

Your Say
Adelaide

The City of Adelaide invites engagement from the community about

Electric Vehicle (EV) Charging Stations - Service Fees

Project Summary

The City of Adelaide is seeking your feedback on proposed service fees for on-street and off-street (UPark) electric vehicle charging services.

We invite you to join the conversation.

Consultation closes 5pm, Friday 22 September 2017

Included in this consultation pack:

- Project Information
- Frequently Asked Questions
- Feedback Form

Enquiries:

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on **8203 7562**

or

Email: n.nash@cityofadelaide.com.au

Project Information

Purpose

The City of Adelaide is seeking feedback and views on what service fees should apply for electric vehicle (EV) drivers using on-street and off-street (UPark) EV charging stations.

Background

The *City of Adelaide Strategic Plan 2016-2020* positions Adelaide to be a smart, green, liveable and creative city. The city is aiming to become the world's first carbon neutral city and a leader in environmental change. Under the Plan we will "provide a range of incentives for the use of electric-powered and low emission vehicles within the city".

The *Carbon Neutral Strategy 2015-2025* established a number of targets, including that the City of Adelaide has zero net carbon emissions by 2025. It also promotes priorities including:

- *Decarbonisation of the transport system; and*
- *A supportive environment for early adoption of great ideas and technologies.*

In 2015, transport contributed 35% of the city's total emissions. Major initiatives are required to reduce emissions in our transport system.

Strategic context

City of Adelaide 2016 – 2020 Strategic Plan

Theme: GREEN

City carbon emissions will be reduced by 35% from the 2006–07 baseline by 2020.

Action: *Provide a range of incentives for the use of electric powered and low-emission vehicles within the city.*

Carbon Neutral Adelaide Action Plan 2016-2021

Pathway 2: Zero Emissions Transport

Action 2.3.2 Investigate incentives for increasing the purchase of electric vehicles and installing public recharging infrastructure.

Smart Move Interim Action Plan 2016-2018

6.1 Rollout electric vehicle (car and bike) charge points in the city

- *Install at least 40 on-street and off-street (UPark) electric vehicle (car and bike) charging points by 2017.*
- *Determine the number of on-street and off-street (UPark) parking bays that will provide recharging services by 2020.*

Electric vehicles in the city

Council has already taken a number of actions to encourage electric vehicles in the city.

An important driver for electric vehicle ownership is the convenience, stability and lower cost of home or destination charging.

Recognising this, the City of Adelaide's Sustainability Incentives Scheme provides financial rebates of up to \$1,000 for each fast charger (<20kW) and up to \$5,000 for each super-fast charger (>20kW) installed in the city.

To attract more EVs to the city, we will be installing 34 EV charging stations in the City of Adelaide UPark car parks and near the Adelaide Central Bus Station. We will also be installing on-street EV charging stations in up to 4 locations.

We seek your feedback on the proposed EV charging service fees to ensure we provide a level of incentive that will be effective and consistent with community expectations.

As interim fees are currently in operation, Council will consider feedback and establish ongoing fees by 30 June 2018.

Potential on-street EV charging station locations

We are currently consulting separately on 9 locations for up to 4 locations to be the first sites for the on-street EV charging stations. Community feedback will inform Council's decision on the selection of the locations where 2 parking bays at each location will be equipped with dual port ≤22kW EV charging stations.

For more information and to provide feedback on the proposed locations, go to: yoursay.cityofadelaide.com.au/evlocations

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Fees and charges

Worldwide research and expert advice indicate that EV charging stations where users do not pay for electricity are highly effective incentives to encourage community uptake of EVs, and to attract EV owners to a specific precinct, business or car parking facility.

However, research also indicates that where EV charging services have been provided free, there has been a negative driver response when fees have been imposed at a later date.

The City of Adelaide considers it good practice to establish a low-level of service charges from the outset as a pathway to a sustainable revenue model that will be required for the ongoing expansion and maintenance of EV charging stations.

We expect that EV charging stations will need to realise a direct return on investment, as the increasing popularity of electric vehicles would otherwise generate the following risks for the City of Adelaide:

- On-board vehicle batteries can store up to 100kWh. If no fees were charged, on a residential electricity price of \$0.40/kWh, EV charging station operators would be providing a full charge subsidy of more than \$40;
- Destination charging could rapidly evolve as a preferred alternative to conventional petrol stations;
- Electricity network peak demand charges are already a significant component of site operator costs; and
- EV charging station electricity consumption will become significant as electric vehicle sales increase.

As we are installing two types of EV charging station – **AC Fast** (22kW) and **DC Fast** (50kW), which have different power outputs and operating costs, service fees will vary depending on which one is used, and when it is used.

See the table overleaf for the proposed charges.

Benefits of the project

Internationally we are seeing a growing trend in the uptake of electric vehicles (EV), with countries such as Norway, the United Kingdom, France and China providing strong supportive policies and incentives.

Accelerating the global transition to zero emission electric vehicles is essential to reduce transport carbon emissions and the consequent impacts of climate change. It is also important to improve the air quality in cities, as air pollution is a leading cause of death from respiratory diseases, including lung cancer and asthma.

Installing EV charging stations will strategically place Adelaide at the hub of South Australia's emerging EV charging network, attracting EV owners to key locations across the city and bring associated economic benefits. It will also send a clear signal to vehicle manufacturers that Adelaide is EV ready.

EV charging stations will also enhance our growing reputation as an international leader in environmental change, and contribute to achieving our community's ambition for the City of Adelaide to be the world's first carbon neutral city.

Project impacts

The early establishment of EV charging services fees will facilitate financial sustainability in the next 3 to 5 years as the South Australian electric vehicle fleet grows and service demand increases.

Your feedback will help us to find the right balance between short-term incentives for EV ownership and cost recovery, as we move towards a sustainable business model.

Timeline

As interim fees are currently in operation, Council will consider feedback and establish ongoing fees by 30 June 2018.

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Draft Electric Vehicle Charging Service Fees

Location	Charging Duration	AC Fast Charging Stations ≤22kW		DC Fast Charging Stations ≥50kW rated output
		Peak Times (6:00 am to 6:00 pm)	Off Peak Times (6:00 pm to 6:00 am)	All times
Weekdays (Monday to Friday)		Cost per kilowatt hour	Cost per kilowatt hour	Cost per kilowatt hour
On-street	≤1 hour	\$0.00	\$0.00	\$0.45
	> 1 hour	\$0.20	\$0.10	\$0.45
Off-street (UPark)	≤1 hour	\$0.00	\$0.00	\$0.45
	> 1 hour	\$0.20	\$0.10	\$0.45
Weekends				
On-street	≤1 hour	\$0.00	\$0.00	\$0.45
	> 1 hour	\$0.10	\$0.10	\$0.45
Off-street (UPark)	≤1 hour	\$0.00	\$0.00	\$0.45
	> 1 hour	\$0.10	\$0.10	\$0.45

Parking fees may also apply, subject to the policy in the surrounding parking spaces.

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Frequently Asked Questions

What is an EV?

Plug-in hybrid electric vehicles (PHEV) and 100% battery electric vehicles (BEV) and are collectively referred to by the automotive industry as electric vehicles (EV).

BEVs are powered exclusively by an electric motor from energy stored in its rechargeable batteries, whereas PHEVs have a conventional internal combustion engine coupled with battery storage. Both types of EV require the car to be plugged into an electricity supply to recharge the battery.

When powered by the electric motor, EVs produce no tailpipe emissions, reduce dependency on oil, and are cheaper to operate than petrol or diesel fuelled vehicles.

What does an EV charging station do?

An EV charging station supplies electricity to recharge electric vehicles, such as plug-in EVs and plug-in hybrids.

The charging stations will be located on the footpath, 700mm from the kerb.

Vehicles will park nose to kerb, which will prevent drivers standing in the flow of traffic when plugging in their vehicle.

The charging station is:
Height – 1.1m
Width – 0.4m
Depth – 0.2m



Is it dangerous?

No. Electric vehicle charging stations are extremely safe.

However, while plugging the vehicle into a station is straightforward, the large amount of current carried over the cord from the power source to the vehicle makes caution necessary.

The charging station is designed so that electricity only flows through the cord while it is connected to the vehicle and the station is activated. If the cable connection to the vehicle is interrupted, the electricity supply is turned off.

As a further safety feature, once connected to the charging station, EVs cannot move while the cord is plugged in.

How will I activate the station and pay for services received?

You will be able to activate and pay for services using your credit or debit card through a contactless payment system on the charging station or with a mobile phone application. There will be no facilities for cash payments.

Will I need to pre-register to use the service?

No. The contactless and online payment system will enable casual users to plug-in, tap to pay and activate.

However, if you wish to track your charging sessions, receive tax receipts or participate in special offers you will need to register using the mobile phone application.

Will I need to bring my own cable?

DC Fast charging stations will be equipped with both a tethered CHAdeMO and Combined Charging System (CCS) plug.

AC Fast charging stations will be fitted with Type 2 IEC 62196 Mennekes socket. This has been deemed necessary to minimise trip hazards and potential damage to cables between uses and to provide a flexible service that is compatible with all vehicle plug types.

As no cables will be tethered to the AC Fast charging stations, you will need to bring your own cable. You can purchase a cable that is compatible with your car by contacting the City of Adelaide on (08) 8203 7203.

What will be the electricity output of the EV charging stations?

We are installing two types of EV charging station – **AC Fast** (22kW) and **DC Fast** (50kW), which have different operating costs and power outputs. Different fees are proposed depending on which one is used and when.

Services will be charged on a kilowatt hours received basis, with customers paying fees based upon the total amount of electricity that they receive. During peak electricity network demand and pricing periods, the power output may be reduced to manage to the total cost of service provision.

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Will I have to pay parking fees at the EV charging station?

Yes. For on-street parking, the parking fee will be in line with the surrounding parking controls. Within UPark car parks, existing UPark fees will apply.

Will the spaces have a time limit for parking?

For on-street locations, parking times will align with existing parking controls. In UPark car parks, there will be no time limitations.

How will the proposed cost compare to home charging?

The cost to run an EV depends on where you live and the capacity of your vehicle battery. For example, it takes around 18 kWh to travel 100km in an average EV. With a residential electricity price per kilowatt hour (kWh) of about \$0.40 it will cost approximately \$7.20 in electricity charges to travel 100km.

This compares to a cost of \$1.80 (off-peak) or \$3.60 (peak) based on the proposed fees for using a City of Adelaide 22kW AC charging service or \$8.10 for a City of Adelaide 50kW DC fast charging service.

How many charging stations will the City of Adelaide be providing?

In October 2016, the City of Adelaide announced that it will be installing at least 40 EV charging stations. 34 EV charging stations will be installed in the City of Adelaide UPark car parks and near the Adelaide Central Bus Station. We will also be installing on-street EV charging stations in up to 4 locations, each equipped with 1 dual port charger servicing 2 parking bays.

What happens to my feedback?

Council will be provided with a report of all consultation feedback before making any decision on service fees.

How do I know my feedback has been received?

All feedback forms or correspondence will be acknowledged, either by email or in writing, so that you know your comments/feedback has been received.

How do I provide my feedback?

Feedback form

You can complete the attached Feedback Form, which asks specific questions about EVs in Adelaide and the proposed service fees as well as providing an opportunity for general comments.

All written feedback must be received by 5pm, Friday 22 September 2017.

Feedback can be provided through the following options:

Online:

You can submit feedback online. Council has a dedicated website (yoursay.cityofadelaide.com.au) that provides an opportunity for quick and efficient online feedback. It also gives you information about the project and ways to provide your comments.

In writing:

Community Consultation
EV Charging Stations – Service Fees
GPO Box 2252
Adelaide SA 5001

Email:

yoursay@cityofadelaide.com.au.

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Feedback Form

Feedback closes **5pm Friday 22 September 2017**

This feedback form asks specific questions about the project and provides an opportunity for general comments.

Providing contact details in a feedback form is optional, but will help us to know a little more about who you are and how you use the city to ensure we get a higher quality of data to accompany your feedback. The data will help us analyse feedback from specific groups (e.g. age, gender, city users), which in-turn will provide a richer and more valuable response to help Council make decisions.

First Name

Surname

E-Mail

Address

If a Business or Organisation, Organisation Name

Gender Female Male

Year of Birth

Are you a City of Adelaide Ratepayer? Yes No

Q1. Do you own, or have you ever owned, an electric vehicle? (Please tick)

Yes

No

Q1b. If your answer to Q1 is No, are you considering buying an electric vehicle in the next 2 years? (Please tick)

Yes

No

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Q2. If running costs and maintenance were half of your current vehicle's costs, at what price would you consider buying an electric vehicle? *(Please circle)*

- a) Over \$75,000
- b) Under \$75,000
- c) Under \$50,000
- e) Under \$30,000

Q3. Do you support the concept of electric vehicle users paying for electric vehicle charging services? *(Please tick)*

- Yes No

Q4. Should the City of Adelaide subsidise the cost of public EV charging station electricity? *(Please tick)*

- Yes No

Q5. Do you agree with the proposed times for peak pricing of 6am-6pm? *(Please tick)*

- Yes No

Q5b. If you answered No to Q5, what do you consider the peak times should be and why?

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Q6. Do you believe that having the first hour of charging free would be an incentive to attract electric vehicle owners to the city?

(Please tick)

Yes

No

Please explain your response.

Q7a. With regards to Fast Charging Stations (AC≤22kW) do you support the proposed fees for charging during peak hours (6.00 am - 6.00 pm) Monday to Friday? (Please tick Yes or No)

	Yes	No
On-street charging for less than 1 Hour - \$0.00 (per kWh)		
On-street charging for longer than 1 Hour - \$0.20 (per kWh)		
Off-street (UPark) charging for less than 1 Hour - \$0.00 (per kWh)		
Off-street (UPark) charging for longer than 1 Hour - \$0.20 (per kWh)		

7b. With regards to Fast Charging Stations (AC≤22kW) do you support the proposed fees for electric vehicle charging at all other times? (Please tick Yes or No)

	Yes	No
On-street charging for less than 1 Hour - \$0.00 (per kWh)		
On-street charging for longer than 1 Hour - \$0.10 (per kWh)		
Off-street (UPark) charging for less than 1 Hour - \$0.00 (per kWh)		
Off-street (UPark) charging for longer than 1 Hour - \$0.10 (per kWh)		

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7c. With regards to Super-Fast Charging Stations (DC≥50kW), do you agree with the proposed fees of \$0.45 per kilowatt hour for electric vehicle charging at all times?

Yes

No

Q8. If you have answered No to any of the proposed charges in Q7, please tell us what you consider to be a fair charge and why?

Q9. Which of the following do you think would encourage EV drivers to come into the city more often?

Please rank the following in order of preference (1 to 7*)	Priority
a) Availability of parking spaces with EV charging facilities	
b) At cost EV charging service fees	
c) Below cost EV charging service fees	
d) Charging stations located convenient to major attractions	
e) Loyalty program for city-based charging	
f) On-line display of EV charging station availability	
g) Other (Please describe in Q10 below)	

* 1 = highest priority; 7 = lowest priority

Q10. Do you have any further comments about the proposed service fees for the EV charging stations?

Comments

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Written feedback must be received by 5pm Friday 22 September 2017.

Community Consultation

Electric vehicle charging stations – Service Fees

GPO Box 2252
Adelaide SA 5001

Or

Email yoursay@cityofadelaide.com.au

For all enquiries, please telephone Nick Nash on 8203 7562 or email at n.nash@cityofadelaide.com.au

Please tell us how you participate in city life (tick all that apply):

- Work Live Shop Play (e.g. Leisure, recreation, entertainment, dining)
- Study Tourist Own a Business

Please indicate your main areas of interest (tick all that apply):

- Council Services & Programs Open Space & Recreation City Design, Planning & Development
- New & Future Projects Social & Community Issues Policy, Budget & Management Plans
- Environmental Issues Arts & Events in the City

Please indicate locations that are of interest to you (tick all that apply):

- North Ward Central Ward South Ward

Your Say Adelaide is Council's online consultation website. It is your chance to be kept up-to-date and provide feedback on areas of the City that interest you. Would you like to be signed up to Your Say Adelaide online and be emailed when there is an opportunity to have your say on areas that are of interest to you?

- Yes No

Please Note: If you've ticked Yes, you will receive an email to your nominated e-mail address to confirm your new account.