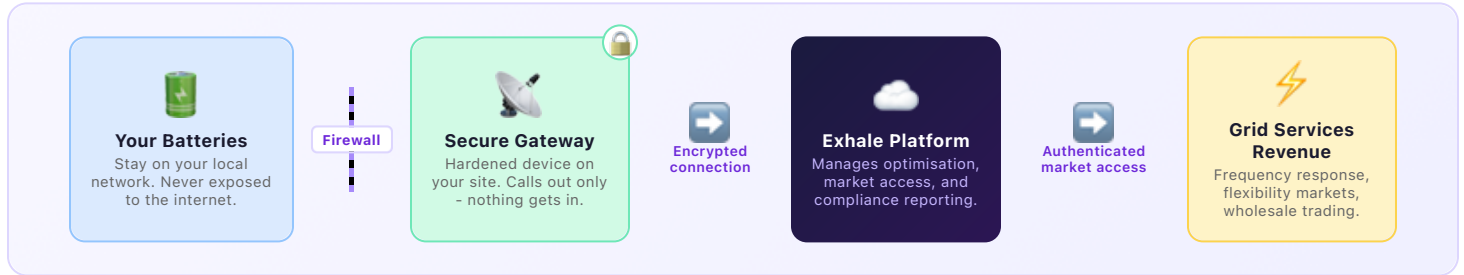


## Your batteries are remotely managed, but are they secure?



Grid-connected batteries can be charged, discharged, or damaged through their internet-facing control interfaces. A single breached credential could destabilise your site's grid connection or destroy cells through over-charge attacks.

### How We Keep Your Batteries Safe



### What We Protect Against

**Remote Takeover**  
Attackers exploit internet-facing inverter APIs to seize control of your battery fleet. Our gateway ensures batteries are **never directly reachable** from outside your site.

**Equipment Damage**  
Malicious commands push batteries beyond safe limits. Our gateway enforces **hardware safety limits locally** - even if the connection to the Exhale platform fails.

**Grid Disruption**  
Coordinated attacks use batteries to destabilise local grid infrastructure. Every command is **independently verified** through our platform before being passed to your equipment.

### How We Protect You

- **Batteries never touch the internet** - they sit behind our firewall, communicating only with the on-site gateway.

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- **The gateway only calls out** - no inbound connections are accepted. Even if someone knows it exists, they cannot connect to it.

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- **Every command is signed and logged** - a complete audit trail from instruction to battery response, traceable end to end.

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- **Each site has unique credentials** - automatically rotated. A compromise at one site gives zero access to any other.

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- **Fail safe during outages** - if the internet or cloud goes down, the gateway holds your batteries in a safe state until connectivity returns.

### What You Get

- Protection without complexity**  
We handle the security architecture. You get a hardened, auto-updating, gateway device, installed on site, with nothing to configure or maintain.

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- Revenue from secured assets**  
Your batteries earn from grid frequency services and flexibility markets - securely, automatically, and with full transparency.

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- Regulatory confidence**  
Continuous compliance reporting, performance monitoring, and audit logs - ready for any regulator or insurer who asks.

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- Complete visibility**  
Live dashboard showing asset status and security events - securely accessible from anywhere, on any device.

*"Most battery owners don't realise their assets can be remotely controlled by anyone with stolen API credentials. We built Exhale so that even if credentials are compromised, the physical equipment remains protected by hardware-enforced limits at the edge."*

- Gareth Williams, Co-Founder, Exhale

- IEC 62443
- NIS2 READY
- NESO COMPLIANT
- ZERO TRUST
- UK GDPR
- POST-QUANTUM READY