

**Fact:** The best thing we can do to combat rising electricity prices is reduce or better manage 'peak demand'.

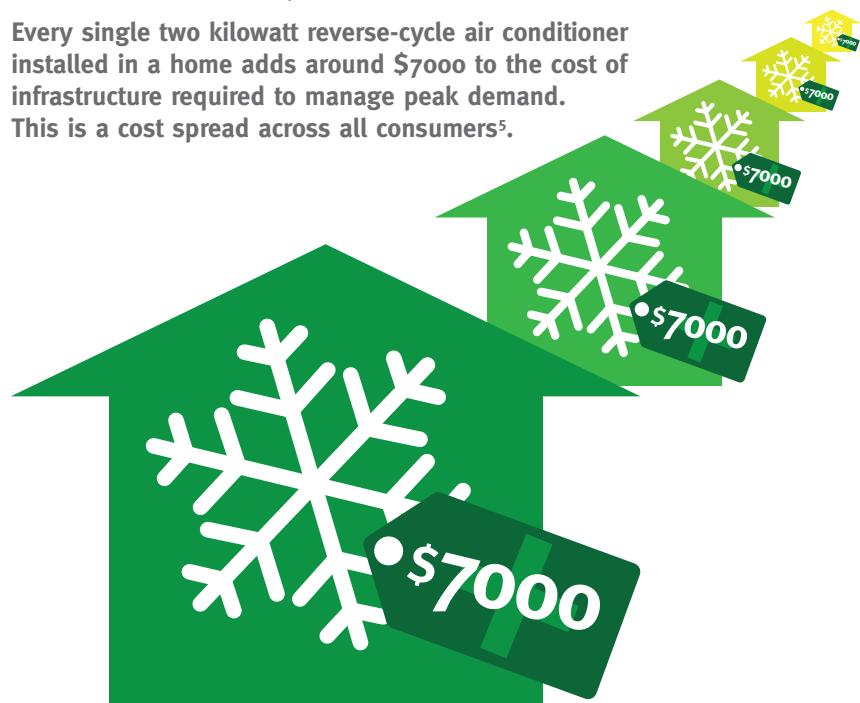
The growth in 'peak demand' – those few times a year when demand for electricity is the highest (usually the hottest few days in summer) – is a major factor in driving up energy costs.

More houses, more air conditioners and other gadgets, all being used at the same time for just a few hours a year, put enormous strain on the entire system. To avoid blackouts during these few hours we need to build extra power plants – at considerable cost. For example, recent estimates indicate that 25 per cent of retail electricity prices are derived from peak demand that occurs for less than 40 hours per year<sup>3</sup>. Add to this the fact that demand at these times is predicted to increase by 25 per cent by 2021<sup>4</sup>, and it quickly becomes clear that peak demand is the real issue that Australia needs to confront if we want to stop power price rises.

So what's the solution? Clean energy sources like co-generation, tri-generation and commercial-scale solar as well as energy efficiency measures can help reduce demand on the electrical network during peak demand times. Smart meters which use proper time-of-use pricing can empower consumers to reduce peak demand. Both can help reduce the need to build expensive extra infrastructure.

**Every single two kilowatt reverse-cycle air conditioner installed in a home adds around \$7000 to the cost of infrastructure required to manage peak demand.**

This is a cost spread across all consumers<sup>5</sup>.



<sup>3</sup> Fraser, R., 'Demand side management', presented at Australian Institute of Energy symposium, 'NSW Electricity Future 2020 (and beyond): What will it look like and how do we get there?' (Sydney, 24 May 2010) 6.

<sup>4</sup> AEMC, What can be done in the longer term? - Presentation to ACOSS seminar, September 2011, [www.acoss.org.au](http://www.acoss.org.au).

<sup>5</sup> 2011 Queensland Energy Management Plan

# Clean energy update no.1: power prices



visit [cleanenergycouncil.org.au](http://cleanenergycouncil.org.au)

The Clean Energy Council is the peak body representing Australia's clean energy sector. It is an industry association made up of more than 600 member companies operating in the fields of renewable energy and energy efficiency.



Clean Energy Council

**Fact:** Government support for renewable energy only contributes a tiny amount to the average household power bill.

In total, state and federal government support for solar energy makes up only around 6 per cent of household energy bills. This will fall significantly from next year to just over 2 per cent by 2020 as government incentives wind back. Meanwhile, government support for large-scale renewable energy like wind, bioenergy and hydro makes up only around 2 per cent of energy bills<sup>1</sup>.

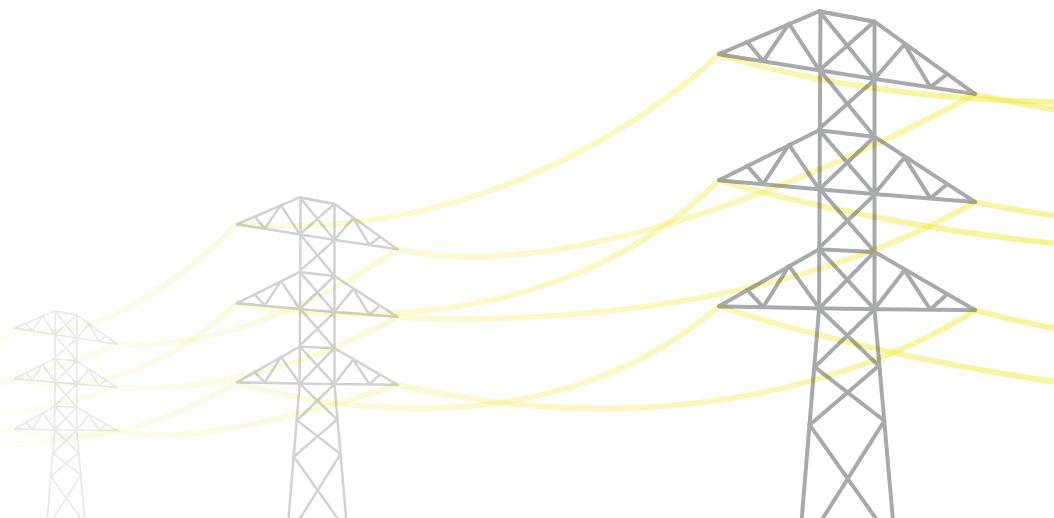
On the opposite page is one chart showing the current breakdown of an average bill, and another showing the composition of an average bill in 2020.

**Fact:** Maintaining the power network (things like poles and wires) is by far the biggest contributor to household electricity bills.

The biggest contributor to household power bills is the cost of maintaining the electricity network. This contributes more than 40 per cent to household power bills, as shown in the chart on the opposite page. Analysis by the Clean Energy Council indicates that network costs will continue to increase over time.

The Productivity Commission has backed this up. In its continuing inquiry into electricity network regulation, it has observed that:

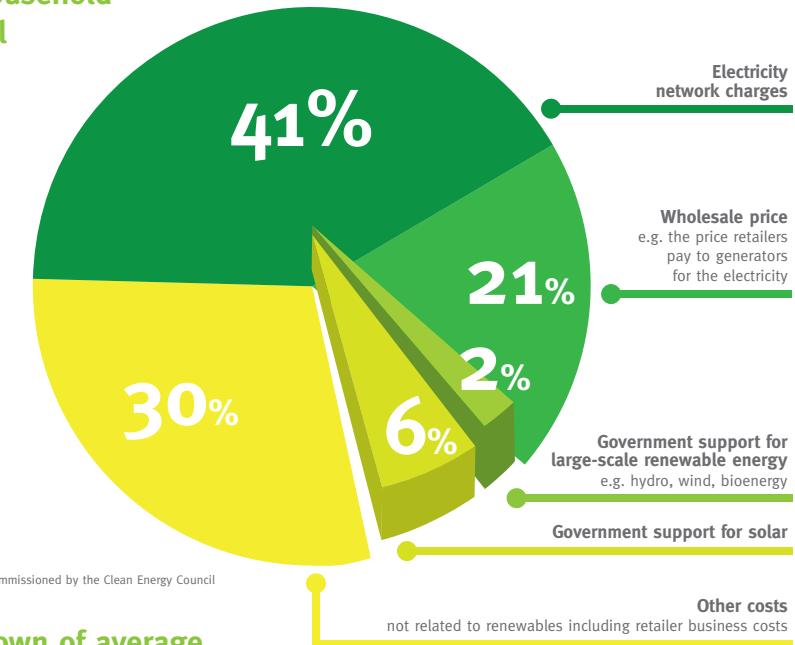
**Future retail electricity prices — at least partly locked in through regulatory agreements — are projected to increase by 29 per cent from 2011/12 to 2013/14, with network costs the main contributor<sup>2</sup>.**



<sup>1</sup> Independent analysis commissioned by the Clean Energy Council

<sup>2</sup> Electricity Network Regulation, Productivity Commission Issues Paper, February 2012,  
Excerpt from page 1 - Introduction

**Price breakdown of average Australian household electricity bill**



**Price breakdown of average Australian household electricity bill in 2020**

