

5 June 2024

File Ref: OIAPR-1274023063-28034



Tēnā koe

Request for information 2024-106

I refer to your request for information dated 24 May 2024, which was received by Greater Wellington Regional Council (Greater Wellington) on 24 May 2024. You have requested the following:

"Firstly, my partner and I were wondering what the extending arms at the back of the double decker buses are - they extend to connect to a pole above the bus at bus depots and major stops.

My second question is what is the average cost to purchase an electric double decker/single decker bus?

What is the average range of a single and double decker bus?

What's the battery capacity of the single and double decker buses?

And lastly how many electric buses have we got our fleet across the greater Wellington region? How many buses do we have total?"

Greater Wellington's response follows:

Firstly, my partner and I were wondering what the extending arms at the back of the double decker buses are - they extend to connect to a pole above the bus at bus depots and major stops.

This is a pantagraph which is a method used for charging buses, the charging method has been used on 10 Electric Long Vehicle Double Decker (ELVDD) buses. The pentagraph is used to charge the buses on route. The Pantagraph charging station is at Island Bay on the Route 1 and allows for a rapid charge top up, see the link below for more information.

https://www.heliox-energy.com/press-releases/heliox-fast-chargers-power-new-zealands-first-10-electric-double-deck-buses

My second question is what is the average cost to purchase an electric double decker/single decker bus?

The buses are purchased by the bus operators who are contracted to run the services. The actual cost to Greater Wellington for the buses is commercially sensitive information and is therefore withheld under section 7(2)(b)(ii) of the Local Government Official Information and Meetings Act 1987 (the Act) in that the release of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information.

When making the decision to withhold this information we are required to consider the public interest in the release. We have considered this and do not believe the public interest outweighs our decision to withhold.

The range of costs for an Electric Long Vehicle (ELV) would be in the region of \$600,000 - \$1,000,000 depending on the specification, type of bus and battery size.

The overall cost is generally dependent on:

- The size of the vehicles/bus type
- The size of the battery; and
- The manufacturer

What is the average range of a single and double decker bus? What's the battery capacity of the single and double decker buses

The range is dependent on the battery size and the size of the battery required is dependent on the anticipated use and topography of the route. We work with our operators on battery sizes to suit the required demand.

To guide the operators, we issue the Vehicle Quality Standards to support the Requirement for Urban Buses (RUB, which is issued by NZTA/Waka Kotahi. The RUB is silent on range). The VQS contains the following statement.

T2.	2.3	The Vehicles in the Fleet List must be capable of	Ensures Vehicles are able to
3	Performa	meeting the operational requirements of this	complete Passenger Operating
	nce -	Partnering Contract at all times, without the need	Services in an efficient manner and
	Battery	for any additional vehicles.	be able to be capable of being
	powered	The Operator must ensure that each Electric Bus	deployed throughout the Wellington
	Electric	used in the provision of Passenger Services under	Public Transport Network.
	Buses	this Partnering Contract has sufficient range and	

charge (i.e. is able to travel sufficient distance	
without the need for the battery to be recharged) to:	
(a) enable this requirement to be met; and	
(b) enable that Electric Bus to complete the	
Passenger Services which it is being used	
to provide without running out of charge,	
at all times throughout the life of that Electric Bus's	
battery pack.	

An example of two different specifications, the Airport Express Buses have 350 kWh batteries, and the buses on Route 2 have 500kWh batteries.

And lastly how many electric buses have we got our fleet across the greater Wellington region? How many buses do we have total?

Currently there are 105 electric buses in the fleet, with 109 more planned by the end of the financial year 2027. The operators run a total of 465 buses under the Public Transport Operating Model contract, this includes spares.

If you have any concerns with the decision(s) referred to in this letter, you have the right to request an investigation and review by the Ombudsman under section 27(3) of the Act.

Please note that it is our policy to proactively release our responses to official information requests where possible. Our response to your request will be published shortly on Greater Wellington's website with your personal information removed.

Nāku iti noa, nā

Samantha Gain

Kaiwhakahaere Matua Waka-ā-atea | Group Manager Metlink