



Ford's Plug-In Hybrid Electric Vehicles

Paving the Way for Vehicle-to-Grid Communications



PHEV Charge Plug



PHEV User Interface

Ford's plug-in hybrid electric vehicle (PHEV) can communicate the user's recharge preferences directly to the electrical grid via smart meters provided by utility companies.

Eventually, users may be able to request the use of renewable energy sources such as wind or solar power in addition to time and rate preferences.



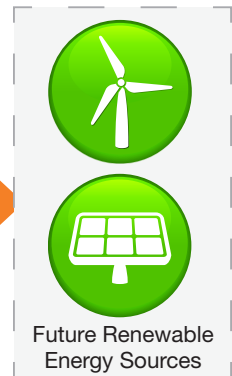
Smart Meter



Electric Grid



Power Plant



Future Renewable Energy Sources

Recharge Control Center

The PHEV driver uses the vehicle's touch screen navigation interface and in-dash computer to select recharge preferences.



Enable Price Control – Programs the vehicle to only accept a charge when electric rates are lower, such as off-peak hours



Enable Charge Complete – Selects a recharge completion end time



Enable Time Charge – Schedules daily recharge start times for weekdays and weekends