



COMMUNITY INFORMATION SHEET

Glossary

Key data centre and AI terms, in plain English

A quick reference to the terms used across this series.

Term	Plain meaning
AI (artificial intelligence)	Software that learns patterns from data to predict, generate or assist.
AI factory	A large data centre built specifically to train and run AI at scale.
BESS	Battery Energy Storage System — a large on-site battery for backup and grid support.
Colocation	A data centre that leases secure space and power to many customers.
Compute	Computing power — the processing capacity used to train and run software and AI.
CUE	Carbon Usage Effectiveness — carbon emitted per unit of computing energy (lower is better).
Data centre	A building housing networked computers plus power, cooling and security.
EMF	Electromagnetic fields — here, low-frequency magnetic fields from electrical equipment (measured in mG).
ERF	Energy Reuse Factor — share of energy reused off-site, e.g. captured waste heat (higher is better).
GPU	Graphics Processing Unit — the parallel-processing chip that powers modern AI.
Hyperscale	A very large cloud or AI data centre campus (often hundreds of MW).
IT load (MW)	The power drawn by a facility's computers — the truest measure of its size.
LUPAA	Land Use Planning and Approvals Act 1993 (Tas) — the main planning law.
EMPCA	Environmental Management and Pollution Control Act 1994 (Tas) — the main pollution-control law.
NABERS	National Australian Built Environment Rating System — a measured 1–6 star efficiency rating.
PPA	Power Purchase Agreement — a long-term contract to buy (often renewable) electricity.
PUE	Power Usage Effectiveness — total energy ÷ computing energy (1.0 is ideal; lower is better).
REF	Renewable Energy Factor — share of energy from renewable sources (higher is better).
UPS	Uninterruptible Power Supply — batteries that bridge the gap to backup generators.
WUE	Water Usage Effectiveness — litres of water per unit of computing energy (lower is better).
mG / μ T	Milligauss and microtesla — units of magnetic field (1 μ T = 10 mG).

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.