

### Unlocking the Grid's Potential:

How V2G Technology is Redefining Energy Management

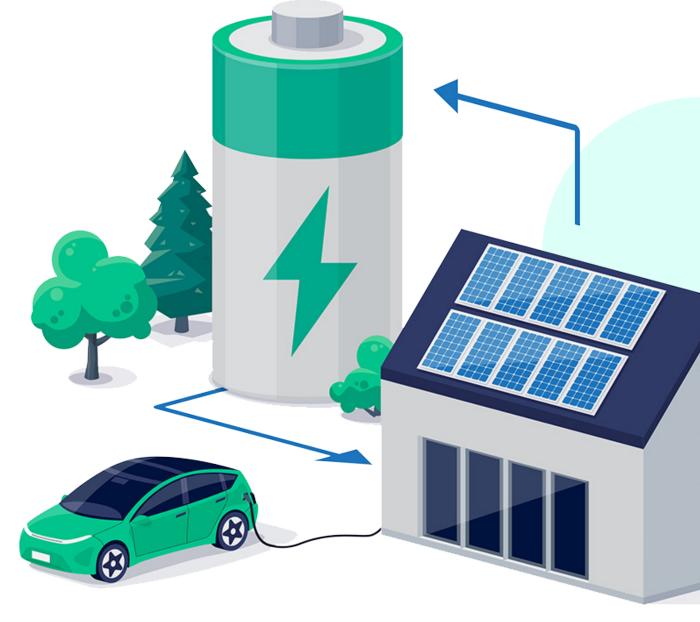




### **Bi-directional Charging**in Action

EVs are no longer just **energy consumers**—they are **mobile energy assets**that can enhance grid resilience by supplying power back to the grid during times of need, offering **smart energy solutions** to manage demand.







#### Key Benefits of V2G

Besides balancing energy supply & demand during peak hours, V2G technology supports in:

#### Sustainability

Reduces reliance on fossil fuels

#### Monetization

Opportunity to earn via ancillary services markets, where energy storage is traded for grid support.





# Industry Initiatives Driving V2G Adoption: A Collaborative Effort (1/2)

- Nissan planned to launch affordable vehicle-to-grid technology in 2026
  - **Nuvve, ComEd,** and **Resource Innovations** announced the launch of a pilot partnership to advance V2G technology using electric school buses.
- **GM** has patented a dual charging system concept for EVs.



# Industry Initiatives Driving V2G Adoption: A Collaborative Effort (2/2)

- Nissan joined BMW, Ford, and Honda-led V2G charging joint venture: ChargeScape
  - **Nuvve** has collaborated with **Tellus** for V2G charging solutions by opting for the latter's bidirectional & unidirectional charging solutions ranging from 20 kW to 360 kW.



## Future of V2G in Energy Markets

V2G-powered EV fleets can store excess solar & wind energy, reducing curtailment losses.





Advanced charge cycle management and Al-driven charge optimization help mitigate degradation risks.





# V2G is shifting the energy paradigm—where EVs

are not just vehicles but integral components of the smart grid

For tailored insights, email to our **mobility tech expert** 

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