

EV Charging Options		
Level 1 at personal parking spots	Level 2 at personal parking spots	Level 2 and 3 public charging stations
Requires only 120 V outlets	Requires 240 V	Requires 240 V 480 V
Approximately 80 km overnight charge. Some users will need top up elsewhere.	Full charge overnight	19-128 km/hr range on a Level 2 250 km/hr range on a Level 3 charger
Quick to install, minimal infrastructure upgrade.	Requires significant infrastructure upgrades	Requires significant infrastructure upgrades
Minimal cost to maintain	Service costs are likely	Significant maintenance costs
Level 1 chargers come with most model cars, so no need to purchase a charger	Must purchase Level 2 charger or contract the use of a charger at premium electricity costs	Charger provided but cost of electricity is at a premium
Primarily uses off-peak power	Primarily uses off-peak power	Likely uses on-peak or mid-peak power.
Lowest cost of electricity so the cost of EV ownership is less	If Level 2 charger purchased, cost of electricity is low. If a contract charger cost of electricity is higher	Highest cost of electricity, so the cost of EV ownership is high
Convenient to use	Convenient to use	Inconvenient to use
Slow charge overnight minimizes peaks	Overnight charge reduces peaks but shorter duration charging more prone to peaks	Prone to exacerbating peaks
Can be upgraded to Level 2 when capacity available	Two car owners may eventually want two Level 2 chargers	Excessive capacity is wasted
If at first we installed 120 V outlets at all overnight parking spots. PHEV wouldn't need any more charging infrastructure. Most EVs would only periodically need a top up at a public charging station. Infrastructure costs would be minimal. Peak demand minimized. The grid would be more efficient maximizing off-peak use. Transmission costs per kwh would reduce.		