### THE VALUE OF THE GRID

NOVEMBER 2014

## MORE SERVICES THAN YOU MIGHT THINK ....

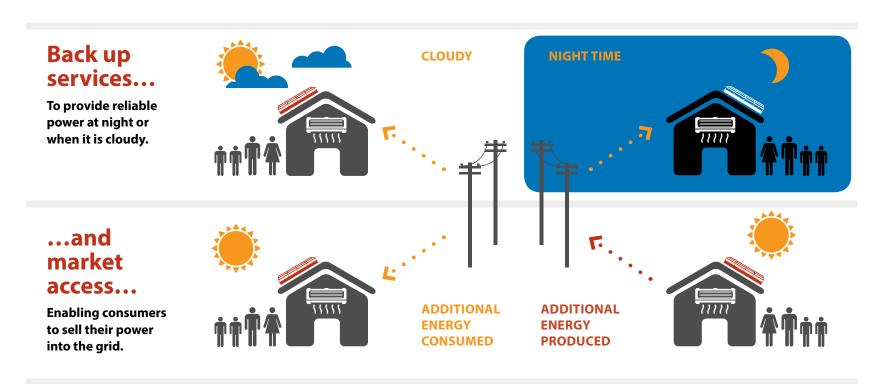
energy networks associati

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In the future, energy users will have more choices about the source of their energy supply. They may take their energy from the grid, or a combination of onsite sources and the grid. Some may consider leaving the grid entirely.

The grid provides a range of services that are often hidden, but which consumers benefit from.

YOUR GRID - WORTH A CLOSER LOOK.



Plus...

**Startup power services** supporting appliances like air-conditioners which increase energy load by up to 4 to 5 times when they start. **Balancing services** that instantaneously adapt to the customers' changing demand throughout the day – which can be difficult for a rooftop PV that isn't connected to the grid.

#### Power quality services

that protect the safe operation of home appliances.

### **VALUE OF THE GRID TO SOLAR HOUSEHOLDS...**

#### The grid delivers value for solar households

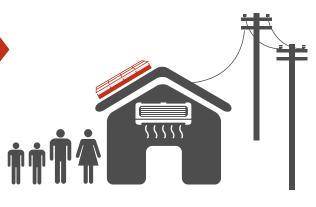
Grid services to solar customers are valued at \$69 per month in benefits, including \$61 in backup energy which would be otherwise unserved and \$8 in export sales to the Grid.

A solar customer helps to lower the cost of network services, estimated at approximately \$10 per month.

VALUE OF \$69 per month

VALUE

OF \$10



# ...at a lower cost than DIY

A Grid service continues to provide significant value compared to a stand alone system. For one-fifth of the cost of a stand alone system the Grid supports a full range of customer appliances, allows customers to export excess energy and participate in new markets. To provide an equivalent service, a stand alone system can cost approximately \$56,500 for a home with limited air-conditioning use or \$72,500 for a home with typical air-conditioning use.

#### **STAND ALONE SYSTEM**



Note: Based on Oakley Greenwood report, Value of a Grid Connection to Distributed Generation Customers, analysing a NSW residential customer

