



CSH

CHERY SUPER HYBRID

HYBRIDS WITHOUT THE HEADACHE

WWW.CHERY.CO.ZA | MORE POWER TO YOU

WHAT IS HYBRID TECHNOLOGY?

Fully electric vehicles (EVs) offer impressive innovation, but many regions, including South Africa, are still building the charging infrastructure needed for fully electric mobility. This is where HEV (Hybrid Electric Vehicle) and PHEV (Plug-in Hybrid Electric Vehicle) provide practical and forward-thinking solutions.

The **HEV** combines a petrol engine with an electric motor to deliver improved efficiency, reduced running costs, and a smoother drive. The **PHEV** can drive in full electric mode for short trips but needs to be charged at home or at public charging points.

HEV Hybrid Electric Vehicle



Petrol + small battery. Charges itself. No plug-in. Limited electric driving, mostly runs on fuel

PHEV Plug-in Hybrid Electric Vehicle



Petrol + bigger battery. Can drive electric for 90km. Plug in to charge. Flexible for city + long trips. Doesn't cause range anxiety.



Battery



Electric Motor



Petrol Engine



Charging Plug



Petrol

HOW IT WORKS

Chery's PHEVs (Tiggo 7, 8, and 9) integrate petrol and electric power seamlessly through intelligent engineering. Each component works together to deliver strong performance, lower fuel consumption, and a quiet, refined drive.

Think of it as a coordinated system where each part plays a specialised role:

- Engine: built for efficiency and long-distance stamina
- Electric motors: provide smooth starts, instant acceleration, and city running
- Battery: stores and manages electric energy
- Transmission: intelligently determines how power is delivered

1. DEDICATED HYBRID ENGINE (DHE)

- 44.5% thermal efficiency – significantly higher than typical engines (30–35%)
- Turbocharged performance for smooth, confident driving
- Smart cooling and lubrication for optimal long-term reliability

2. DEDICATED HYBRID TRANSMISSION (DHT)

The DHT acts as the system's control centre, deciding when to use electric, petrol, or both. The 3-speed DHT in the Tiggo 9 PHEV delivers up to 90% system efficiency for seamless transitions between modes.

Examples:

- City driving: prioritises electric power
- Highways: petrol engine leads for stability
- Overtaking: petrol + electric combine for stronger acceleration

3. BATTERY SYSTEM (DHB)

Chery's high-performance lithium battery is built with robust protection and aerospace-grade materials and is tested for safety in extreme conditions.

Key benefits:

- Double-layer protection against impact, water, and heat
- Intelligent 24/7 monitoring for optimal charging and temperature control
- Fast charging capability: 30% → 80% in ±20 minutes

4. ELECTRIC MOTORS

Depending on the model, Chery PHEVs use one to three electric motors to enhance responsiveness and power. Example: Tiggo 9 PHEV AWD accelerates from 0–100 km/h in 5.7 seconds, outperforming many premium SUVs.

5. SMART OPERATING MODES

MODE	HOW POWER WORKS	IDEAL FOR
EV Mode	Electric motors only	Short city trips
Parallel Hybrid	Engine + motors	Overtaking / hills
Series Hybrid (REEV)	Engine charges battery	Low battery situations
Direct Engine Drive	Engine drives wheels	Highway cruising
Regenerative Mode	Braking recharges battery	Downhills / slowing down

The system works automatically — no input required from the driver.

EVERY DAY DRIVING WITH CHERY SUPER HYBRID

Chery's hybrid technology is designed to make everyday driving easier, more economical, and more convenient.



CHARGING OPTIONS:

- Standard plug (cable): ±8.5 hrs
- Home charging unit: 3–5.5 hrs
- Fast charge: ±20 minutes (30% → 80%)

POWERED FOR LIFE ON THE GO:

With up to 6.6 kW external power output, the vehicle can power outdoor equipment, appliances, or devices.

RANGE ON A FULL TANK AND FULL CHARGE*:

TIGGO 7 PHEV
1200
KILOMETERS

TIGGO 8 PHEV
1200
KILOMETERS

TIGGO 9 PHEV
1400
KILOMETERS

BUILT FOR SOUTH AFRICAN ROADS:



500mm
WADING DEPTH



IP68
WATERPROOFING



REINFORCED
BATTERY
PROTECTION



24/7 SAFETY
MONITORING

UNDERSTANDING YOUR CHERY PHEV:

Think of it like your smartphone. Use electricity at home or during short trips, then rely on petrol for longer journeys. The vehicle automatically balances both to maximise efficiency.

COST EFFICIENCY:

Fuel consumption can drop to as low as 1.4 L/100 km, with reduced wear on mechanical parts, leading to meaningful long-term savings.

SUMMARY

Chery Super Hybrid technology offers a smart balance of power, efficiency, and convenience, giving drivers a future-focused mobility solution without the limitations of fully electric travel. It's a practical, intelligent step toward cleaner, more efficient driving.

*Range figures are estimates only and may differ in real-world conditions due to driving behaviour, environment, vehicle load, and usage of vehicle systems.

