ELECTRIC VEHICLE GUIDE

A practical buyer’s handbook for choosing, checking and understanding electric vehicles.

WHAT THIS GUIDE COVERS

How to compare EVs, understand battery and range claims, assess charging, estimate ownership costs, check a vehicle before purchase, and recognize warning signs.

Quick principle: The right EV is not simply the one with the lowest price or longest advertised range. It is the vehicle whose battery, charging, performance, space, safety, warranty and total running cost fit your actual use.

1. How to Choose the Right Electric Vehicle

Start with your daily use. Think about your normal distance, road conditions, passenger or cargo needs, parking, access to charging and how often you make longer trips. A vehicle that comfortably covers your routine can be more practical than paying extra for specifications you rarely use.

Range: Treat the advertised range as a reference rather than a guarantee. Speed, temperature, traffic, terrain, payload, driving style and climate-control use can change real-world energy consumption.

Battery: Check battery capacity, chemistry when available, warranty terms, expected degradation coverage and whether the battery is repairable or replaceable. Battery condition is particularly important for a used EV.

Charging: Confirm the connector, AC charging rate, DC fast-charging capability if offered, charging time and whether the charger you plan to use is compatible. Home charging access can significantly affect convenience.

Power and performance: Look beyond a single motor-power number. Acceleration, hill performance, thermal management, braking and sustained performance can all matter depending on how you drive.

2. Vehicle Types at a Glance

Type	Common use	Key checks
Electric car	Family, commuting, longer trips	Range, charging, safety, space, warranty
Electric motorcycle / bike	Daily commuting, urban travel	Battery, motor, brakes, tires, service support
Electric bicycle	Short trips, light commuting	Battery, frame, brakes, motor assist, charger
Electric rickshaw	Passenger or local commercial use	Payload, battery, durability, parts, operating cost
Electric bus	Public or fleet transport	Range under load, charging, uptime, fleet support

3. Price: What Should You Pay?

There is no single “correct” EV price because market prices vary by country, model, battery size, equipment, taxes, incentives, dealer costs and after-sales support. Compare vehicles with similar battery capacity, charging capability, warranty and equipment rather than comparing sticker prices alone.

Price level	What to investigate
At a lower price	Check battery size and condition, real-world range, warranty length, parts availability and whether the quoted price includes the charger and essential equipment.
At a mid-range price	Compare charging speed, safety equipment, thermal management, build quality, software/features and service coverage.
At a higher price	Make sure the extra cost brings useful benefits for your needs—such as more range, faster charging, better safety, more space or stronger warranty/support.

4. What to Check Before Buying

- **Battery:** Ask for battery health information where available. Look for unusual range loss, warning messages, overheating history or charging problems.
- **Charger:** Confirm the supplied charger is genuine, compatible and in good condition. Check the charging connector and cable for damage.
- **Brakes and tires:** Inspect brake response, discs/pads where applicable, tire condition, tread and unusual wear.
- **Motor and drivetrain:** Listen for unusual noises and test acceleration smoothly. Check for vibration, hesitation or error messages.
- **Electrical systems:** Test lights, display, indicators, climate control, windows, locks, cameras and other important equipment.
- **Body and chassis:** Inspect for accident repairs, corrosion, structural damage, uneven panel gaps and signs of water intrusion.
- **Documents:** Verify VIN/chassis number, ownership documents, registration requirements, service records and warranty status.
- **Test drive:** Test the EV in conditions close to your real use. If possible, inspect it when the battery is not nearly empty or fully charged only.

5. Buy When the EV Fits Your Real Needs

A purchase makes practical sense when the vehicle’s range comfortably covers your routine, charging is accessible, the battery and major systems are in good condition, the price is supported by the specification, and service or replacement parts are realistically available.

For a used EV, place extra attention on battery health, charging history where available, accident or flood damage, software warnings, service records and the remaining battery/vehicle warranty.

6. Warning Signs to Take Seriously

- The seller avoids providing battery, service or ownership information.
- The advertised range or specifications cannot be verified from reliable documentation.
- The battery shows abnormal degradation, repeated faults or charging interruptions.
- The vehicle has unexplained warning lights, overheating, unusual electrical behavior or major vibration/noise.
- The price is unusually low but the seller cannot clearly explain the condition or history.
- Warranty, parts availability or after-sales support is unclear.

7. Quick EV Buyer Checklist

■	My daily driving distance is understood
■	The real-world range is suitable for my routine
■	I have a practical charging option
■	Battery condition and warranty are verified
■	Charging equipment and compatibility are confirmed
■	Safety, brakes, tires and key electronics are checked
■	Service, parts and support are available
■	The total ownership cost fits my budget

Final takeaway

Choose an EV by matching the vehicle to your daily use—not by chasing one headline number. Verify the battery, charging, safety, warranty, service support and complete ownership cost before you commit.

About Electric Vehicles

Practical information for people exploring electric mobility.