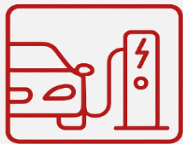


Glenveagh Homes EV Charging Proposal Summary

We have outlined below a summary of the key points of Glenveagh Homes' proposed EV charging strategy.

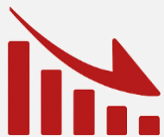
The Glenveagh proposal has researched current market trends and available data to determine the optimum EV charging provision. This takes account of typical usage patterns, ongoing maintenance/billing costs, infrastructural requirements and embodied carbon emissions. The table below summarises The Glenveagh proposal compared to a 20% EV charging strategy.

KEY BENEFITS:



Future-proof:

Infrastructure easily expanded as EV adoption increases.



Energy Savings:

Up to 65% savings in ongoing energy costs through optimized usage when compared to the standard 20% EV approach.



Faster charging Times:

Higher EV charge output reduces charge time and increased usage efficiency with reduced down time. Fast Charge assumed to operate at 11kw due to restrictions on most current batteries.



Lower Carbon Emissions:

Reduced Electricity consumption and simplified infrastructure reduce CO2 emissions and embodied carbon.

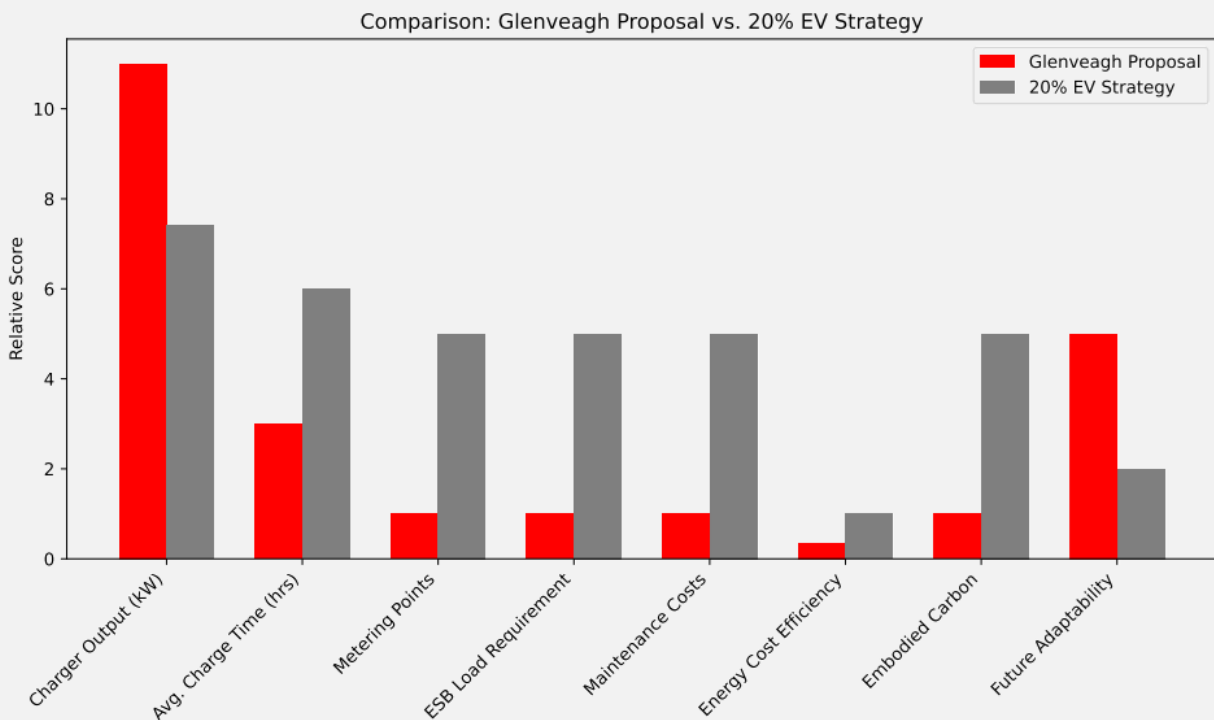


Simplified Infrastructure

The strategy addresses potential infrastructural challenges, particularly concerning ducting across public and private footpaths. By consolidating metering points into fewer locations, it significantly reduces the load requirements assessed by ESB, which can lead to decreased infrastructure costs and avoid complications associated with network limitations.

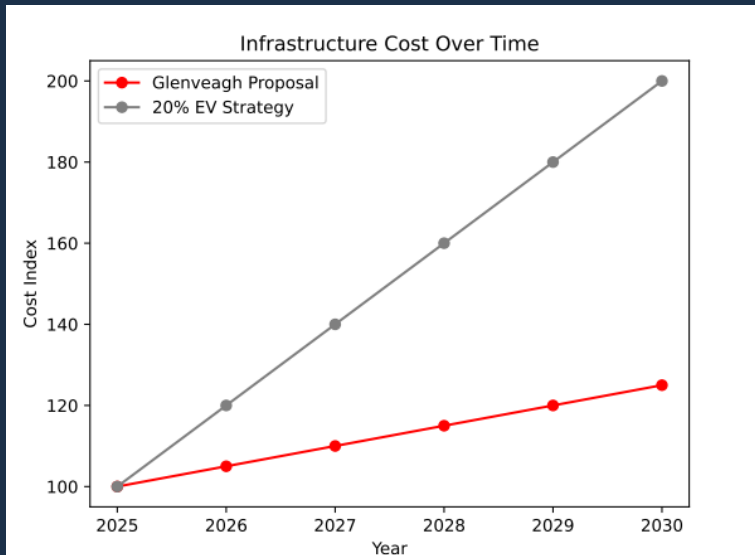
KEY COMPARISONS:

Feature	Glenveagh Proposal	20% EV Charging Strategy
Charger Type	22kW (avg. 11kW effective)	Typically 7.4kW
Avg. Charge Time	2–4 hours	6–8 hours
Metering Points	Grouped (fewer)	Distributed (more)
ESB Site Load Requirement	Lower (≤ 49 kVA per point)	Higher due to quantities may require additional substation
Maintenance & Billing Costs	Significantly reduced, fewer metering points	Higher due to more points
Energy Cost Efficiency	~65% reduction	Baseline
Embodied Carbon Emissions	Lower due to reduced infrastructure	Higher – more cabling, ducting, equipment
Future Adaptability	High	Limited

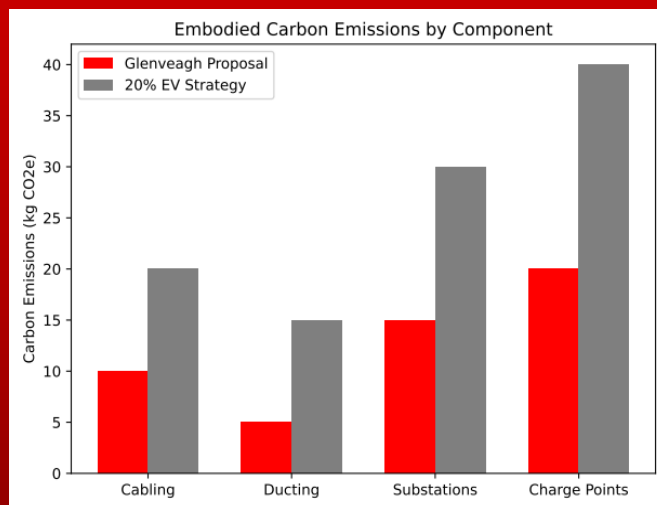


This bar chart compares both strategies across several key metrics. Lower values indicate better performance, except for adaptability where higher is better.

KEY GRAPHS



The graph above indicates the significantly higher predicted energy and maintenance cost over time with the standard 20% approach compared to the GVH proposal.



The graph above indicates the significantly higher predicted embodied carbon emission of the standard 20% EV approach compared to the GVH proposal

SUMMARY:

Mooretown Phase 2 Planning Site EV Strategy Comparative Summary						
EV Strategy	Number of EV chargers	Electrical load	No. of Cars Charged per week	Cars charged per week as % of total parking spaces	Cars per week per EV charger point	Average Charge time per EV charger
	[Qty]	[kw]	[Qty]		[Qty] 1 No. Users per	[Qty]
20% Total spaces with EV	37 x 7kw x 2	555	74	20%	7 kw charger	7 Hours per 7kw charger
Glenveagh Proposal	8 x 22kw x 2 1 x 22kw x 1	374	187	51%	11 No. Users per 22kw Charger	2 to 4 hours per 22kw Charger

Total No. Communal Parking spaces **367**

* The average charge time associated with proposed 22kw chargers is noted as 2 to 4 hours. This takes account of the limited number of vehicles with ability to charge at 22kw currently commercially available. The figures quoted above assume maximum charge is 11kw for all vehicles even when connected to a 22kw charger.*

Basis of Calculation:

The following is the basis of calculation for the figures quoted and as requested by FCC:

Average EV User:

- Average travel/ day = 44.8km (equivalent to 9.4 kWh of battery at 0.21kW/km).
- Average charging session = 30-40kW (equivalent to between 3 and 4 days average travel).
- Assume charge required by average EV owner every 3 or 4 days (i.e. twice a week).



22kW Charger (Operating at average 11kW rate):

- Average charging session = 2-4 hours.
- Charger could conservatively be used 3 times per weekday and 4 times per day at weekends (23 times per week).
- Each 22kW charger suitable for 11.5 EV owners (round down to 11).
- Easily adaptable for future spaces if and when additional EV is required.
- No issues with ducting traversing public/private footpaths

Summary of Glenveagh EV charging proposal report:

- Significantly less load requirement in relation to ESB application. Each Metering point is allocated with 49 kVA as per ESB loading assessments. Potentially incurs significant infrastructure costs, potential delays due to network constraints and could potentially add an additional sub-station for the Mooretown scheme. The Glenveagh solution groups the metering points into fewer locations, thereby requiring less network capacity.
- Significantly reduced maintenance and ongoing billing costs due to reduction in ESB metering locations and overall quantities of EV charge points. Due to the more efficient EV point usage, there is an estimated 65% reduction in energy costs
- Faster charging times with higher output chargers which leads to higher EV point usage and less downtime. This will increase as technology improves and more cars can avail of the total 22kw charge further increasing efficiency and usage.
- Significantly reduced embodied carbon emissions associated with reduced infrastructure and materials.