

EV Driver Training SOP & Checklist (v1.0)

Objective: To Standardize safe and efficient EV truck operations:

- Equip drivers to operate EVs safely and efficiently
- Build consistent pre-/post-trip and charging habits
- Reinforce escalation and safety awareness

Why it matters: EVs don't drive like diesels. Without proper training, range, uptime, and safety all suffer. Drivers are your first line of defense against charging errors, downtime, and inefficient driving.



Training Overview

➤ Training modules overview.

Module	Focus	Duration	Delivered by
1. EV Basics	How EVs differ from diesels – torque, SOC, battery systems	30 min	OEM/Trainer
2. Energy Efficiency	Range management, regen braking, predictive driving	45 min	Trainer
3. Charging Operations	Charging routines, safety, escalation	30 min	Technician
4. Safety & Emergency	Responding to charger or vehicle faults	30 min	HSE Lead
5. Route Familiarization	SOC planning, telematics monitoring	45 min	Fleet Supervisor

Each driver completes classroom + hands-on modules before vehicle handover.

Pre-Drive & On-Road Checklist

➤ What to do before and during every shift

Pre-drive

Checkpoint	Status
Check SOC, tire pressure, and cooling fluid	☐
Confirm route and range buffer ($\geq 20\%$)	☐
Set Eco or Standard mode depending on load	☐
Verify charging cable disconnected and stowed	☐

On-road

Checkpoint
Accelerate smoothly — avoid sharp torque pulls
Use regenerative braking early and often
Maintain steady cruising (60–80 km/h)
Anticipate stops — predictive driving saves kWh
Avoid unnecessary idling (climate draws power)

Charging & Range Management

➤ Charging Routines Drivers Must Know

1 When to charge

- Follow assigned depot schedule
- Plug in at ≤30% SOC for full overnight charge
- Top-up mid-shift only if route or range requires

2 How to charge safely

- Follow the Charging SOP
- Inspect cables and confirm charger ID
- Never force disconnects

3 What to report

- Faulted sessions, slow charge rates, or range anomalies
- SOC <10% after return
- Use telematics or digital feedback form

Every charging action leaves a data trail – make sure it's accurate.

Safety & Fault Escalation

➤ When Things Go Wrong

Common scenarios:

- ✗ Charger shows "Fault" or "Error" message
- ✗ Vehicle won't start charging
- ✗ Connector stuck or won't release
- ✗ Warning lights (battery temp, HV system, etc.)

Immediate actions:

- 1 Press STOP if safe
- 2 Don't force disconnect
- 3 Report to supervisor
- 4 Tag charger "Out of Service"
- 5 Move to alternate bay if available

Safety first – never attempt repair or reset unless trained.

Monitoring & Continuous Improvement

➤ Driving Smarter Over Time

Performance tracking:

- Monitor energy (kWh/km) and regen % in telematics
- Aim for target regen >30% and steady efficiency trends
- Review monthly feedback with supervisor

Refresher training:

Annual or after new vehicle/software updates

Retraining triggered by:

- Consistently high consumption
- Charger misuse
- Fault escalation issues

Smooth, safe, and smart driving is what makes electrification work.

Driver Certification & Sign-off

➤ Final Step: Certify and Keep Improving

Step	Verification	Responsible
Complete training modules	Attendance record	Trainer
Complete practical driving test	Route report + SOC verification	Supervisor
Pass post-training quiz	≥80% score	Trainer
Certification issued	Valid for 12 months	Fleet Ops

Linked documents: Charging SOP, Route & Duty Cycle Tool, Driver KPI Dashboard

