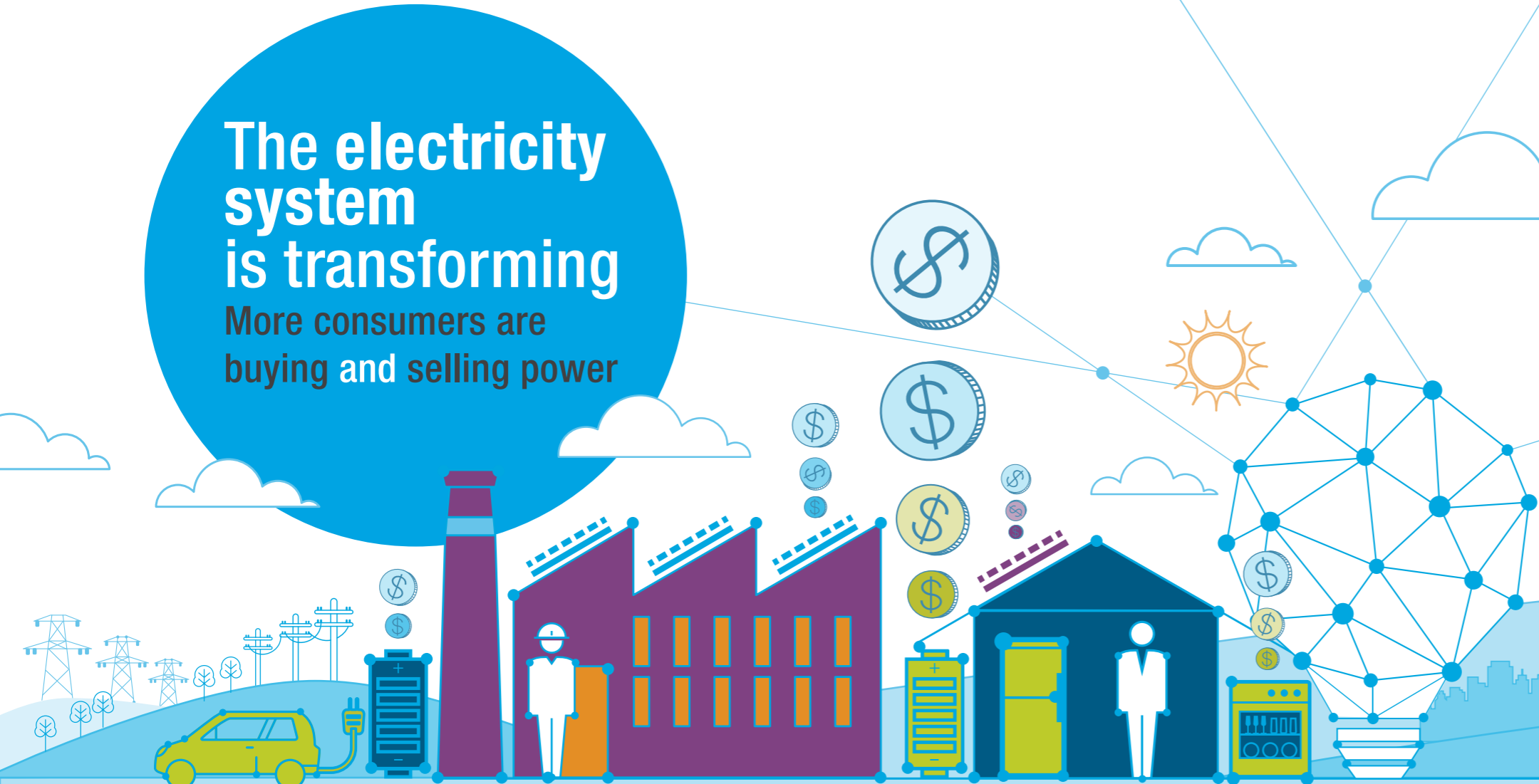


# SUPPORTING A COMPETITIVE MARKET FOR DISTRIBUTED ENERGY RESOURCES

Distribution market model project – draft report 6 June 2017

## The electricity system is transforming

More consumers are buying and selling power



We are exploring options to put consumers and their energy service providers in the driving seat – giving them more control over how their batteries or other distributed energy resources are used.

The draft report outlines the need to buy and sell energy and related services at the distribution level in a more dynamic way, in response to price signals.

For consumers this means that if you want to use the electricity from your solar panels or batteries, you can.

And if you don't need it, you can sell it to whoever values it the most at a particular point in time, for example the local network business or the wholesale market.

Distributed energy resources are integrated systems of smart energy equipment connected to the electricity network. They include battery storage, electric vehicles, rooftop solar or household appliances such as fridges and dishwashers that respond to changes in price. They can:

help consumers reduce their electricity bills

help electricity networks manage peaks in demand

compete in the wholesale electricity market by exporting electricity

provide services that help make the system secure, such as frequency control

## What's needed to transform the electricity grid?

The draft report describes how an independent 'optimising' function would help consumers with distributed energy resources decide how best to use them. The optimising function should be undertaken by parties other than regulated network businesses. This will allow consumers to maximise the full value of distributed energy resources – that is, their value to networks, wholesale markets and consumers themselves.

The draft report identifies key market and technical arrangements that may be needed in the future to underpin a competitive distribution market.



Implement and refine cost reflective network tariffs, so consumers have more accurate price signals on investing in, and using, distributed energy resources



Invest in smart IT and communication infrastructure so network businesses can better assess the technical impacts of distributed energy resources on networks, and other market participants can have information so they are able to make better decisions on how to invest in, and operate, distributed energy resources



Consider the appropriate access model for distributed energy resources to use the network, if networks become congested as more resources connect



Allow for more transparent and standardised technical assessments for connecting distributed energy resources, to avoid onerous requirements which can increase costs, or loose requirements which can create technical issues



Evolve Australian Standards for distributed energy resources so they remain fit-for-purpose

## Why a market?

A well-functioning, competitive distribution market would provide incentives for companies to innovate by providing new and improved services, technologies and business models that are driven by consumer demand.

There would still be a role for regulation to ensure the safety, security and reliability of electricity supply and to maintain consumer protections. Network businesses would also likely continue to own and operate the grid – which is regulated under energy market rules.