



ORANGE  
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OPPORTUNITIES FOR QUEENSLAND TO BE  
A WORLD LEADER IN SOLAR DEPLOYMENT

QUEENSLAND  
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# THE QUEENSLAND FUTURES INSTITUTE (QFI) SUPPORTS GREATER USE OF SOLAR GENERATION IN THE QUEENSLAND ELECTRICITY SUPPLY CHAIN.

## RECOMMENDATIONS

We encourage the Government to reframe the million Queensland PV target and look to broader policy settings to ensure Queensland's solar deployment is efficient, encourages innovation and is socially equitable.

The QFI believes that Queensland's PV aspiration should be reframed as a capacity target. Having a one million homes equivalent target will open opportunities for commercial and industrial located systems and commercial-scale grid solar storage plants which may be opened to broader community opportunity.

The other key elements of the policy should include

- Appropriate tariff signals to ensure equity and to encourage new innovation and storage.
- The application of advanced metering systems to support tariff signals and provide real time data for customers
- Support for greater levels of grid and commercial scale solar
- Greater inclusiveness through solar farms and community schemes

## CURRENT STATE

- Queensland has some of highest levels of residential photovoltaics (PV) in the world. A third of all domestic solar PV in Australia is on Queensland roofs.
- However, the State has only very limited grid or commercial scale solar.
- While household installation is extremely high in national and international terms there are some community sectors significantly under-represented in the community. There is a range of customers (rental, units dwellers) who can't access the benefits of solar ... and are actually subsidising customers who do have solar PV.

## NEW DIRECTION FOR SOLAR?

THE QUEENSLAND GOVERNMENT HAS SET AN ASPIRATIONAL TARGET TO HAVE A MILLION ROOFTOPS WITH SOLAR PANELS BY 2020.

This provides great opportunity and challenge for the Queensland community. While there is certainly room for additional solar PV installations in the Queensland network, further development is required on the Policy to ensure that Queensland takes a leadership role in best practice deployment of the next phase of solar. There is likelihood of a saturation point for domestic household market well inside the 1 million homes target; likewise continued PV system expansion needs consideration regarding the electricity cost efficiency; equity for solar and non-solar customers; technical limitations, innovation opportunities and broader community pricing impacts.

## PRINCIPLES FOR POLICY DEVELOPMENT

THE QFI BELIEVES THE CRITERIA/PRINCIPLES OUTLINED BELOW SHOULD GUIDE THE POLICY CONSIDERATIONS:

### 1. Efficiency

- a. Lowest cost of electricity production within the solar framework
  - Small scale solar rooftop PV systems are not least cost, nor is domestic solar on standalone detached dwellings the only option open to the Queensland Government. There are significant opportunities for commercial, industrial, multi-unit dwelling developments and community buildings and grid scale solar. Overseas experience shows that greater levels of solar deployment are generally built off a broad range of solar solutions rather than promoting a single solution.
  - Emerging technologies, such as large scale battery storage coupled with solar generation are likely to change the way an electricity network can operate and may provide additional efficiencies for the community.
- b. Optimal use of existing infrastructure
  - Solar could be integrated into the network where there is currently little penetration (eg. Commercial and Industrial networks, and rural supply areas) or to relieve cost pressures in the network. In any case the key driver is not to put additional capital pressure on the existing network, especially at a time the focus is on trying to drive down power prices for customers.
  - The application of solar should also better match the peak loads in the network to provide grid support. This is best achieved for commercial and industrial sites (eg. schools, shopping centres) where the peak load is coincident with solar generation in the middle of the day.

- Further “time of use” incentives on domestic electricity networks will encourage storage to provide better opportunities for grid support.

## 2. Brings forward innovation

- a. Small scale PV is a proven technology but is now not encouraging significant new innovation by itself. The integration of storage is the next major step. However appropriate tariff signalling and advanced metering systems are required to optimise this outcome.
- b. By contrast in Queensland commercial scale systems have a low uptake. There are benefits for commercial and industrial sites, schools, community organisations, body corporate/high-density residential complexes, hybrid solar-diesel generation and solar-storage applications to add value and drive down the cost outcomes.

## 3. Equity

- a. The current model, while highly successful in increasing installations, creates some social justice and price transfer issues – highest cost will fall on those least able to afford it.
- b. The solar Feed in Tariff results in the broader community picking up costs for private profits.
- c. Renters and unit dwellers who are not able to participate in the solar PV program are disadvantaged and under-represented. This could be alleviated with community and “share-farming” opportunities.

## QFI PARTNERS



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## COMMITTED TO IMPROVING THE STATE OF QUEENSLAND

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