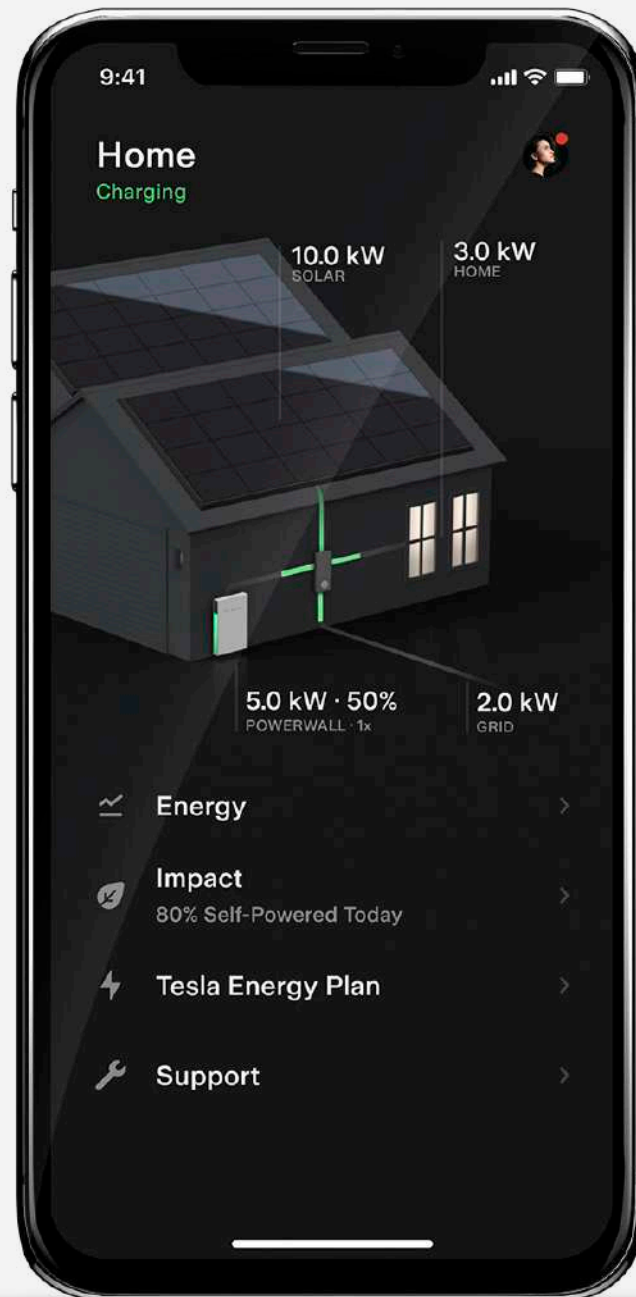


Tesla Energy Plan with the Tesla Virtual Power Plant User Guide

T E S L A
ENERGY PLAN



Overview

Our mission is to accelerate the world's transition to sustainable energy.

By joining the Tesla Energy Plan, the value of your Powerwall and Solar are being maximised as part of the Tesla Virtual Power Plant.

The Tesla Virtual Power Plant works by connecting a network of solar powered homes and Powerwall together in a co-ordinated manner using Tesla's world leading technology. This not only benefits your home first and foremost, but also supports the grid when it is needed, by using stored energy in your Powerwall and other homes with Powerwall, that are connected to the Tesla Virtual Power Plant.

By joining the Tesla Virtual Power Plant, you are helping the grid become more stable, reducing the use of fossil fuels and lowering energy costs for you and those in your community.

The Tesla Virtual Power Plant along with the Tesla Energy Plan is purpose built for Powerwall and is delivered to you by our retail energy partner, Energy Locals.

Value

- Receive monthly Grid Support Credits for each Powerwall you own, calculated daily and applied monthly to your bill.
- Tesla's world leading technology will forecast your energy needs and charge your Powerwall from solar and off-peak grid energy, helping you to minimise importing energy in peak times.
- Access to flexible Time of Use rates, helping you to maximise savings by using low-cost energy from the grid.
- Certainty that we will only cycle your battery up to 50 discharge cycles a year[#]
- Receive a competitive feed-in-tariff for any solar energy exported to the grid.
- Become more self-sufficient and less reliant on the grid
- No lock in contract energy plan.
- Back up protection. Minimum 20% reserve during a grid outage.
- Australian Based Customer Service Team.

[#] Each cycle corresponds to 13.5kWh discharged from Powerwall to the grid directly.

How Your System Will Work

Your Powerwall creates value by shifting your home's energy usage from peak to lower priced periods. This is called 'load shifting' which helps to minimise your bill and reduces the cost to power your usage, meaning Tesla can pass on lower energy rates, credits and competitive feed in tariffs for your home.

Your Powerwall will constantly monitor your solar production and usage based on historical patterns. It uses these predictions to prioritise charging from your solar when it exceeds your usage (e.g. in Summer when there is an abundance of sun).

When there is not enough sun available for your solar production to offset your predicted peak period usage, it will charge from the grid during lower priced periods to avoid peak pricing (e.g. in Winter when there is typically not as much sun available).

Your Powerwall may discharge to help support and create grid stability when needed. This support helps to reduce energy prices for both you and your community. Tesla's world leading software ensures your home's predicted energy usage is prioritised.

Predictions may not provide an accurate picture due to circumstances that are out of our control. You will notice at times that Powerwall may not operate in a way that is expected. However you can rest assured that Powerwall will always aim to minimise your bill by taking advantage of lower Time of Use rates, based on your predicted solar production and your home's usage.

Frequency Support

Frequency support is a term used to describe electricity being sent into the grid or taken out of the grid, so it remains at 50 Hertz. If the frequency is more or less than 50 Hertz, it can create instability, this is when power outages can occur.

Your Powerwall is configured to provide frequency support to the grid at all times. This type of service is rarely needed (about once a month on average, although contingency events are unpredictable) and consumes very little energy. Frequency support is a service that all Powerwalls enrolled in the Tesla Virtual Power Plant with the Tesla Energy Plan provide simultaneously as a fleet. This is not only critical to keep the lights on across the electricity network, but also generates value that is shared with you in the form of Grid Support Credits and competitive Time of Use energy rates.

Traditionally, fossil fuels have been used to perform these services, but Powerwall can react 100 times faster with cleaner energy.



How Your System Will Work

Wholesale Market Arbitrage

At times, Tesla may charge your Powerwall from and discharge to the grid for energy arbitrage. Energy arbitrage uses Powerwall to store energy when prices are low and to sell that low-cost energy back to the grid when energy prices are higher. Tesla shares this value with customers through Grid Support Credits and competitive Time of Use rates.

Tesla's world-leading software is constantly assessing opportunities to participate in the energy market, while helping reduce your energy bill by learning your consumption behaviour and assessing opportunities to minimise grid fluctuations by:

- Charging your Powerwall from the grid with lower prices.
- Exporting solar or stored energy from Powerwall to the grid when market conditions are optimal.
- This may lead to instances where your Powerwall is kept idle, while waiting for an opportunity to discharge, meaning your home's energy usage will come from solar or the grid. This method of operation allows us to help keep energy prices down for you and the community.

For example: If wholesale market prices are low or negative, which is typically due to an oversupply of electricity in the grid (e.g. usually coinciding with solar sponge in South Australia or off-peak/shoulder times across other states) Tesla may charge your Powerwall or import energy from the grid to cover your home's energy use.

If wholesale market prices are high, which is typically due to an undersupply of energy in the grid (e.g. usually coinciding with peak times) Tesla may export your solar system or Powerwall's energy to help stabilise and support the grid.

While your Powerwall is being monitored and managed by Tesla, your system may draw from the grid more frequently depending on the season.



Summer

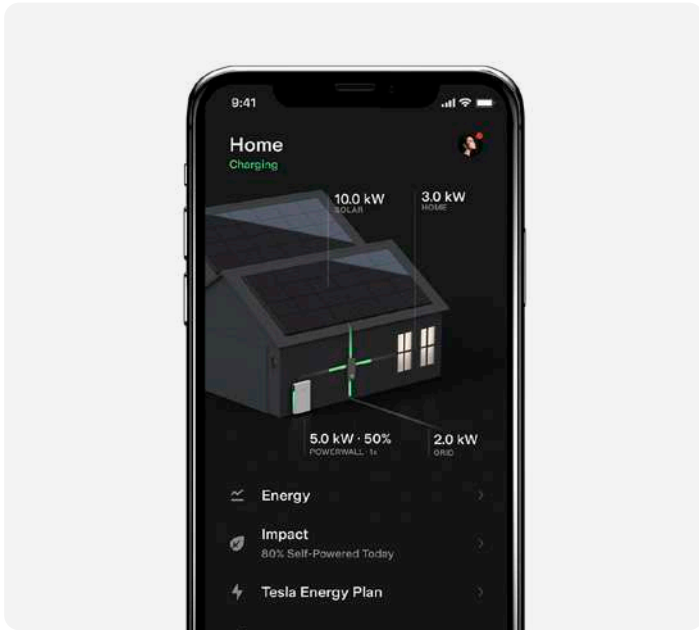
Your system is likely to produce more solar energy during summer which means you will notice that Powerwall will be charged more from solar than the grid.



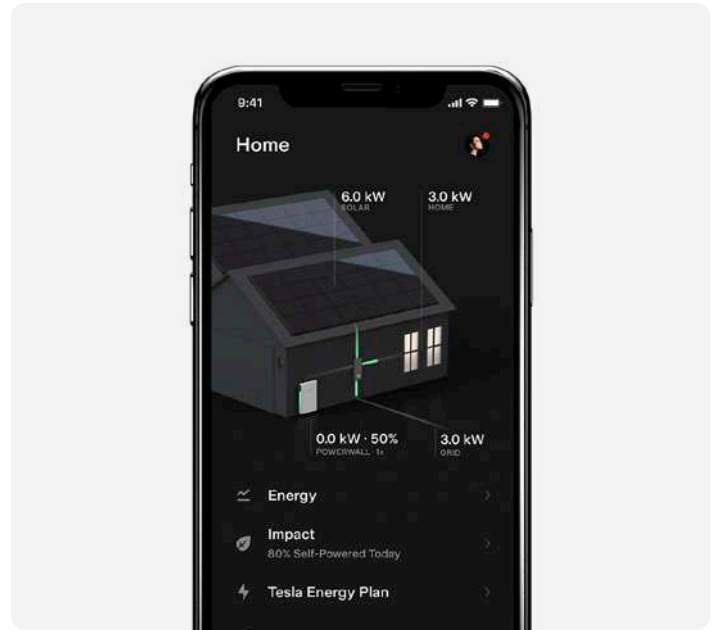
Winter

There will be less solar energy generated by your system during winter which means you will notice Powerwall charging more from the grid.

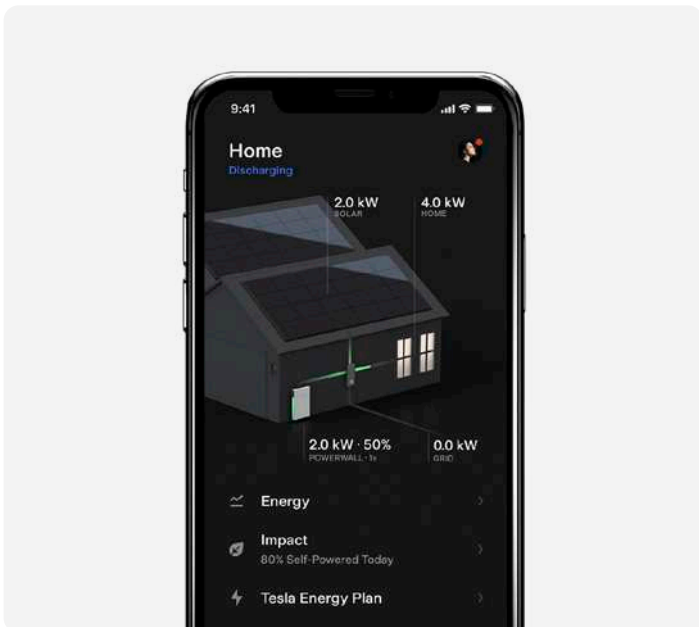
What You May See When There Is Sun



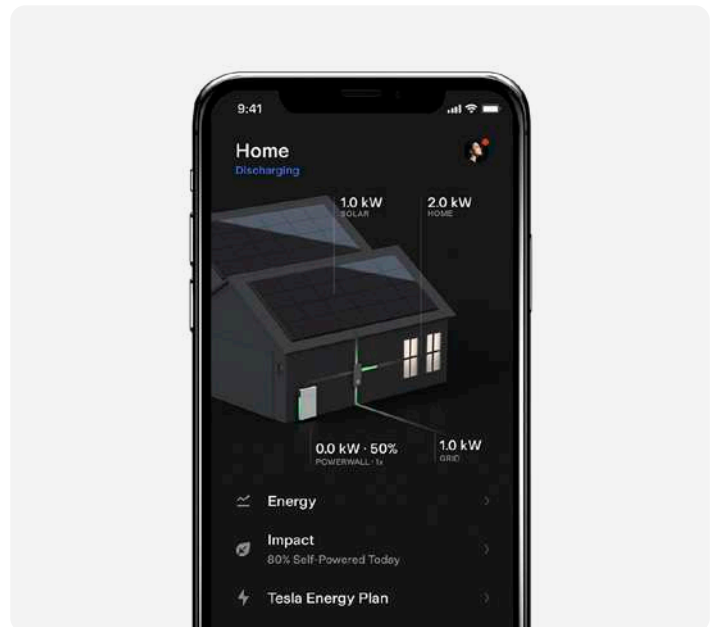
Solar powering the home, Powerwall and the grid
Solar is generating energy, covering your home's energy use, charging Powerwall and exporting to the grid. You are receiving a feed in tariff for your solar exports.



Solar powering the home and exporting to the grid
Solar is generating energy to power your home. Powerwall is not charging as it may be full or is predicting to charge later in the day. Excess energy is sent to the grid and you receive a feed in tariff.

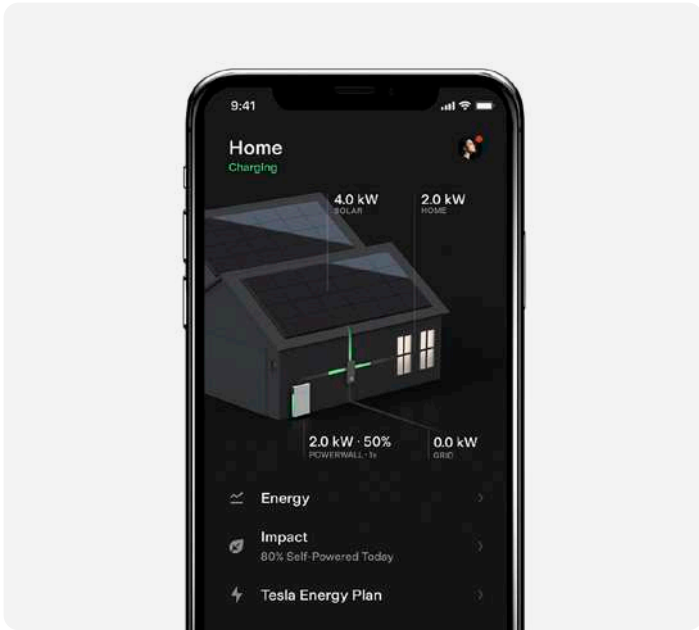


Solar and Powerwall powering the home
Solar is unable to cover your home's energy requirements, so Powerwall provides the additional energy.

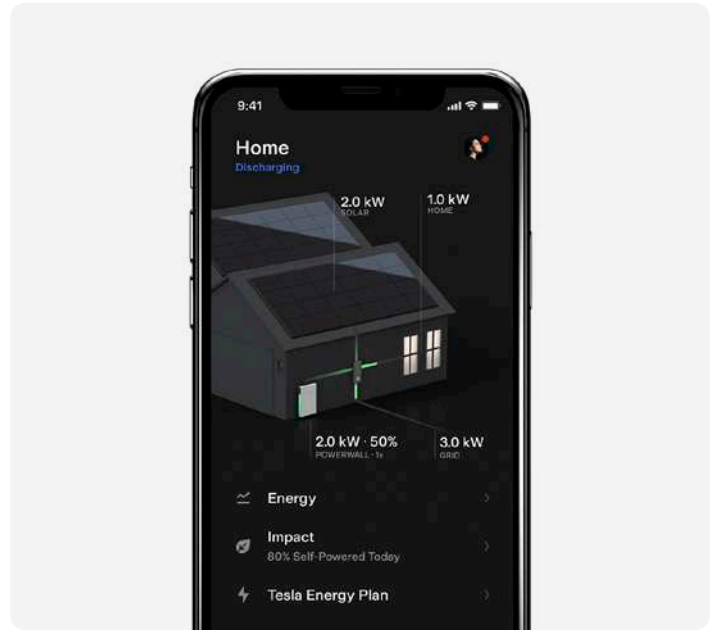


Solar and grid powering the home
Solar is unable to cover the home's energy requirements, so the grid provides additional energy. Powerwall is either empty or predicting to discharge later in the day. You will be charged with Time of Use rates for any energy drawn from the grid.

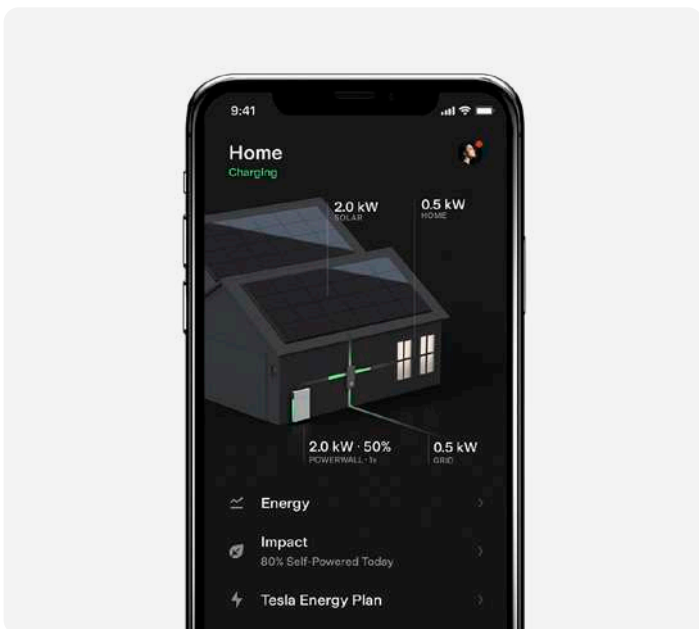
What You May See When There Is Sun



Solar is powering the home while charging Powerwall
Your home's energy usage is powered from solar, any excess solar generation is stored in Powerwall.

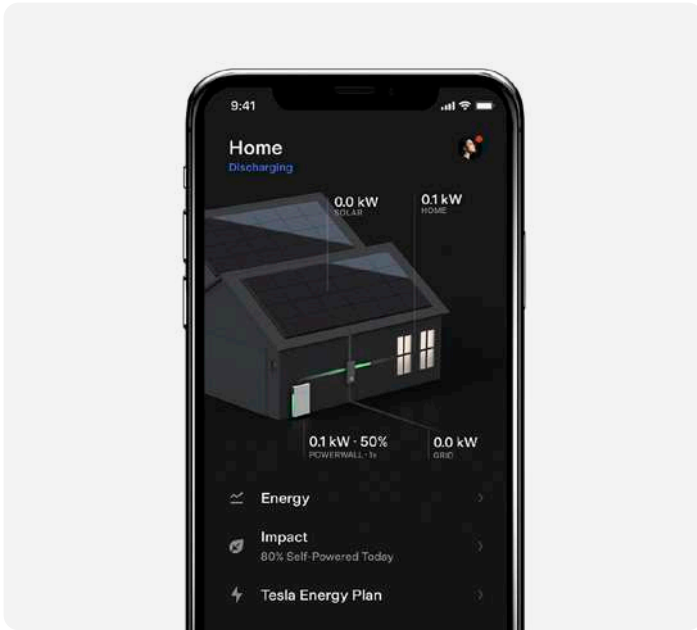


Solar is powering the home with excess solar and Powerwall exports to the grid
Solar is continuing to power your home, any excess solar is exported to the grid from solar and Powerwall to take advantage of high energy prices. You'll receive monthly Grid Support Credits and a competitive feed in tariff.

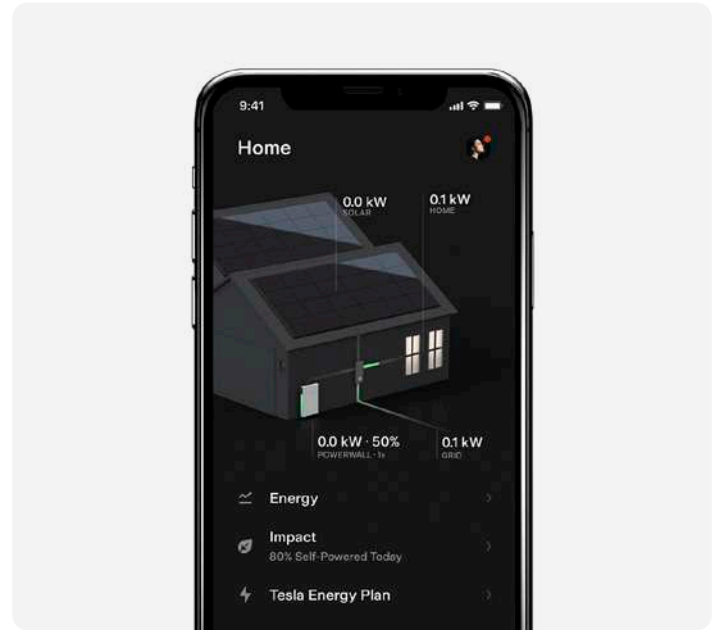


Solar is powering your home and charging your Powerwall. Powerwall is also being charged by the grid.
Solar is covering your home's energy usage while charging Powerwall. Powerwall is being charged from the grid to take advantage of low-cost energy. This energy is being stored to offset your predicted needs during peak periods.

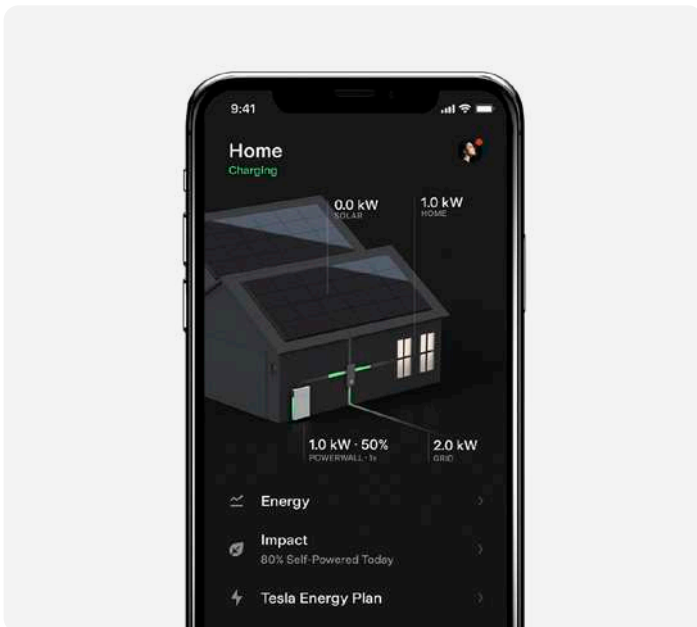
What You May See When There Is No Sun



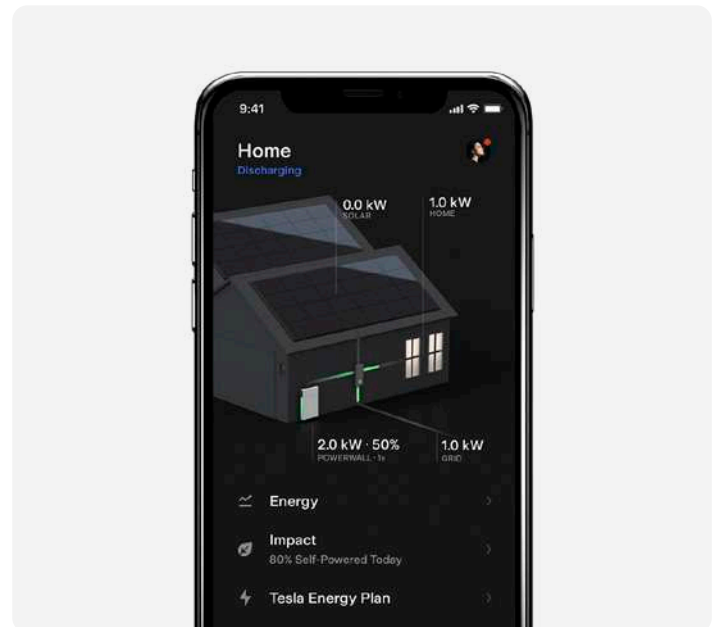
No solar is being generated, Powerwall is covering your home's usage
There is no solar being generated, so your home's usage is being covered by stored energy from Powerwall.



Grid powering the home
Your home is powered by the grid and you are charged with our competitive Time of Use rates. Powerwall is either empty or predicting to discharge later in the day.



Energy from the grid is powering your home and Powerwall. Powerwall prioritises charging from the grid with low-cost energy.
No solar is being generated, your home's usage is covered by energy from the grid with competitive Time of Use rates. Powerwall is also charged from the grid taking advantage of low-cost energy. This energy is being stored to offset your predicted needs during peak periods.



Powerwall discharging to the grid while powering the home
Powerwall is covering your homes usage while also supporting the grid. You receive a Feed in Tariff for exports from your Powerwall as well as Grid Support Credits.

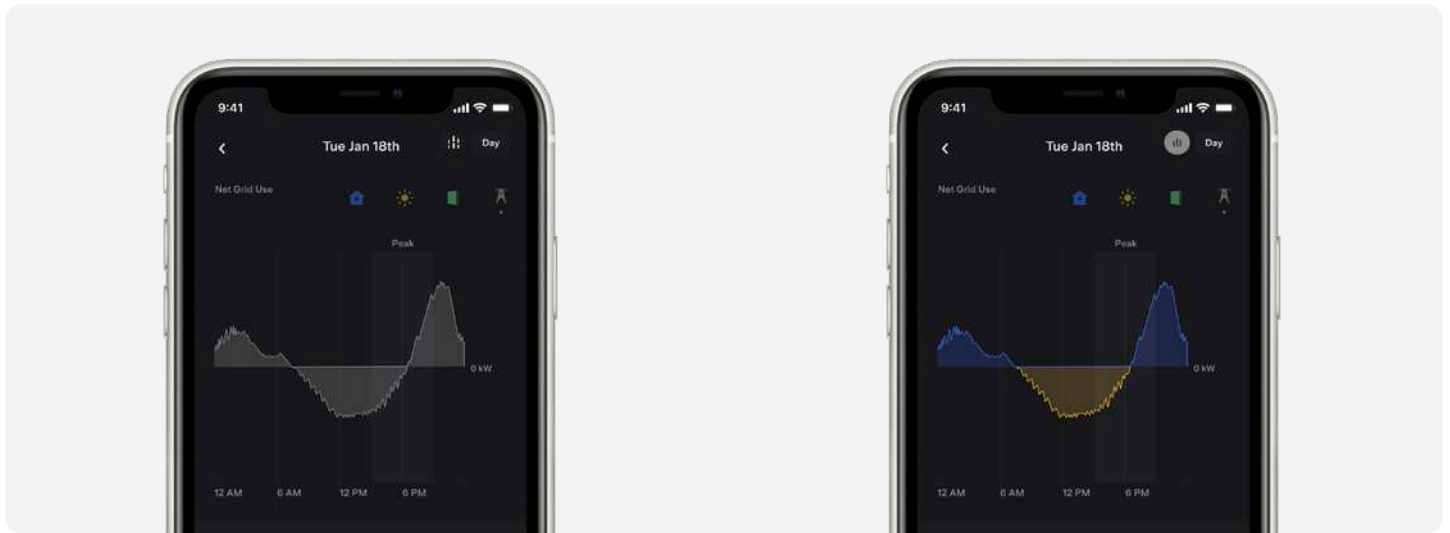
Understanding Energy Flows

Time-Based Control: Summer PV Production

During Summer and periods of high solar production, Powerwall will typically charge from your solar to offset your home's peak usage as a priority, and at times your off-peak usage.

Solar Only

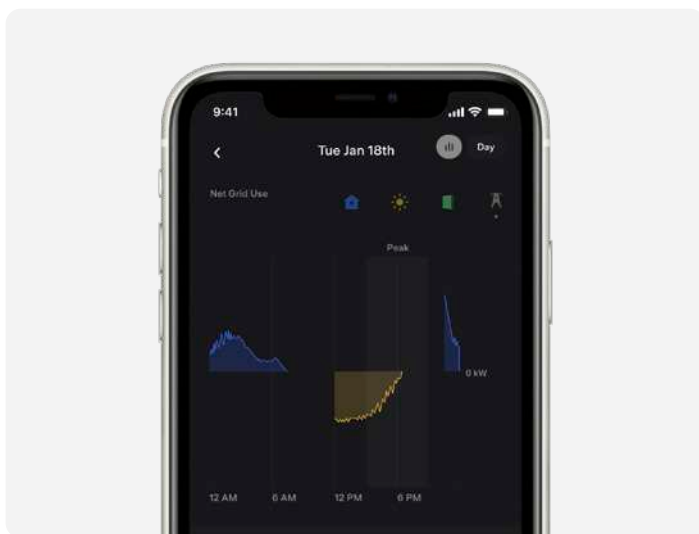
The following graphs show typical grid usage in summer without a Powerwall. Any illustrations that are shown as negative values are read as exports and positive values are read as imports.



Net grid use

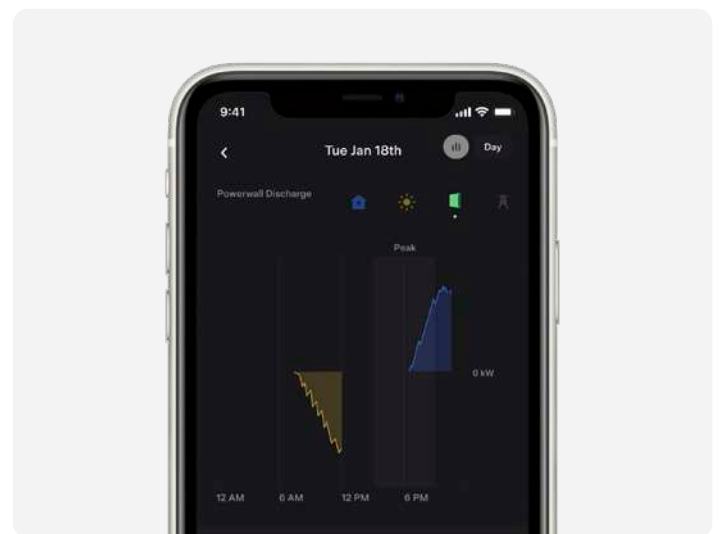
Solar production is consumed by the home and any excess solar is sent to the grid.

Solar Production with Powerwall



Net grid use

Powerwall charged from high solar production, reducing your need to draw from the grid during evening peak periods.



Powerwall discharge

Energy charged from solar is used to offset energy usage during peak periods as a priority. Any energy remaining in Powerwall will be used to offset some or all of your off-peak usage.

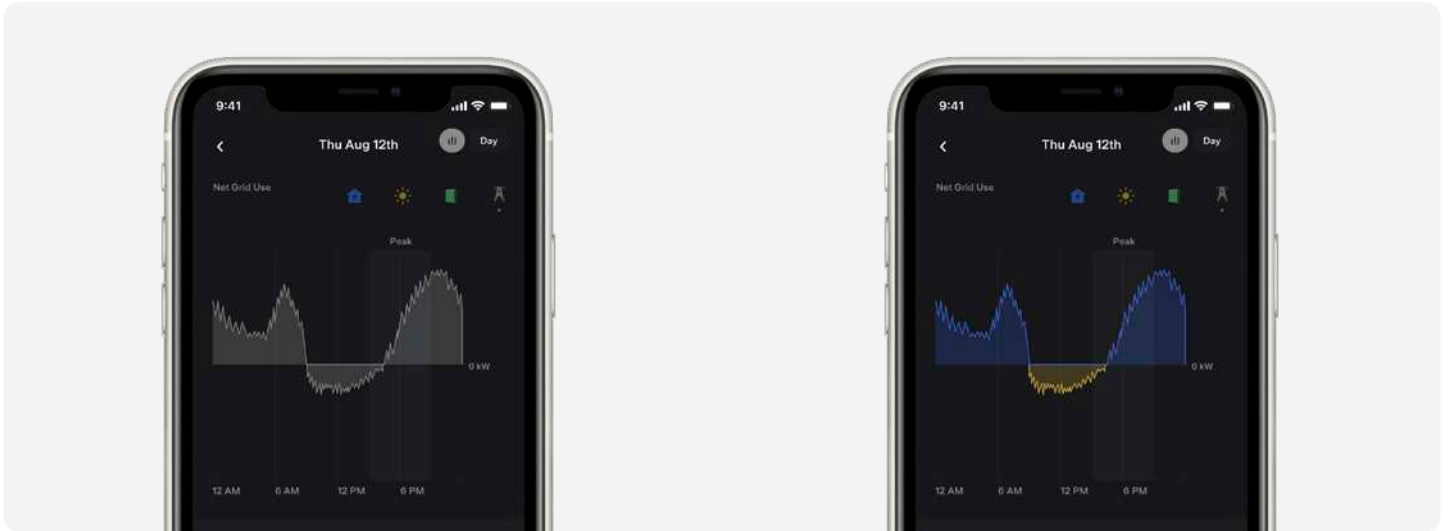
Understanding Energy Flows

Time-Based Control: Winter PV Production

During Winter and periods of low solar production, Powerwall may need to charge more often from the grid to offset your home usage during peak periods.

Powerwall will take advantage of low off-peak energy so you can offset your home's peak usage to help reduce your exposure to peak pricing. This gives you a level of flexibility that traditional energy plans may not allow.

Solar Only



Net grid use

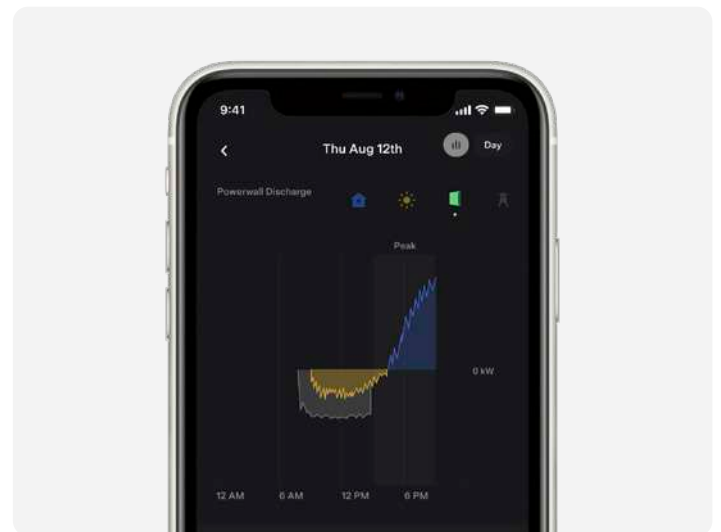
Solar production is consumed by the home and any excess solar is sent to the grid.

Solar Production with Powerwall



Net grid use

Powerwall charges from the grid and solar ahead of peak periods to offset forecasted home usage during peak periods.



Powerwall discharge

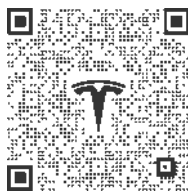
Low solar production, so Powerwall accesses low-cost energy from the grid to offset anticipated consumption during peak periods.



For more information on the Tesla Energy Plan visit Tesla.com/en_au/TEP

For further assistance or technical questions contact our Powerwall Support Team on [1800 646 952](tel:1800646952) (24/7)

FAQs



To download the Tesla app, visit the Google Play store or the App Store on your device