

20 August 2026

Solar 101 for Growers



EECA's strategy

Our mission

Mobilise New Zealanders to be world leaders in clean and clever energy use.

Our desired outcome

Energy users save energy, money and reduce emissions.

Energy productivity and resilience improves.



Energy efficiency first

Efficient energy use is the first option users adopt.



Empower energy users

Users are empowered to control their energy.



Accelerate renewable energy

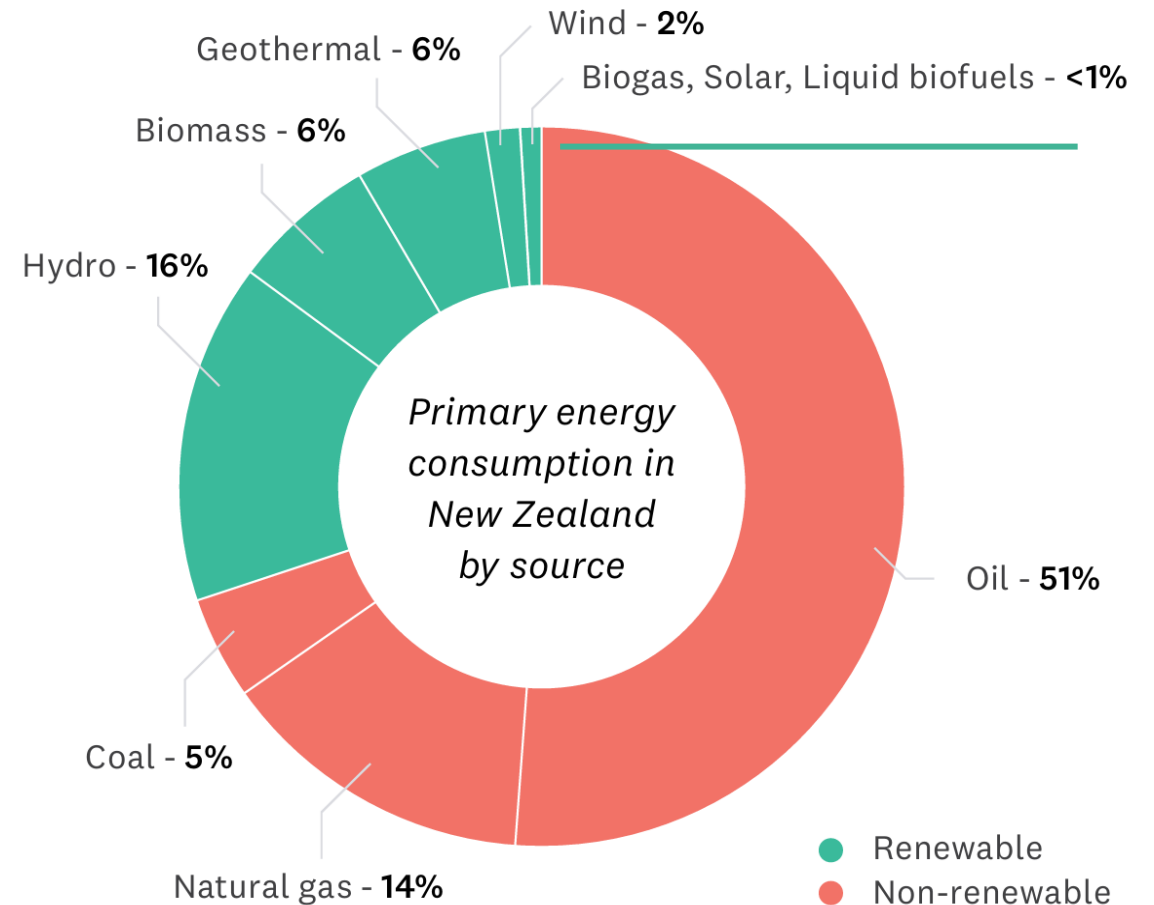
Users transition to low emissions energy.

Energy System

Energy use

Solar use is increasing but there is still plenty of potential

- Opportunity remains to increase uptake of renewables
- EECA is increasing the focus on solar as system options improve
- Support for all energy users continues through a range of programmes



NZ electricity generation

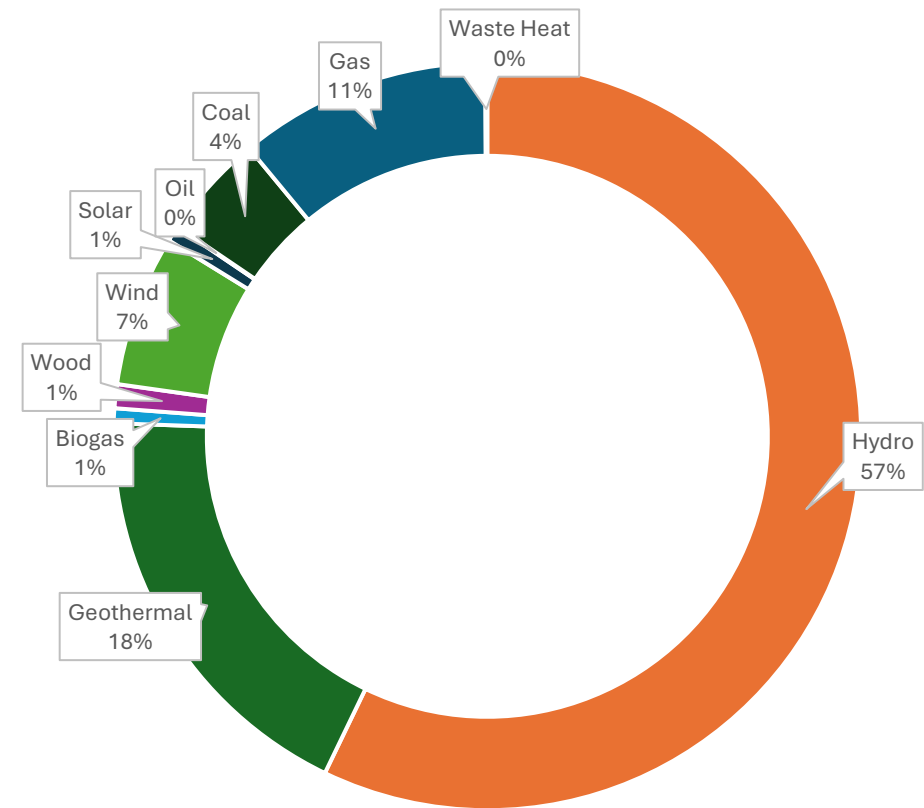
Electricity generation over past 5 years (2020-2024)

New Zealand's generates ~80-88% electricity from renewable sources

Balance generated from burning fossil fuels

Our capacity for solar, wind and geothermal generation is increasing

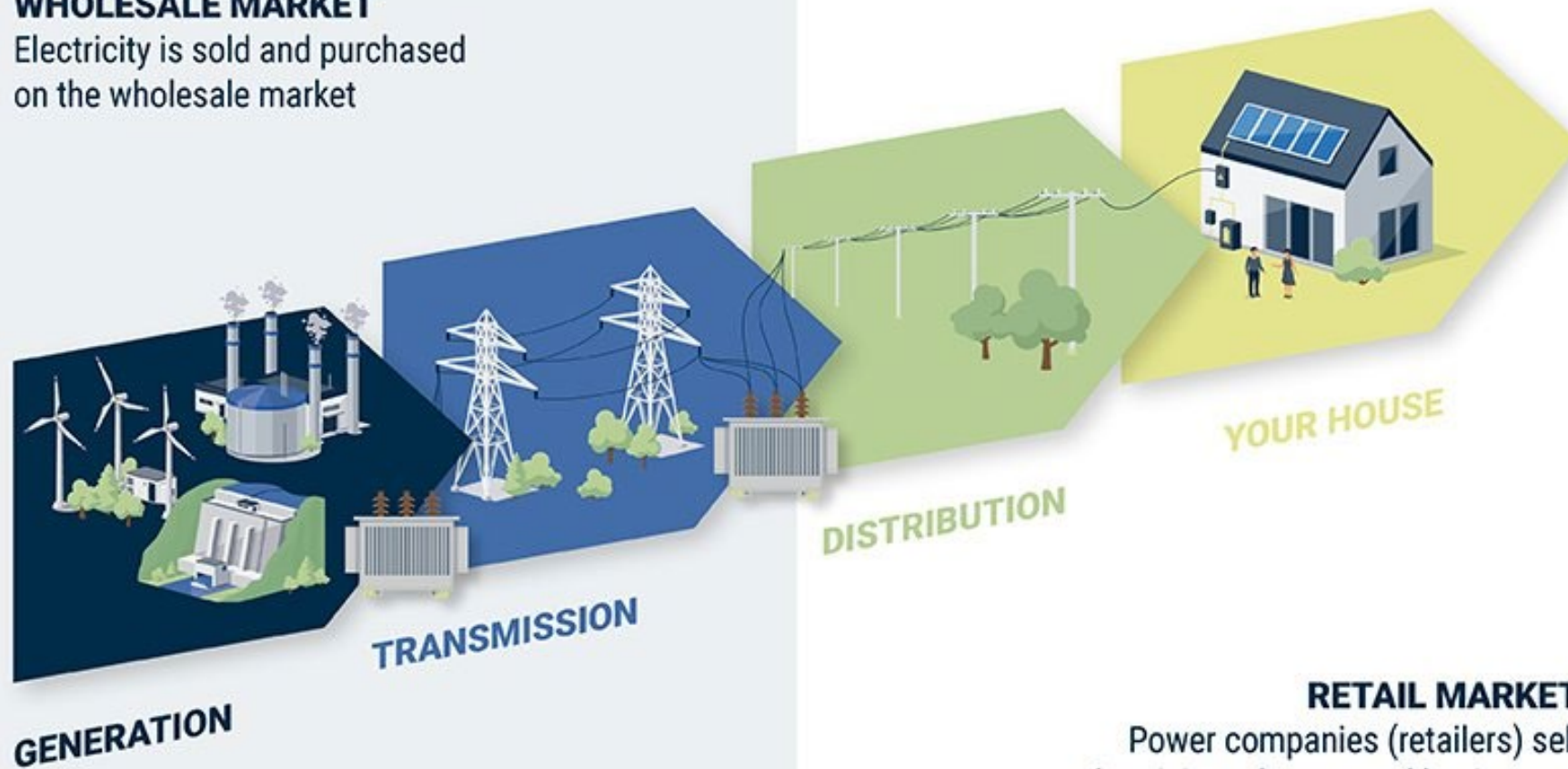
From 2023 to 2024 we recorded a 60.2% increase in solar generation



Source: [MBIE Electricity statistics](#)

WHOLESALE MARKET

Electricity is sold and purchased on the wholesale market



RETAIL MARKET

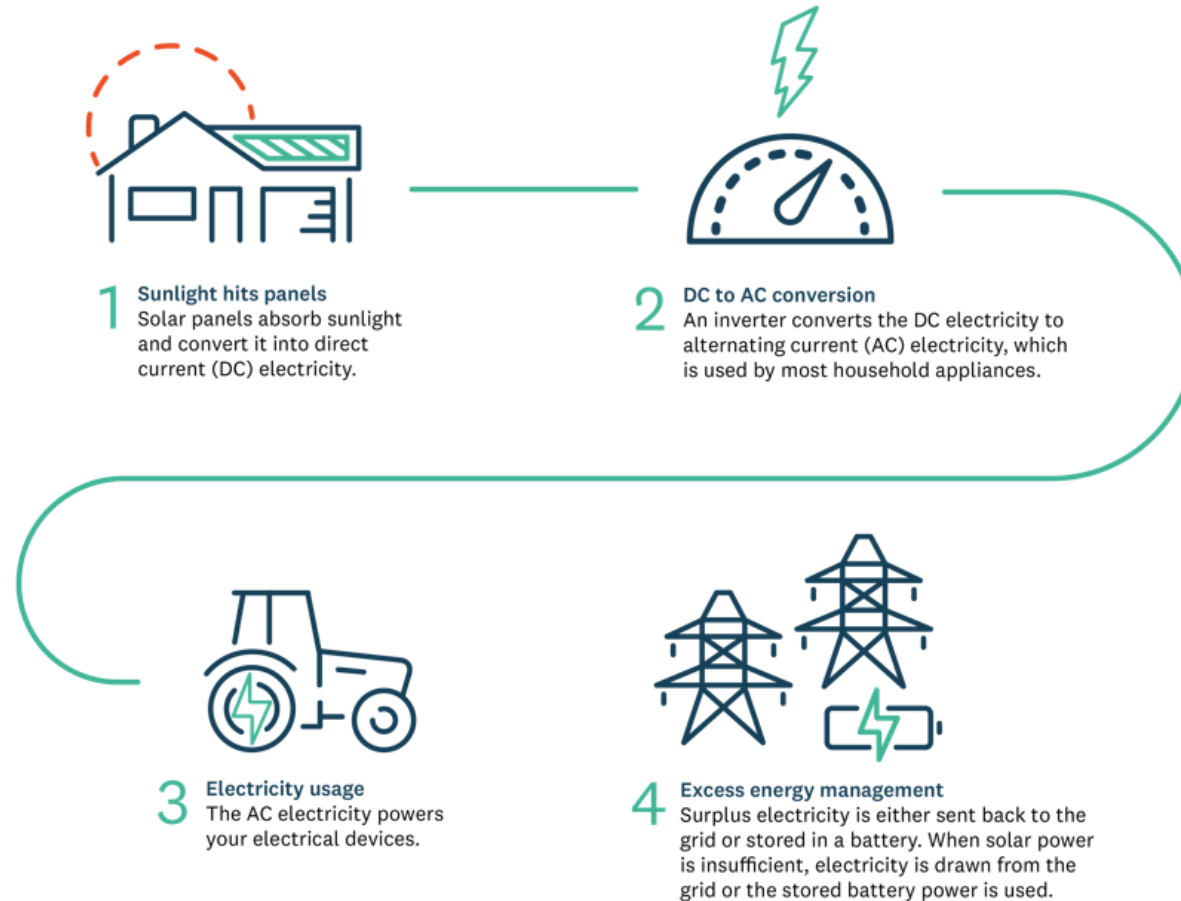
Power companies (retailers) sell electricity to homes and businesses

Getting started with solar

Key aspects for solar

Solar system aspects

How solar works:



Comparison with Australia

Solar driven by incentives

	Australia	New Zealand
Installed Capacity	45+ GW	~1.1 GW
Household take up	1 in 3 homes has solar	1 in 27
Electricity share	20%+	~1%

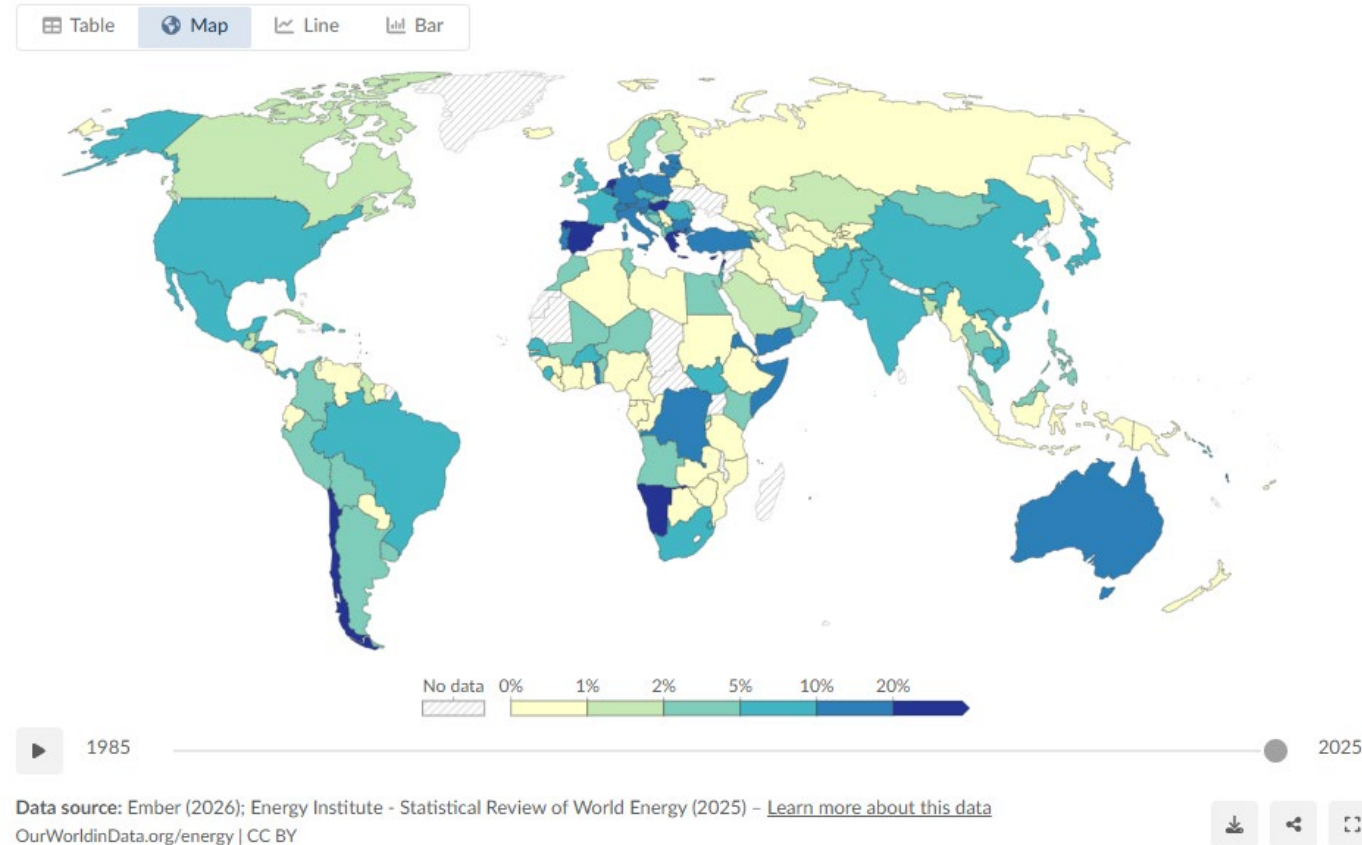


Solar worldwide

Share of electricity production from solar, 2025

Measured as a percentage of total electricity produced in the country or region.

Our World
in Data



[Share of electricity production from solar, 2025](#)

Farmers move through a journey when thinking about solar.

Farmers information needs evolve as they move through a journey with specific phases – from first becoming aware of solar, to exploring whether it's relevant to their farm, through to deeper evaluation, and finally choosing whether and how to invest. At each stage, the questions farmers ask (and the information they need) change, meaning different types of data and content play different roles along the way.

Awareness

Solar could be an option.

Early Interest

Is solar right for *my* farm?

Early Research

How would this work on my farm?

Deeper Evaluation

Does this stack up financially?

Decision

Is this the right investment?

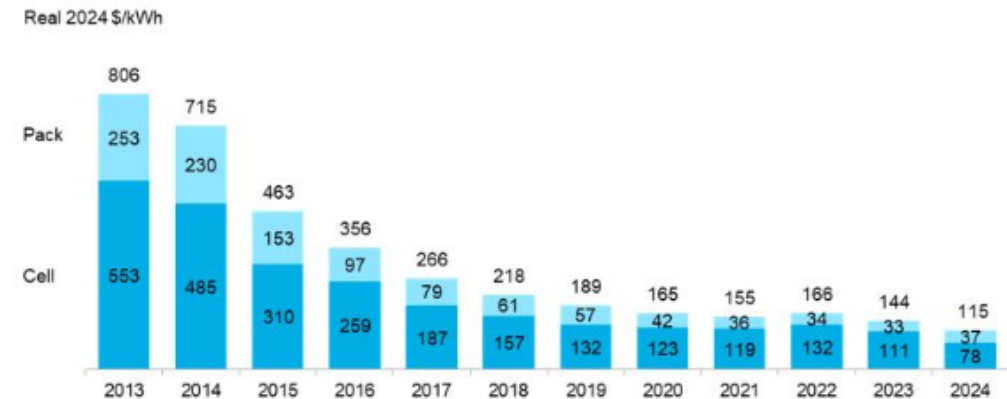
Batteries and other technology

Update on what's happening with battery energy storage and other emerging technology

Prices have been steadily falling

- No reason the trend won't continue and technology advancements could improve the products even further.
- Solid State batteries not far from being commercialized.

Figure 1: Volume-weighted average lithium-ion battery pack and cell price split, 2013-2024



Source: BloombergNEF. Note: Historical prices have been updated to reflect real 2024 dollars. Weighted average survey value includes 343 data points from passenger cars, buses, commercial vehicles and stationary storage.

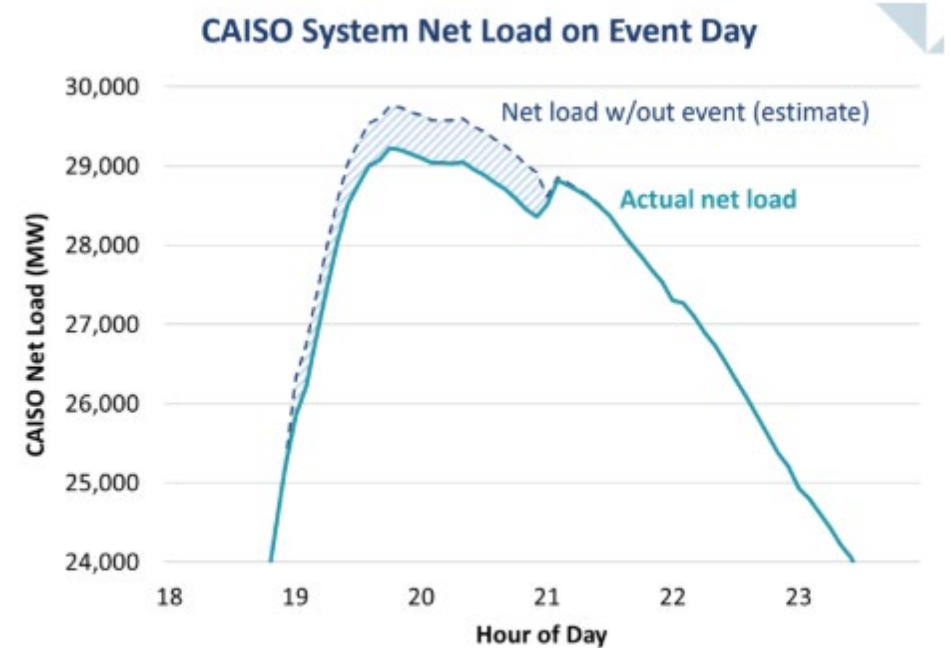
Energy storage



Virtual Power Plants (VPPs)

Promise of smart grids

Aggregation of Distributed Energy Resources (DERs) shows potential for system wide savings.



Notes: Net load sourced from CAISO and reflects actual demand less solar and wind output. Baseline net load in the absence of the event was constructed using 5-minute telemetry data provided by Sunrun and Tesla. All battery output is shown as a reduction in net load.

Solar on Farms Programme

Solar and battery demonstration farms

Solar on farms programme

Confirmed as at 1 April 2026

4008 (kilowatt peak)
kWp
Total solar capacity

Overview of demonstration farms

37

Battery
systems

32

Solar
arrays

14

New Zealand
regions

10

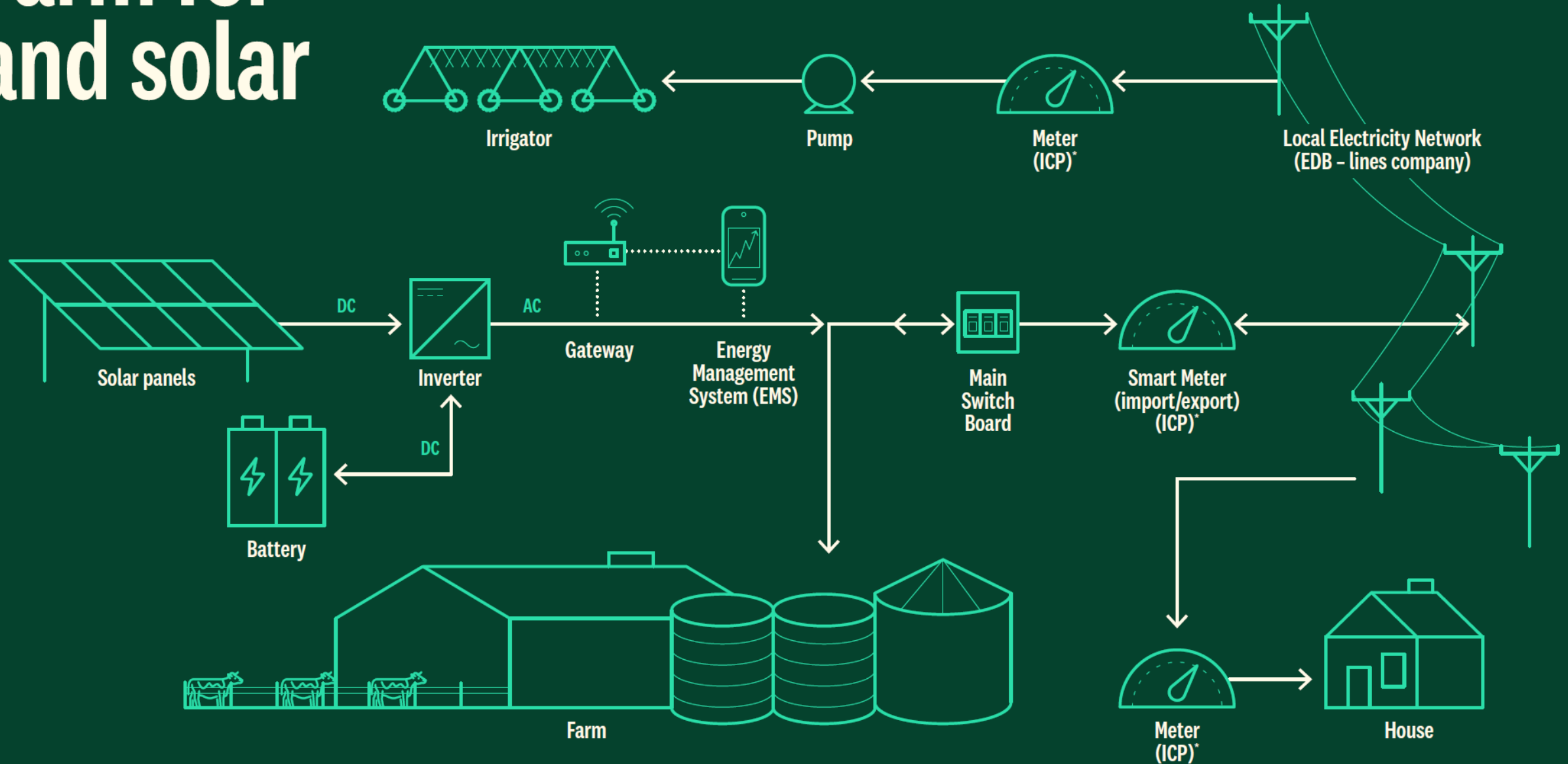
Farm
types



Farm type

- Dairy
- Horticulture
- Sheep & beef
- Mixed
- Arable
- Other livestock
- Viticulture
- Plant nursery
- Poultry
- Pig

Farm ICP and solar



*ICP = installation control point

Residential support

Residential Solar

[Breaking down home solar costs and savings | EECA](#)

SWITCH ON SOLAR

Solar costs and savings

Prices for solar systems have gone down over time, making them more affordable than ever. Find out what costs to expect and how solar saves you money.



Solar products approved list

EECA has a list of residential solar products that we have approved based on their efficiency and demand flexibility.

[Home](#) > [Regulations](#) > [Voluntary Guidance](#) > [Solar products approved list](#)

As part of our work to help consumers make informed choices about solar, EECA has developed an approved list of solar products to support homeowners when they are choosing rooftop solar panels, inverters and batteries.



Recommended solar products

EECA's approved list makes it easy to choose solar technology that meets our recommendation for efficiency and demand flexibility. The list of panels and inverters will continue to grow, and batteries will be added soon.

The products included on the list have been assessed by EECA, and meet the criteria outlined in our technical specification.

Staying up to date



Call us on 0800 300 643



You can email us at:
solar@eecca.govt.nz



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