

Our approach to safety

At RES, safety is of the utmost importance.

Our ambition is to continue to lead the market in delivering best-in-class health and safety performance, as we simultaneously look to the future in developing a zero-harm culture.

Health and safety is woven into every aspect of RES' battery energy storage systems. The Machaire project will be developed to address and mitigate against the risk of fire ignition and propagation, in a number of ways.

Monitoring and Remote Access

Unlike electric cars and scooters, for example, RES-managed battery energy storage systems are constantly monitored from our 24/7/365 control centre. Some controls can also be safely operated remotely from our control centre, such as the shutting down of an individual battery rack or the entire battery energy storage system, if required.

Battery Selection

The proposed battery technology for the development is anticipated to be lithium iron phosphate (LFP). LFP has better stability against thermal runaway at higher temperatures compared to some other battery chemistries. All batteries must be tested and certified to an industry standard (UL9540A), demonstrating resistance to thermal runaway, and which ensures there is no likelihood of explosion, with any fire contained within the affected battery rack.

Equipment Spacing

The site will be developed to include adequate spacing between the battery storage enclosures (BSE) to mitigate against the risk of fire spread in the unlikely event of a fire within one BSE.

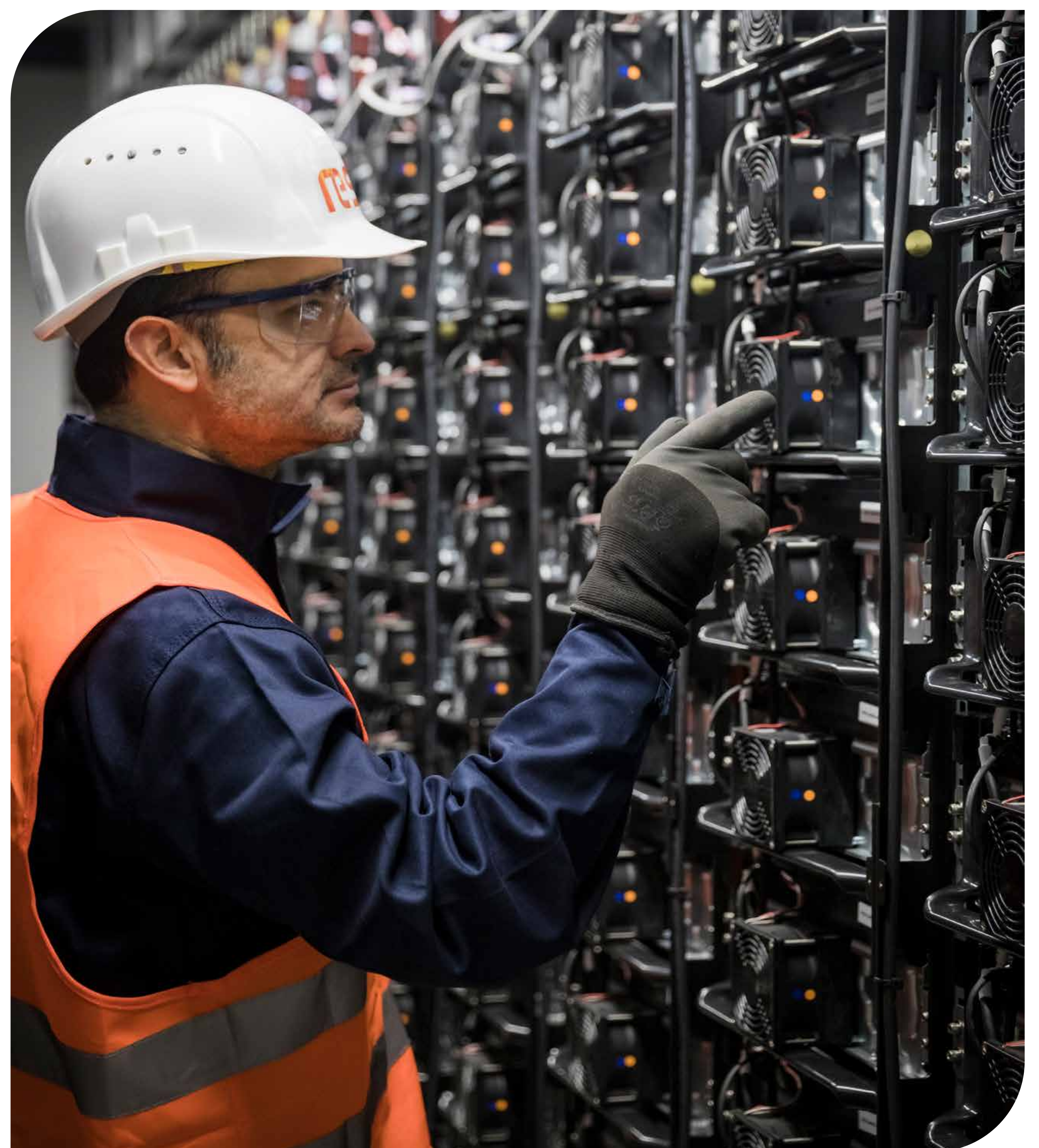
Protection Systems

Each BSE will have a dedicated fire protection system, comprising flammable gas detection and venting, fire detection and alarm, and an automatic fire suppression system.

Access to Battery Enclosure and for Emergency Services

All battery enclosures will be accessed via external doors only. The fenced compound will have a wide access route through 2 access points that allows a circular corridor around the battery containers, allowing the fire service to access the site in the unlikely event of an incident. In addition, two site access points will be proposed to the battery energy storage compound.

A Fire Risk Statement will accompany any planning application.



Machaire Energy Storage Proposal

machaire-energystorage.co.uk