

Energy glossary

AD	Aerobic digestion – is a microbial process which occurs with the availability of oxygen. Organic material is oxidized under aerobic conditions and products like nitrate, phosphate and carbon dioxide are produced as a result	CSTD	Completely stirred tank digesters – is a technology based on a semi-continuous flow of fresh biomass that enters the reactors, is mixed at a controlled temperature, and exits as biogas and digestate.
ACCU	Australian Carbon Credit Unit Each ACCU issued represents one tonne of carbon dioxide equivalent (tCO ₂ -e) stored or avoided by a project. ACCUs are issued by the Clean Energy Regulator (CER) for greenhouse gas abatement activities undertaken as part of the Australian Government's Emissions Reduction Fund (ERF).	CAL or CAP	Covered Anaerobic Lagoon (or Ponds) – is an anaerobic lagoon with a cover over the top. The cover is generally constructed of a high-density polyethylene (HDPE), which joins up with the lagoon lining and forms a 'seal', ensuring gas and odours remain under the cover.
AEIP	Agriculture Energy Investment Plan (Victoria)	CT	Current Transformer – is a device which is used to produce an alternating current in its secondary winding, which is proportional to the AC current in its primary winding. This device is mainly used when a current or voltage is too high to measure directly.
AER	Australian Energy Regulator (Federal)	DA	Dairy Australia
ARENA	Australian Renewable Energy Agency (Federal)	DoD	Depth of Discharge – a battery's DoD indicates the percentage of the battery that has been discharged relative to the overall capacity of the battery.
CEFC	Clean Energy Finance Corporation	DPI	Department of Primary Industries (NSW)
CIP	Clean in Place – is an automated method of cleaning the interior surfaces of pipes, vessels, equipment, filters and associated fittings, without major disassembly.	DELWP	Department of Environment Land Water and Planning (Victoria) now known as the Department of Energy, Environment and Climate Action.
COP	Coefficient of Performance – is a measure of the efficiency of heating. It is the ratio of the heating capacity to the effective power input of the device, at any given set of rating conditions.		

EUAs	Environmental Upgrade Agreements – is an innovative financing mechanism made under NSW legislation which allows building owners to repay a loan for upgrades through a local council charge on the land. This financing mechanism can be used for a range of upgrade works improving the environmental and sustainability performance of existing buildings.
EWEN Project	Efficient Water Energy and Nutrient project in northern New South Wales helping dairy farmers become more energy and water efficient (NSW Department of Primary Industries).
FIT	Feed-in Tariffs
GHG	Greenhouse Gas (GHG) emissions
GST	Goods and Services Tax
HP	Heat Pump
HPHW	Heat Pump Hot Water System – a heat pump that uses renewable energy to heat your water. It absorbs the heat from the surrounding air and uses it to heat your water.
HWS	Hot Water System
IoT	Internet of Things (IoT) , or the use of internet tech to sync with hardware.
ISU	International System of Units (SI) – commonly known as the metric system, is the international standard for measurement.
kVA	Kilovolt-amps – units of electrical power demand. kVA is a measure of apparent power: it tells you the total amount of power in use in a system. In a 100% efficient system kW = kVA. However electrical systems are never 100% efficient and therefore not all of the systems apparent power is being used for useful work output.
kW	Kilowatts – units of electrical power, it is the amount of power that is converted into a useful output. kW is therefore known as actual power or working power.
kWh or kW.hr	Kilowatt-hours – units of electrical energy use or consumption. Your average daily energy use is measured in kWh and megajoules (MJ) for gas. A kilowatt-hour is a unit of energy: one kilowatt of power for one hour. In terms of SI derived units with special names, it equals 3.6 megajoules.

kWp	Kilowatt ‘peak’ power output of a system. It is most commonly applied to solar arrays. For example, a solar panel with a peak power of 3kWp which is working at its maximum capacity for one hour will produce 3kWh.
LED	Light-emitting diode – a semiconductor diode which glows when a voltage is applied.
LEM	LEM Current Sensors – Local Energy Market The open loop Hall-based current sensor measures the magnetic field generated by the primary current flowing in a busbar inserted in the sensor slot and delivers a galvanically isolated output proportional to the primary current.
MWh	Megawatt-hours – units of electrical energy use or consumption.
NEM	National Electricity Market – comprises five interconnected states that also act as price regions: New South Wales (including the Australian Capital Territory), Queensland, South Australia, Tasmania and Victoria.
NMI	A National Meter Identifier (NMI) is a unique 10 or 11 character reference that’s associated with the electricity connection point at your home or business.
PCM	Phase Change Materials – is a substance which releases/absorbs sufficient energy at phase transition to provide useful heat or cooling.
PPA	Power Purchase Agreement – is an agreement between a buyer and a generator to buy renewable energy at an agreed price for an agreed period of time.
PV	Photovoltaic – relating to the production of electric current at the junction of two substances exposed to light.
RDP	Regular Dairy Provider – this is whomever the farmers get their supplies from.
ROI	Return on Investment – is a calculation of the monetary value of an investment versus its cost. The ROI formula is: (profit minus cost) divided by cost.
RPM	Rotations per minute – a unit which describes how many times an object completes a cycle in a minute.

SoMe	Social Media
SRES	Small-scale Renewable Energy Scheme – (commenced 1 April 2022) a range of legal requirements that directly affect solar businesses whose work relates to claims for small-scale technology certificates.
STCs	Small Technology Certificates – one STC is equal to 1 megawatt hour of renewable electricity either generated or displaced by eligible small-scale renewable energy systems such as solar PV, wind and hydro and solar water heaters and air source heat pumps. STCs create a financial incentive to install small-scale renewable energy systems by reducing upfront installation costs.
tCO₂-e	Tonnes (t) of carbon dioxide (CO₂) equivalent (e) – “Carbon dioxide equivalent” is a standard unit for counting greenhouse gas (GHG) emissions regardless of whether they’re from carbon dioxide or another gas, such as methane.

TOU	Time of use tariff
VDL	Van Diemens Land Company
VEECs	Victorian Energy Efficiency Certificates – electronic certificates created under the program when certain energy efficiency activities are undertaken in residential or non-residential premises. Each certificate represents one tonne of greenhouse gas emissions reduction (CO ₂ -e). Once created, certificates can be sold to energy retailers who have a liability under the program to surrender a certain number of certificates each year.
VSD	Variable Speed Drive – controls the speed and torque of an AC motor by converting fixed frequency and voltage input to a variable frequency and voltage output. System performance can be greatly improved by controlling speed to precisely match the load.