

Your home your power your choice

NEXT GEN BATTERY STORAGE FOR YOUR HOME

itphomeenergy.com.au



To address climate change

WE NEED TO CHANGE HOW WE GENERATE AND USE ENERGY.

By installing a PV and battery system, you can be among the first to kick-start this change and contribute to a sustainable future, both locally and globally.

The ACT is already leading the renewable energy revolution and is on track to achieve 100% renewable electricity by 2020.

ITP Renewables is one of a select number of firms to have been selected by the ACT Government to deliver their Next Generation Renewables Energy Storage Grants Program, which allows homes and businesses to install battery storage at a subsidised cost.

Take control of your power and join the revolution

About the ACT Government Next Generation Energy Storage Grants Program

The ACT is a world leader in renewable energy. Through its Next Generation Energy Storage Grants Program, the ACT Government is supporting the roll out of energy storage to around 5,000 Canberra homes and businesses by 2020. This is the largest roll out of household batteries in the world (outside of Germany).

A key objective of the Program is to generate valuable real-world data on energy storage system costs and performance. This data will be analysed to identify opportunities to improve consumer outcomes and uptake rates for energy storage businesses.

Households and businesses participating in the Program will not only benefit from the support of the ACT Government, but will be participating in critically important research that will speed up the transition to renewable energy, both locally and globally.

Who are these systems for?

We are offering systems to homes and businesses within the ACT who are interested in the benefits of battery storage. Each system will be tailored to the customer.

Systems are suitable for households with or without an existing solar PV system.

For homes with an existing system on a gross feed-in tariff we will install a new system alongside and independent of the old system, meaning existing feed-in tariff agreements will not be affected. For existing systems on a net feed-in tariff, we can retrofit a battery to work with the panels already on the roof.

The time it takes for the system to pay for itself will vary significantly depending on how the system is used. Households or businesses that will have the best payback period are those which:

- Consume a lot of electricity
- Consume electricity late in the day or in the evening when the solar PV system is no longer generating power
- Have easily accessible, suitably orientated roofs with no shading.

As a key objective of the Program is to generate valuable real-world data on energy storage system costs and performance, households and businesses participating in the Program will be required to share anonymised data on their system usage. This will require a satisfactory mobile phone signal strength.

Why batteries?

In recent years the economic feasibility of installing a residential energy storage system has significantly improved, with continued technological improvements and economies of scale constantly pushing battery prices down. The ACT Government's support through the Next Generation Program makes batteries a more financially attractive option than ever before.

Reduce electricity bills

By installing a battery with your PV system, you can significantly reduce your electricity bills. Storing solar electricity is valuable because rather than selling surplus solar electricity back to the electricity grid for low prices, consumers can instead reduce the need to buy relatively high cost electricity from the grid during peak times.

A solar and battery system also helps to protect you against future rising electricity prices.

Gain energy independence

A PV and battery system enables you to take control of your energy generation and consumption. Instead of feeding surplus electricity generated by your solar panels during the day back to the grid, save it in the battery for later use and reduce the amount of electricity you purchase. For a small additional charge our system can even provide you with power if there is a blackout, giving you the peace of mind that electricity will be available when you need it as long as your battery has charge.

Live a More Sustainable Life

Those with solar PV systems, including those with battery storage systems are among the first to substantially reduce their contribution to global warming and are driving a revolution that is changing the world for the better. A solar system with optional battery will provide you with the peace of mind that you are generating and consuming your electricity in an environmentally conscious, sustainable manner.

Contribute to world-leading research

This Program is among the first of its kind in Australia and the world, and will generate invaluable data for research which will facilitate better understanding of the operation and effect of battery systems within the network. Households and businesses which install systems as part of the Program will be participating in critically important research that will speed up the transition to renewable energy, both locally and globally.

Community Benefits

Distributed small-scale battery banks can also have a broader community benefit. By cutting demand on over-loaded parts of the electricity network during peak usage periods they can reduce the need for future investment in electricity network infrastructure. This saves everybody money.

An independent energy supply powered by the sun AVAILABLE WHEN YOU NEED IT

NEXTGEN PACKAGES

PACKAGE 1 Tesla package

- 5.2kW solar photovoltaic system
- Individual panel monitoring
- Reposit Power kit included

\$23,051 Total \$4,066 STC Rebate \$2,995 ACT NextGen Grant



- 5.2kW solar photovoltaic system
- Highly compact battery
- \cdot Australian inverter company

\$20,867 Total \$4,066 STC Rebate \$3,811 ACT NextGen Grant

PACKAGE 3 Pylontech package

• 5.2kW solar photovoltaic system

- High battery discharge power
- Scalable design

\$19,230 Total \$4,066 STC Rebate \$4,174 ACT NextGen Grant





\$15

ITP solar and storage systems

Take advantage of the ACT Government's Next Generation Energy Storage Grants Program to install subsidised battery storage at your home. We offer three different system sizes to suit a range of users. Each new battery system must be connected to a solar PV system. We will help you to find the best system size for your needs by visiting your home, evaluating where your solar and battery system would be situated and talking to you about your electricity usage.

Every package that we offer is can be configured to provide back-up power from the panels and battery in the case of an electricity outage, as an optional system extra.

PACKAGE 1

SOLAR PANELS	Jinko Solar •Tier 1 Manufacturer •Supplied panels for the ACT Royalla Solar Farm	Eagle module •260W polycrystalline module •10 year product warranty, 25 year performance warranty	
BATTERY	Tesla Energy ∙Part of Tesla Motors	Tesla Powerwall •6.5kWh energy capacity with 100% Depth of Discharge •3.3kW power output •Sleek aesthetic design •Active temp management •Indoor or outdoor rated •10 year warranty	7.812
INVERTER	SolarEdge •Leading DC optimiser inverter company •Based in Israel	SE inverter with StorEdge •Individual panel optimisation leading to better performance •Indoor or outdoor rated •Includes detailed system monitoring •Reposit-compatible •12-25 year warranty	
SMART CONTROL	Reposit Power •Australian company based in Canberra	Reposit Kit •Smart software controls your system to maximise savings •Earn Grid Credits	

PACKAGE 2

SOLAR PANELS	Jinko Solar •Tier 1 Manufacturer •Supplied panels for the ACT Royalla Solar Farm	Eagle module •260W polycrystalline module •10 year product warranty, 25 year performance warranty	
BATTERY	LG Chem •Tier 1 Manufacturer •Supplied panels for the ACT Royall Solar Farm	RESU6.5 •6.5kWh energy capacity with 90% Depth of Discharge •4.2kW power output •Incredibly high energy density leads to compact size •Indoor or outdoor rated •10 year warranty	
INVERTER	Redback Technologies •Australian company	Smart Hybrid Inverter System •Indoor or outdoor rated •Includes system monitoring •5 year warranty	

PACKAGE 3

SOLAR PANELS	Jinko Solar •Tier 1 Manufacturer •Supplied panels for the ACT Royalla Solar Farm	Eagle module •260W polycrystalline module •10 year product warranty, 25 year performance warranty	
BATTERY	Pylontech •Subsidiary of Chinese energy storage technology manufacturing company ZTE	Extra2000 Modules •Each module has 2.4kWh energy capacity with 80% Depth of Discharge •Scalable storage can be increased by adding more modules •Up to 4.6kW power output when combined with the SolaX inverter •Indoor rated •10 year warranty	
INVERTER	SolaX •Based in China with Australian Head Office in Melbourne	Hybrid inverter •Indoor rated •Includes system monitoring •Reposit-compatible •5 year warranty	BOLAX

What's involved in getting a solar and storage system?



Get in touch with us on O2 6257 3511 or at sales@itpau.com.au. We will talk to you about whether your home or business might be suitable for inclusion in this exciting project, and answer any questions you might have.



We will arrange to visit your house or business to meet you, inspect the site, and provide you with a tailored quote.



We will arrange suitable dates with you to install your system., including coordinating all meter replacement and inspection appointments with you. As a final step, we will test your system to ensure its optimal operation.



Once your system has passed inspection by ACTPLA it will be connected to the network.



We will run you through how to operate and maintain your system.



Your system is now fully operational and yours to use and enjoy!

EXPERTS IN RENEWABLE ENERGY AND STORAGE

Why you can trust ITP

ITP Home Energy is part of ITP Renewables, which has been based in Canberra since 2003. ITP and our installers are experts in the design, installation and operation of photovoltaic and battery storage systems. We have designed and installed household and commercial systems around Australia.

As part of ITP Renewables, our expertise is informed by involvement in cutting edge research and development, such as the ARENA-funded Lithium Ion Battery Test Centre we are running at the Canberra Institute of Technology.

ITP Home Energy is committed to providing not only the best products, but the best experience to its customers. All enquiries begin with a free on-site assessment, followed by design, installation and hand-over – all in collaboration with you. We provide a whole-of-system warrantee as standard, including workmanship.

ITP is also:

• A Clean Energy Council (CEC) Approved Solar Retailer, committed to raising the bar in the solar industry. ITP has signed on to the Clean Energy Council Solar Retailer Code of Conduct – the only solar industry code of conduct authorised by the Australian Competition and Consumer Commission (ACCC)

• A Gold Member of the Australian Energy Storage Council

• A Tesla Energy Authorised Reseller





How can I get involved?

To get involved, contact us at sales@itpau.com.au or call 02 6257 3511. We will provide you with further information and get you started with the next steps.

Am I eligible for the ACT NextGen subsidy?

The grant is available on a first-come, first-served basis within the ACT and the numbers are limited. For us to install a system for you under the ACT Government Next Generation Grant Program you must:

- Have the system installed at a residence or business with an ACT address
- Have a reliable internet connection
- Have a strong and reliable data connection
- Have space on your roof for at least 3kW of panels
- Have a suitable location for the battery and inverter
- Agree to share data with the ACT Government and other approved groups for research purposes

Is finance available?

Yes, please contact us for details.

Are batteries safe?

Your battery system (and solar panels) must be installed by our licensed electrician who has the appropriate training and accreditation. As part of installing a system, they will run you through the proper operation of your system, as well as emergency procedures.

How does a PV/battery system work?

Batteries store and provide electrical energy. When batteries charge, they convert electrical energy to chemical potential energy; when they discharge, this chemical energy is converted back to electrical energy. Batteries are rated by how much energy they can store, as well as how much power they can discharge (energy per time).

A photovoltaic (PV) system converts energy from the sun into electricity, which is then consumed by the home. On a sunny day, the PV system may produce more electricity than is used by the house. If there is no battery available, excess electricity from the PV is fed back to the grid. A battery allows the excess electricity to be stored for use at a later time; for example, when it's dark and the PV system is no longer generating electricity.

Even when the grid goes out, our battery and PV system are able to supply energy to keep critical appliances powered. This is provided as an optional extra.



Can I participate if I already have solar panels?

Yes, the grant is still available if you already have solar panels. We recommend that your existing system be between 3kW and 6kW for optimal performance with the rest of our system.

How much roof space do I need?

The PV panels are approximately 1.65m x 1m in size. For a 5.2kW installation you would therefore need a minimum of 34m 2 of roof space. Keep in mind that this will depend on the design of your roof. As far as possible we will attempt to locate panels with optimal orientation and minimal shading.

Will I be able to generate all of my own energy?

It is likely that you will be able to generate and self-consume a large percentage of your electricity usage, but not all of it. The extent to which you are able to do so will vary between households, depending on your own usage (both power and energy) and the size and performance of your system.

Will my system be covered by warranties?

Yes. We provide a 5 year whole-of-system warranty, including workmanship and products. Products also have their own manufacturer warranty.

Are there any additional charges?

It is likely that you will need to reprogram or replace your meter to work correctly with your new system:

- · Single phase meter replacement \$563.12
- Three phase meter replacement \$824.60
- Meter reprogram only \$149.22

Additional charges based on your site may also apply, for example if you have a multi-storey house, steep roof, require a meterbox upgrade, etc. The suitability of the optional back-up feature of the inverters varies from house to house, and there is an additional cost associated with this. These charges will be explained to you and clearly outlined in your quote.

The Pylontech Package also requires a Reposit Kit to meet the ACT Government's monitoring requirements. The exact cost of this will depend on the system configuration.

What are STCs?

Under the Federal Government's Small-scale Renewable Energy Scheme, eligible small-scale renewable energy systems are entitled to a number of small-scale technology certificates (STCs). The number of small-scale technology certificates that can be created per system is based on the amount of electricity in megawatt hours (MWh) that it will generate over the course of its lifetime of up to 15 years.

The price of small-scale technology certificates is driven by supply and demand of the renewable energy certificate market and fluctuates daily; however, ITP will manage the sale of STC's on your behalf. You will receive the STC value indicated in your final quote as an upfront discount on your system.

More information about the Small-scale Renewable Energy Scheme is available at www.cleanenergyregulator.gov.au/RET.

How will my data be used and shared?

One of the objectives of the ACT Government's Next Generation Energy Storage Grants Program is to generate data for use nationally and internationally for research, regulatory planning and industry development purposes. Customers participating in the Program will agree to provide anonymised information in exchange for the benefit of their participation.

Personal information regarding the installation of the battery system will be shared with the ACT Government Environment and Planning Directorate (EDP), and other organisations nominated by EPD, for the purposes of ensuring compliance with the Government's Next Generation Energy Storage Program.

De-identified information regarding the installation and ongoing usage of the battery system will be shared with researchers and other organisations.

Call us to discuss today



p 02 6257 3511 e sales@itpau.com.au itphomeenergy.com.au

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