	*
April	123	125	530	331%
May	235	241	572	143%
June	254	260	532	109%
July	300	353	562	87%
August	320	374	578	81%
Septembe r	301	398	729	142%
October	355	440	741	109%
November	429	384	-	-
December	419	491	-	-
January	465	430	-	-
February	429	378	-	-
Total	3630	4258	4730	

Table 2. Combined total kwh usage per month from 2019-2022

	2019/20	2020/21	2021/22	% Increase in kwh usage from 2019/20- 2021/22
%Month	kwh usage	kwh usage	kwh usage	
March	*	3,337	5,732	*
April	1,198	830	6,758	464%
May	2,066	1,880	7,804	278%
June	2,230	2,585	7,494	236%
July	2,995	3,770	7,958	166%
August	3,406	4,717	8,557	151%
Septembe r	3,112	5,537	11,806	279%
October	4,052	5,763	12,117	199%
November	4,674	4,751	-	
December	4,266	6,372	-	-
January	4,421	5,124	-	-
February	4,732	4,152	-	-
TOTAL	37,152	48,818	68,226	



- * Data was not available for March 2019 due to installations not completing until later in the month, data usage was captured from April onwards.
- 5.2. The data usage shows a continued increase in usage month on month demonstrating continued demand and uptake of residential EV charging in Portsmouth.
- 5.3. The chargepoints can be categorised in four ways;
 - High occupancy and high energy consumption these are the most critical chargepoints often used by high mileage drivers
 - Low occupancy and high energy consumption these are often used by high mileage drivers
 - High occupancy and low energy consumption these charge points have cars plugged in much longer than necessary (overstaying)
 - Low occupancy and low energy consumption these show areas with low demand, with no or few EVs
- 5.4. Figures 1 and 2 below show the top usage sites from the trial. All sites are be broken down individually for the number of total charges and total energy consumed (kwh) used in Appendix B.



Figure 1 - top five locations for total energy consumed (kwh) over the three trial years to date

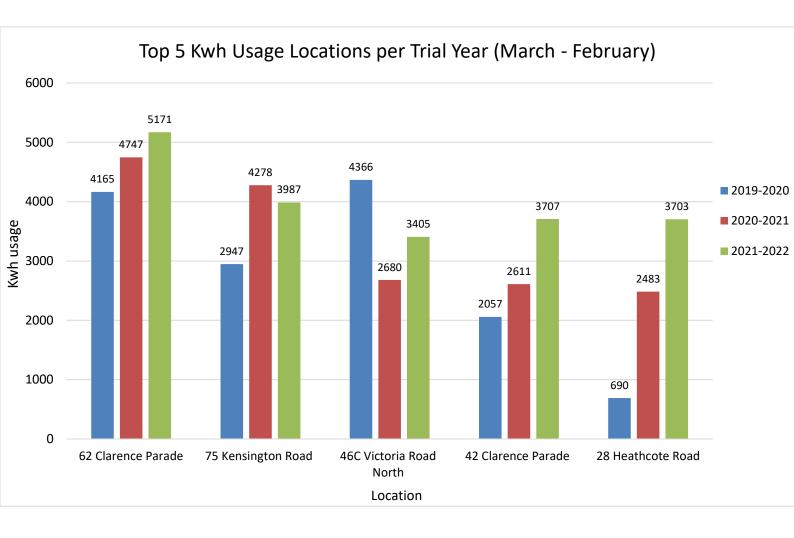
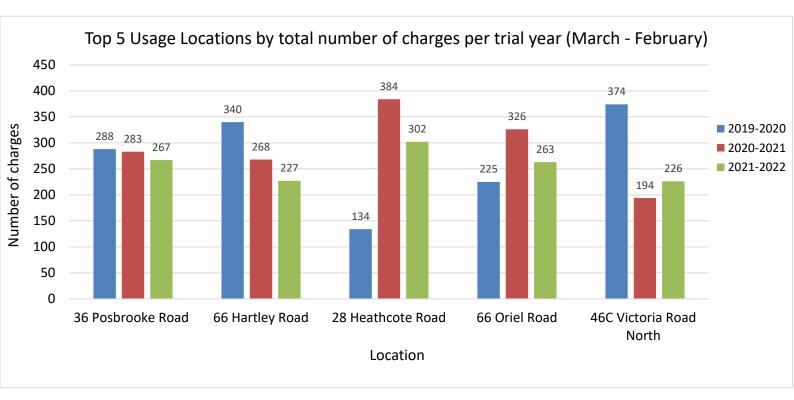




Figure 2 - top five locations for number of charges over the three trial years to date



- 5.5. From Figure 1 it can be seen that the site with the highest level of energy consumption is 62 Clarence Parade with a total of 14,083 kwh used over the trial to date. Furthermore, 4 out 5 sites have surpassed their energy consumption total from the previous trial year, which either shows that existing EVs in these areas are driving more miles and needing higher levels of charging, or there has been an increase in the number of EVs in these areas.
- 5.6. From Figure 2 it can be seen that to date, over the three-year trial period, 28 Heathcote Road has seen the greatest number of charging events in one trial year receiving 384 in 2020-2021. Heathcote Road continues this trend of having the highest number of charges in the current trial year of 2021-2022 with 302 charges. However, in trial year 2021-2022 there is a greater equal distribution of number of charges for the top five locations with the second highest number of chargepoints being 36 Posbrooke Road with 267 charges.
- 5.7. Figure 2 shows, for 2021-2022, there is already one site (46C Victoria Road North) which has surpassed their total number of charges for 2021-2022 with those from 2020-2021. Furthermore, 66 Oriel Road, 66 Hartley Road and 36 Posbrooke Road are both looking likely to surpass their total number of charges from 2020-2021 in 2021-2022. Albeit there were national lockdowns in 2020-2021, this data does show that more EVs are being charged or existing ones are being charged more frequently, which shows an improved utilisation year on year.



- 5.8. By comparison of Figure 1 energy consumed and Figure 2 number of charging events, you can see that only two sites appear in both, thus demonstrating that there is a level of overstaying with vehicles recording a charge event through plugging in their vehicles without always drawing much electricity.
- 5.9. Overall, the most utilised and effective charge point over the trial scheme has been 46C Victoria Road North, as it lies within the top 5 locations both for number of charges and energy consumed, this demonstrates likely high mileage drivers in this area and a chargepoint which is most critical for residents' use. In comparison, it has seen 3575Kwh extra usage to 28 Heathcote Road, which also appears in the top 5 locations for number of charges and energy consumed.

Figure 3 - Bottom five locations for total energy consumed (kwh) over the three trial years to date

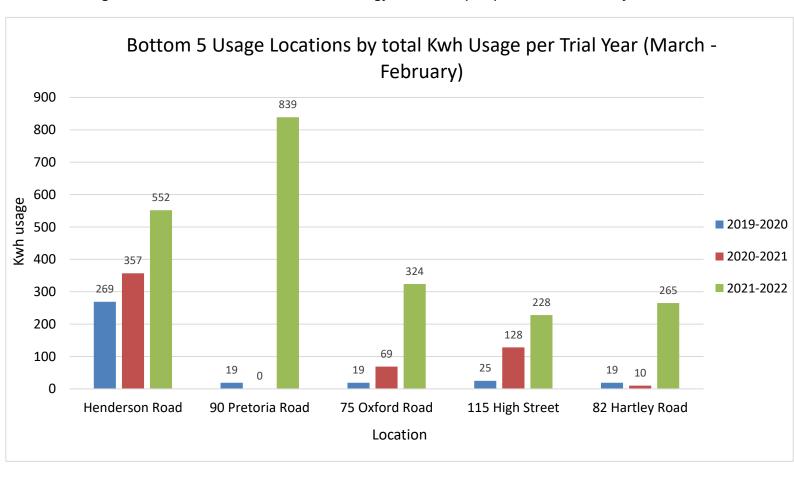
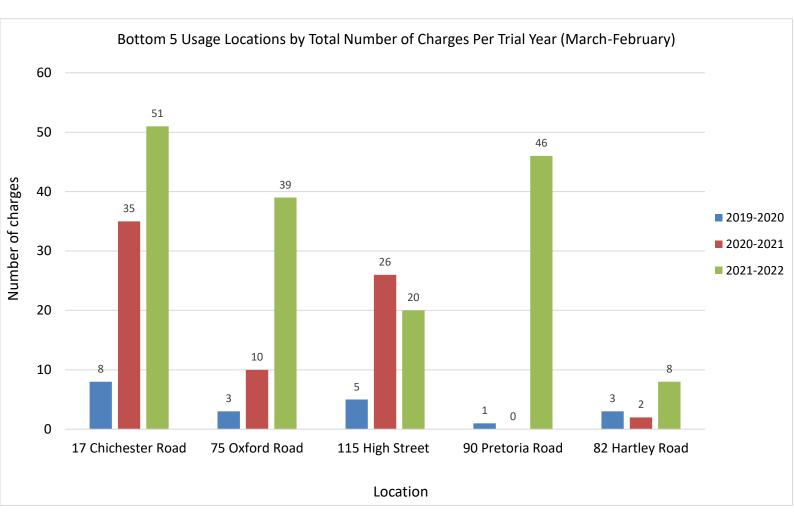




Figure 4 - bottom five locations for number of charges over the three years to date



- 5.10. Reviewing the data from Figure 4, 82 Hartley Road has the lowest number of overall charges over the three trial years so far (13). This may have been caused because of the exclusion of a designated parking bay which was not put in place due to no residents purchasing an EV or requiring the chargepoint parking bay to be marked out (at the time of writing this report), which has made accessing it difficult. Pretoria Road and 102 Oriel Road parking bays were not marked until February 2021 following resident requests. Other locations in the trial were not all marked at scheme launch but were subsequently when demand was identified through resident request. Furthermore, two locations also do not have their bays marked due to the chargers being accessed by residents with disabled bays. These locations are 58 Glencoe Road and 55 Warren Avenue with the chargepoint located at the end of the bay, so it can be accessed from the adjacent space by other users, although there has been no demand to mark a designated electric vehicle space in addition.
- 5.11. It is evident from Figure 4 that although the number of charges is low in comparison to other sites, four of the five sites have surpassed their total number of charges from the previous two trial years. This suggests usage for



2021-2022 is improving at these locations and supports our recommendation of promoting these low usage sites further, as there are residents who are using these charge points more frequently now, rather than relocating or removing the chargepoints.

- 5.12. Figure 3 highlights that the locations also found on Figure 4, have seen an increase in energy consumption in the latest trial year, which shows these chargepoints are becoming utilised more with overstaying less.
- 5.13. Appendix C shows the number of overstays (when a car has remained plugged in for more than an hour after charging has finished, during the day (when it would be reasonable for a resident to move their vehicle) from 8am to 8pm) against the number of full charges from the 2019 2021
- 5.14. From Appendix C (Figure 3), it is apparent that approximately half of the vehicles charging are overstaying during daytime hours (8am to 8pm) when it would be considered reasonable for a resident to move their vehicle if charging was complete.
- 5.15. In some locations where the resident is the only EV owner in the area, this approach to remaining parked in the EV bay avoids exacerbating existing parking congestion issues. It is noted that in the future there is likely to be an increase in EV take up and multiple residents may require access to some of these chargepoints. Each location with overstay issues will be investigated further and we will work with the residents to ensure there is equitable access to all chargepoints. If required financial disincentives to overstaying could be applied.

6. CO2e (carbon dioxide equivalent) savings

- 6.1. Calculations have been made using the assumption that an average electric vehicle can travel approximately 4 miles (6.6 km) on 1Kwh of battery charge. It should be noted that there are a lot of variabilities in distance able to be travelled depending on many factors including vehicle type and journey type (local roads/ motorway).
- 6.2. Over the 3 trial years it has been calculated that approximately 122.7 tonnes of CO2e has been saved by electric vehicles utilising the chargepoints broken down by years as follows;
 - Trial year 2019/20 = approx. 29.7 tonnes of CO2e saved
 - Trial year 2020/21 = approx..38.4 tonnes of CO2e saved
 - Trial year 2021/22 (to date) = approx. 54.6 tonnes of CO2e saved



7. End of trial - options for consideration

- 7.1. Option 1: Extending the current contract with ubitricity
 - 7.1.1 This option would see the current contract with ubitricity extended by up to 3 years.
 - 7.1.2 The contract outlines that no later than three (3) months before the end of the Contract Period the parties may agree in writing to extend the Contract Period by a further period or periods of up to three (3) years (an "Extension") provided that the total Contract Period does not exceed six (6) years. Any such Extension shall be on the same terms and conditions and at the same rates as under this Contract save for any renegotiation of the Contract Price between the parties which shall be subject to the Public Contract Regulations and any other applicable Laws.
 - 7.1.3 Whilst the contract must remain on largely the same terms following lessons learnt the following amendments should be considered.

Tariffs

Due to change in legislation the smart cable solution, which was required at tender stage, is no longer essential and ubitricity are phasing this out in the UK. The promotional tariffs available through the smart cable will come to an end. ubitricity charge points can now be used via the Shell recharge app which means account-based billing is still possible and can be developed further to provide an alternative solution to PAY-G.

Any proposals to alter tariffs would need to be carefully considered. Joju are launching Phase 2 of the scheme in November and have committed to meeting the current ubitricity tariff rates to ensure equity for residents who are not then subjected to a post-code lottery in terms of rates paid. It is however noted that the energy market is currently in a challenging state and discussions with ubitricity on any change in existing tariffs would need to be undertaken as priority.

Currently PCC do not receive any revenue share from the chargepoints in order to keep the tariffs low for residents. Whilst this could be considered it is likely due to the current energy market situation this would remain the same in order to continue matching the current tariffs in the city.

Servicing and maintenance

Annual servicing and electrical certification are currently undertaken by ubitricity at a cost of £100 per charge point per year, totalling £3,600 a year, from council revenue funds. This covers the necessary electrical safety checks and annual servicing of the equipment.



The chargepoints have been under warranty, for the duration of the trial, which expires at the end of the three-year trial.

Ad-hoc maintenance issues are dealt with on a case-by-case basis as they arise and paid for by the council. There is currently no detail of call out rates or other maintenance costs in the contract and this would need to be added in any contract extension to avoid any disputes as maintenance incidents arose.

Consideration should be made as to whether as the sole recipient of income ubitricity should meet in part or full the servicing and maintenance costs, however, it should also be considered that the tariffs for residents would likely be impacted in relation to this with either a plug-in fee applied or higher overall tariffs which would not align with Phase 2 pricing.

All aspects of ad-hoc maintenance issues and procedures should be more clearly set out and reviewed in any contract extension.

Customer service

Supplier customer service improvements have been made and will continue to be reviewed.

The current contract does not include any key performance indicators (KPIs) in relation to customer service and as such potential KPI's may want to be discussed and added to the contract extension.

Low usage sites

Marketing and promotion of low usage sites should be a consideration in any contract extension. With the ability to remove or relocate any that do not have a significant increase in usage after an agreed time period.

- 7.1.4 ubitricity have previously requested novation of the existing contract from the German to UK arm of ubitricity. The UK team currently manage day-to-day operations of the contract. The council was not able to take the novation forward at that time due to lack of assurance through company accounts. Any novation request could be considered again, and we understand the company is now a wholly owned subsidiary of the Shell group. Alternatively, ubitricity is happy that the contract can be extended further with the German company.
- 7.1.5 Notice of the contract extension would be required by 5th December 2021 and it is anticipated that processes to extend the contract would take up to 3 months meaning a contract extension could be in place by the end of trial on 5th March 2022.



- 7.1.6 This option would not incur any additional capital costs, through making use of the existing infrastructure through the same supplier.
- 7.1.7 This option would maintain the provision of electric vehicle infrastructure for Portsmouth residents, and with a consistent supplier, which is shown to be well used and meets the objectives of the Portsmouth Transport Strategy.
- 7.2. Option 2: Appoint a new supplier to manage and maintain the existing chargepoint infrastructure
 - 7.2.1 This option considers utilising another supplier to manage and maintain the existing phase 1 chargepoint infrastructure, which is owned by PCC.
 - 7.2.2 The current contract does not set out anything that does or doesn't allow for this.
 - 7.2.3 The equipment is open charge point protocol (OCPP) and as such is compatible to be absorbed by any software (from any supplier) to continue the use of charge points. OCPP is an application protocol between electric vehicle charging stations and a central management system. Other data layers such as the UMS billing are also understood to be compatible with other suppliers, however it is understood to be a potentially complex process in converting any equipment.
 - 7.2.4 If a new supplier was appointed, it is anticipated that there could be a gap in service between the chargepoints being switched off by ubitricity and commencement with a new supplier.
 - 7.2.5 Financial costs of this option are relatively unknown as to whether there would need to be any infrastructure upgrades made by any new supplier. If a new supplier was to install all new infrastructure this is estimated to be over £190k including installation and 3 years servicing and certification. Any costs would need to be fully funded by the council as OZEV are unlikely to provide a second grant for the same locations.
 - 7.2.6 Attractive user tariffs would also need to be negotiated with a new supplier alongside future maintenance cost.
- 7.3. Option 3: Remove all phase 1 charge points
 - 7.3.1 This option considers ending the current trial and the chargepoint provision.
 - 7.3.2 Implications of terminating the phase 1 contracts means current Portsmouth residents who own an EV would no longer have the option to charge their vehicle at home.



- 7.3.3 Removal of the charging infrastructure would be contrary to the Portsmouth Transport Strategy, particularly the strategic objective of Deliver Cleaner Air, and Policy B Support infrastructure for alternatively fuelled vehicles which promotes delivery of EV infrastructure.
- 7.3.4 There would be a cost to the council for ubitricity to remove the infrastructure of £200 per charge point for removal of each smart socket with higher costs likely to be incurred for removal of the bollards and reinstatement of the highway.
- 7.3.5 ubitricity have stated that they would not be interested in buying back the chargepoints, they indicated there would be no resale value. The council would also therefore incur disposal costs.
- 7.3.6 There would also be costs to the council of removing signing and lining.
- 7.3.7 The timescale removal of infrastructure could be expected to be approximately 6 weeks from the end of the contract.

8. Reasons for recommendations

- 8.1. To deliver our Air Quality Local Plan, under ministerial directive, a continuation of the provision for the first phase of ORCS chargepoints remains an effective way in helping to improve the air quality in the city and reduce nitrogen dioxide emissions.
- 8.2. The continuation of the phase 1 chargepoints will support the government's Transport Decarbonisation Plan and help meet the government target of ending the sale of new petrol and diesel cars by 2030, providing the necessary infrastructure.
- 8.3. Continued provision of EV charging infrastructure supports the visions of both the Portsmouth Transport Strategy and Imagine Portsmouth.
- 8.4. Extending the use of the first phase chargepoints is the most cost-effective and consistent way for our residents who do not have access to off-street parking to charge their EVs.
- 8.5. The data usage demonstrates the chargepoints are well utilised. Keeping them in place will continue to promote the continued and increased use of electric vehicles in our city.
- 8.6. For the locations that do not achieve as much usage as their counterparts, we will work to improve the utilisation of these chargepoints, ensuring all residents are aware of the infrastructure available to them. Raising awareness may also reduce competition for the higher demand sites and incorporate a more even distribution of charges between all phase 1 sites.



9. Integrated impact assessment

9.1. An IIA has been produced for this scheme and hasn't identified any negative impacts, but has outlined how it impacts positively on the following sections:

Section B - Environment and Climate Change

- B1 Carbon emissions
- B3 Climate change mitigation and flooding
- B5 Air Quality

Section C - Regeneration of our city

- C1 Culture and Heritage
- C3 Economy

10. Legal implications

Procurement

- 10.1. Option 1 a fully compliant procurement was undertaken in 2017 2018 and ubitricity was chosen as the Council's preferred contractor. The initial term of the contract was 3 years with an option to extend the contract for up to 3 additional years. As a result, no further procurement would be necessary if Option 1 was chosen as the preferred option. Although no further procurement may be needed, the Council remains under a duty to ensure that best value is achieved. The Council's Contract Procedure Rules would also need to be followed. It is also worth noting that any extension would dependent upon both parties reaching a mutually acceptable agreement.
- 10.2. Option 2 this option would necessitate a new procurement being undertaken and the advice from Procurement and Legal Services should be sought accordingly.
- 10.3. Option 3 no further procurement would be necessary as the removal of the chargepoints falls within the terms of the existing contract.

Traffic

- 10.4. It is understood that the Council is also considering changing the locations of the least used chargepoints which may or may not include appropriate designated electric vehicle parking bays being marked. As a result, this may necessitate Traffic Regulation Orders (TROs) being put in place.
- 10.5. If it was deemed that a TRO is required, then legal advice should be sought to ensure that the necessary processes and rules are being followed as prescribed under the Road Traffic Regulation Act 1984 (as amended), the



Traffic Management Act 2004, the Civil Enforcement of Parking Contraventions (England) General Regulations 2007 and of all other relevant legislation and regulations from time to time in force.

11. Director of Finance's comments

- 11.1. As the report shows for each charge point that is installed in the City there is an annual overhead to the Council of £100 per charge point. For now the Council have been able to accommodate the cost of this within its revenue budget.
- 11.2. The cost of installing chargepoints has so far been met primarily from Central Government, with a contribution from the Council. None of this cost has been met from and operator, or the users of these chargepoints.
- 11.3. Any income from Chargepoints charged through the charging mechanism has been received by the Operator and this new expanded scheme will work in the same way, with any profits accruing to the operator whilst the City Council pay for the maintenance of these units. As the report states the usage of these chargepoints has been fairly low so any profits made by the operator are likely to be fairly insignificant.
- 11.4. During this trial the costs have been quite modest, however as the report suggest the Council may expand the scheme by 60 units and then a further 100 chargepoints the Council can not afford to fund this from its current revenue budget and therefore a more commercial model will need to be developed and adopted before the scheme could be expanded.

Signed	by:							

Appendices:

Appendix A: Phase 1 electric vehicle chargepoints installed in March 2019

Appendix B: Phase 1 chargepoint usage data

Appendix C: Phase 1 overstay data

Background list of documents: Section 100D of the Local Government Act 1972

The following documents disclose facts or matters, which have been relied upon to a material extent by the author in preparing this report:



T'() (
Title of	Location
document	
ORCS Phase	https://democracy.portsmouth.gov.uk/documents/s21455/Electric%20Vehicles%20on-
1 report to	street%20residential%20chargepoint%20scheme%20-
Traffic &	<u>%20TRO%20120%202018%20report.pdf</u>
Transportation	
Cabinet	
Member	
Designated	https://democracy.portsmouth.gov.uk/documents/s17025/Designated Parking Bays.pdf
parking bays -	
Report to	
Traffic and	
Transportation	
Cabinet	
Member	
ORCS Phase	https://democracy.portsmouth.gov.uk/documents/s28562/TT%2029%20Oct%2020%20-
1 mid-point	%20EV%20Phase%201%20report%20with%20appx%20A.pdf
review report	
to Traffic and	
Transportation	
Cabinet	
Member	
ORCS Phase	https://democracy.portsmouth.gov.uk/documents/s28559/TT 29 Oct 20 - EV phase 2
2 report to	report with appx A-E.pdf
Traffic and	
Transportation	
Cabinet	
Member	
Rapid	Agenda for Cabinet on Tuesday, 2nd November, 2021, 12.00 pm Portsmouth City
chargepoints	Council
for taxis and	
private hire	
vehicles	
report to	
Cabinet	

The recommendation(s) set out	t above were approved	d/ approved as amended	/ deferred/
rejected by	on		
, ,			
Signed by:			
5			



Appendix A: Phase 1 electric vehicle charge points installed in March 2019

53 Adair Rd	82 Hartley Rd	83/85 Pretoria Rd
51 Adames Rd	Havant Road (alongside 15 Chichester Rd)	28a Priory Cres
Astley St (North of King Street Junction)	32 Heathcote Rd	36 Posbrooke Rd
Balfour Road (alongside 56 Kirby Rd)	Henderson Rd (opposite Cockleshell Community Centre)	Racton Ave (opposite Lordington Close)
Clarence Parade (opposite Lennox Mansions)	122 Henderson Rd	7 Selsey Ave
Clarence Parade (opposite Stacey Court)	High St (25 Crown Court)	2 St Catherine St
92 Eastfield Rd	Hunter Rd (alongside 29 Hatfield Rd)	Taswell Rd (opposite Wimbledon Park Sports Centre)
131 Essex Rd	74 Kensington Road	48 Victoria Rd N
16 Florence Rd	183 Laburnum Grove	55 Warren Ave
1 Fordingbridge Rd	66 Oriel Rd	95 Warren Ave
58 Glencoe Rd	102 Oriel Rd	Westbourne Road (alongside 268 Chichester Rd)
68 Hartley Rd	75 Oxford Rd	23 Wimbledon Park Rd



Appendix B: Phase 1 Charge point data

Figure 1. Total amount of kwh usage for all Phase 1 locations

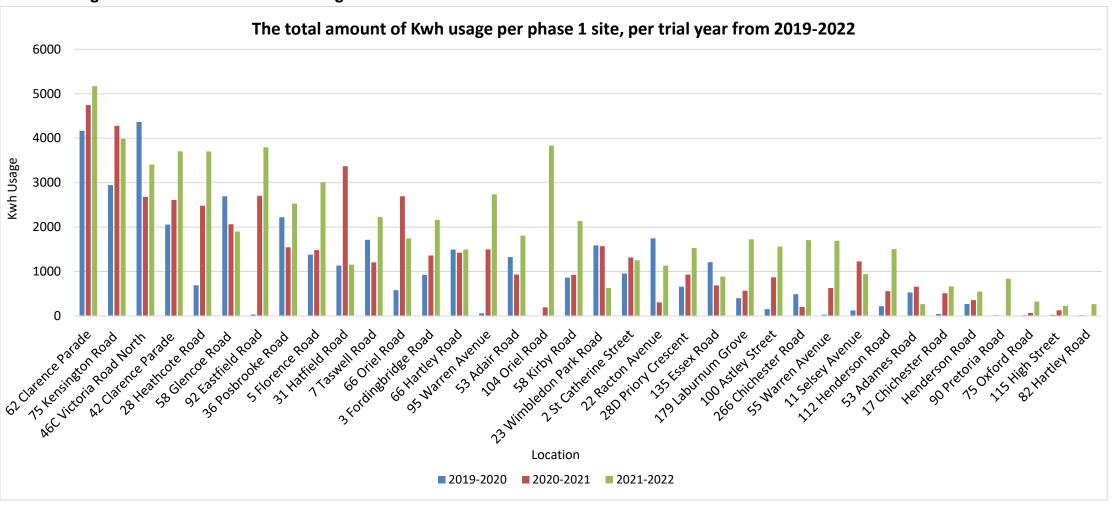




Figure 2. Total Number of Charges for All Phase 1 Locations Per Trial Year (March - February)

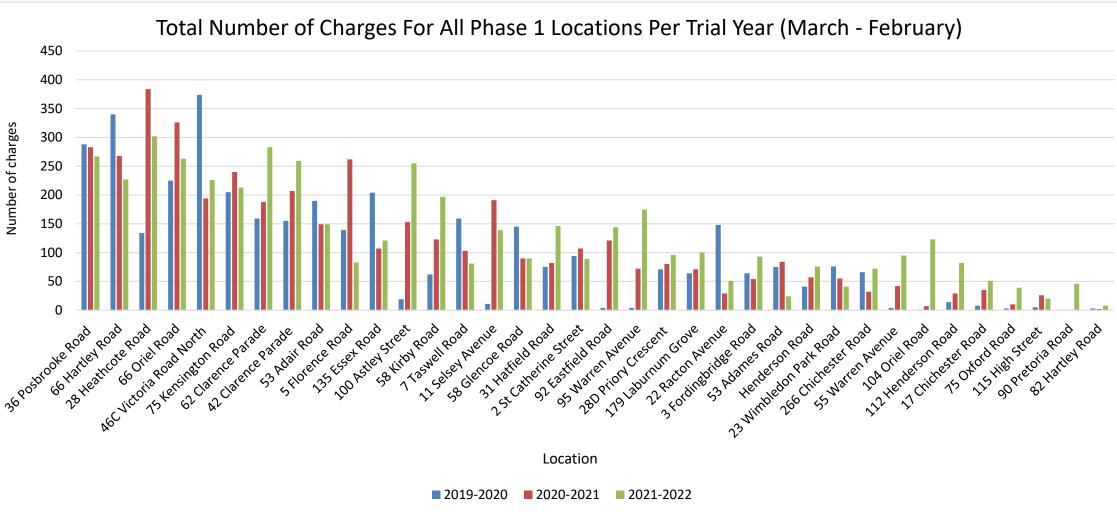




Figure 3. The number of overstays against the number of charges from 2019 - 2021 calendar year during the day

*Overstay = When a car has remained plugged in after it has been fully charged, for over 1 hour during the day from 8am to 8pm

Overstay Duration (No. of charges during the day)	2019 (March - December)	2020 (Full year)	2021 (January - October)
No overstay	1,169	1,638	2,116
1-3 hours	134	287	374
3 - 6 hours	93	123	207
6 - 12 hours	282	494	806
12 - 24 hours	551	768	865
24 + hours	41	131	93
Total Number of overstays	1,101	1,803	2,345
Total number of charges	2,270	3,441	4,461



Figure 4. Number of overstays between 12-24 hours per calendar year

	2019 (March to December)	2020 (Full year)	2021 (January - October)	TOTAL
66 Hartley Road	166	124	139	429
66 Oriel Road	95	158	116	369
36 Posbrooke Road	65	88	99	252
53 Adair Road	52	69	60	181
100 Astley Road	0	27	93	120
42 Clarence Road	23	43	50	116
7 Taswell Road	42	42	14	98
135 Essex Road	19	29	27	75
46C Victoria Road	27	29	16	72
5 Florence Road	4	21	27	52
28 Heathcote	0	29	23	52
11 Selsey Road	0	17	34	51
31 Hatfield Road	3	14	30	47
75 Kensington Road	2	21	18	41
179 Laburnum Road	8	13	18	39
22 Racton Road	15	8	4	27
2 St Catherine Street	4	10	12	26
266 Chichester Road	8	5	6	19
58 Kirby Road	2	4	11	17
3 Fordingbridge Road	7	1	8	16
104 Oriel Road	0	2	13	15
62 Clarence Parade	2	3	9	14
92 Eastfield Road	0	2	11	13
112 Henderson Road	1	0	10	11



23 Wimbledon Park Road	4	0	2	6
53 Adames Road	0	3	2	5
28D Priory Crescent	1	1	2	4
115 High Street	0	0	3	3
17 Chichester Road	1	0	2	3
75 Oxford Road	0	2	0	2
58 Glencoe Road	0	2	0	2
55 Warren Avenue	0	0	2	2
90 Pretoria Road	0	0	2	2
95 Warren Avenue	0	1	1	2
Henderson Road	0	0	1	1
TOTAL	551	768	865	2,184



Figure 5. Number of overstays 24+ hours per calendar year

	2019 (March to December)	2020 (Full year)	2021 (January - October)	TOTAL
66 Hartley Road	7	34	30	71
66 Oriel Road	15	28	4	47
135 Essex Road	2	12	16	30
100 Astley Road	0	3	19	22
7 Taswell Road	10	11	0	21
36 Posbrooke Road	0	18	3	21
53 Adair Road	2	9	3	14
266 Chichester Road	1	5	1	7
28D Priory Crescent	1	4	1	6
179 Laburnum Road	0	2	2	4
17 Chichester Road	1	1	2	4
42 Clarence Parade	1	2	0	3
112 Henderson Road	0	0	3	3
62 Clarence Parade	0	1	1	2
2 St Catherine Street	0	0	2	2
31 Hatfield Road	1	0	1	2
46C Victoria Road	0	0	2	2
5 Florence Road	0	1	1	2
11 Selsey Avenue	0	0	1	1
28 Heathcote Road	0	0	1	1
TOTAL	41	131	93	265