Digital Infrastructure
INSTITUTE

COMMUNITY INFORMATION SHEET

Battery storage

The batteries inside data centres — and on-site grid batteries

Two kinds of batteries

First, every data centre has **backup batteries (a UPS)** that keep the computers running for the few seconds or minutes between a grid outage and the generators starting. Second, some sites now add a larger **grid-scale battery (a BESS)** that can store energy, provide backup, and even support the wider electricity grid.

Why people ask about them

Most modern large batteries use lithium-ion technology, which is safe when well designed but can, in rare cases, overheat ("thermal runaway") and catch fire. The community interest is in fire safety, separation from neighbours, and emergency-services access — all of which are standard parts of the design and approval.

The upside

On-site batteries can make a facility a good grid citizen — smoothing demand, storing surplus renewable energy, and supporting stability — which helps keep power reliable and affordable for everyone.

What good practice looks like

- Battery rooms or enclosures with fire detection, suppression and compartmentation, designed to recognised standards.
- Adequate separation from homes and public areas, with clear emergency-services access.
- Lithium-ion installations with thermal-runaway protection and monitoring.
- Where a grid battery is provided, use of it to support grid stability and renewable energy.

Want to know more? Your local council, the EPA Tasmania and ARPANSA publish further information. This sheet is general information, not medical, legal or planning advice; figures are indicative and a specific proposal is confirmed by qualified assessment.