QUARK SPEED

ENERGY

Energy Logistics for Mining, Transport and Industry

Technology-neutral systems integration designed around the real operating requirements of fleets and sites.

CAPABILITY OVERVIEW | OCTOBER 2026



THE PROPOSITION

Begin with production, not a product

Buying an electric truck is one decision. Designing how energy reaches that truck throughout every shift is a system-level operating decision.

EQUIPMENT-FIRST

Choose a vehicle, battery or charger, then try to make the rest of the operation accommodate it.

QUARK SPEED: OPERATIONS-FIRST

Start with tonnes, routes, duty cycles, uptime and energy access. Work backwards to the right integrated system.

Commercial objective: productive fleets, dependable energy and disciplined whole-life economics.

THE COMPLETE SYSTEM

Energy is a logistics system

Generation, storage, distribution and operation must be designed together, then monitored as one system.

01

GENERATE

Grid supply
Solar and wind
On-site power

02

STORE

Stationary batteries
Mobile storage
Resilience

03

DELIVER

Charging
Battery swapping
Distribution

04

OPERATE

Heavy fleets
Transport assets
Industrial loads

CONTROL LAYER | Fleet software • energy management • performance monitoring

CAPABILITIES

A broad, technology-neutral capability set

Quark Speed coordinates applicable options and specialist partners instead of locking customers into one manufacturing platform.

ELECTRIC FLEETS

Mining haulage, heavy-duty trucks and support vehicles

ENERGY STORAGE

Mobile and stationary batteries, storage system selection

CHARGE OR SWAP

Depot charging, on-site charging, battery exchange

RENEWABLE POWER

Solar, wind and appropriate microgrid configurations

INTELLIGENT CONTROL

Fleet monitoring, energy scheduling and operations software

LONG-ENDURANCE OPTIONS

Hydrogen-battery hybrids where analysis supports them

CUSTOMER FIT

Especially relevant where energy is difficult

Potential applications where diesel costs, downtime and unreliable power can materially constrain operations.



Remote mining

Diesel-intensive operations, demanding terrain, limited grid access

Haul and freight corridors

High-utilisation trucks, predictable routes and turnaround needs

Industrial and logistics sites

Depot electrification, peak power and operating resilience

The correct solution depends on the duty cycle

A practical assessment compares energy systems on technical fit, infrastructure needs, availability and whole-life economics.

BATTERY SWAPPING

Short repeated journeys and high-throughput operations where downtime is expensive.

Key consideration: compatible packs and swap infrastructure.

FAST CHARGING

Predictable depot returns where sufficient power can be provided.

Key consideration: grid capacity and charging schedules.

HYDROGEN HYBRID

Potentially attractive in long-duration or special high-utilisation use cases.

Key consideration: supply logistics, safety and cost.

There is no universal winner. The operating data drives the decision.

HOW WE ENGAGE

A disciplined pathway from challenge to implementation

A measured first engagement helps identify whether there is a real operating and investment case before committing to equipment.

01

DISCOVER

Understand routes, payloads, energy sources, shifts, service capacity and downtime.

02

COMPARE

Model practical configurations, risks, costs and available suppliers.

03

VALIDATE

Define a bounded pilot, acceptance criteria and measurable outcomes where justified.

04

SCALE

Coordinate partners, infrastructure and a staged implementation roadmap.

THE COMMERCIAL OPPORTUNITY

More than a supply relationship

Quark Speed is developing a repeatable project-development and integration model, applicable across geographies and operating sectors.

FOR OPERATORS

A coordinated approach to fleet productivity, energy reliability, technology selection and operating cost.

FOR PARTNERS & INVESTORS

Potential to assemble specialist partners and develop integrated projects across mining, transport and industry.

Priority: demonstrate value through credible scoping and well-defined customer opportunities.

QUARK SPEED

ENERGY

Keep the fleet moving.

Design the energy system that makes it possible.

Lee Gray | Quark Speed Energy

+61 485 607 400

www.quarkspeedenergy.com

Capability discussion and operating scoping

