

## FACT SHEET

# The impact of green schemes on regulated electricity retail prices from 1 July 2012

13 June 2012

In recent years, the Commonwealth and NSW Governments have introduced a number of 'green schemes' designed to support renewable energy generation, reduce emissions from the energy sector (and wider economy) and reduce energy consumption.

The most significant Commonwealth policy developments have been the introduction of and amendments to the Renewable Energy Target scheme (RET), and the introduction of a carbon pricing mechanism from 1 July 2012. The NSW Government has also established a range of schemes designed to encourage individuals, businesses and their own agencies to reduce emissions by increasing energy efficiency, creating new low-emissions energy sources, or directly reducing emissions in the atmosphere (refer to Box 1 for the Commonwealth and NSW green schemes that contribute to electricity prices in NSW).

Retailers ultimately incur additional costs in supplying electricity to customers as a result of these green schemes. These costs must be passed on to consumers in the form of increased electricity prices, if the retailers are to remain financially viable.

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**Box 1 Green schemes that contribute to NSW electricity bills**

- ▼ **Carbon pricing mechanism** – From 1 July 2012, the carbon pricing mechanism will require around 500 entities in Australia to pay for their carbon emissions. These entities will include electricity generators, who will face higher generation costs. Generators will seek to pass on some of these costs to the wholesale market in the form of higher pool and contract prices. Retailers must purchase electricity from the wholesale market and will therefore face higher energy costs.
- ▼ **Large scale Renewable Energy Target (LRET)** – The LRET creates a financial incentive for investment in large renewable energy power stations, such as wind farms. It does this by allowing the owners to create certificates based on the amount of eligible renewable electricity they produce. Retailers are required to purchase a set number of these certificates each year at a rate designed to achieve the renewable electricity target of 20% by 2020.
- ▼ **Small scale Renewable Energy Scheme (SRES)** – The SRES provides a financial incentive to install small-scale renewable electricity systems, such as solar photovoltaic (PV) panels and solar hot water systems. Households and businesses who install eligible systems receive certificates at the time of installation equivalent to the renewable electricity they generate over 15 years (however currently they receive ‘phantom’ certificates by allowing them to create up to 3 times as many certificates under the Solar Credits Multiplier).<sup>a</sup> As the scheme is uncapped, retailers are required to buy their share of all the certificates that get created over a year.
- ▼ **Energy Savings Scheme (ESS)** – The ESS reduces electricity consumption in NSW by creating financial incentives for energy savings activities. Electricity retailers must surrender certificates in order to meet legislated annual energy savings targets.
- ▼ **Climate Change Fund levy (CCL)** – This levy is charged to electricity distributors to provide financial support to the NSW Climate Change Fund. This fund is used to finance projects to help businesses, households, schools, communities and government save water, energy and greenhouse gas emissions. From 1 July 2012, the levy will increase to recover the costs of the Solar Bonus Scheme.

For further information on these schemes, including our approach to determining the costs of complying with the schemes and their impact on regulated retail electricity prices, see IPART’s final report.<sup>b</sup>

<sup>a</sup> From 1 July 2012 the Solar Credits Multiplier will fall from 3 to 2.

<sup>b</sup> IPART, *Changes in regulated electricity retail prices from 1 July 2012 - Final Report*, June 2012.

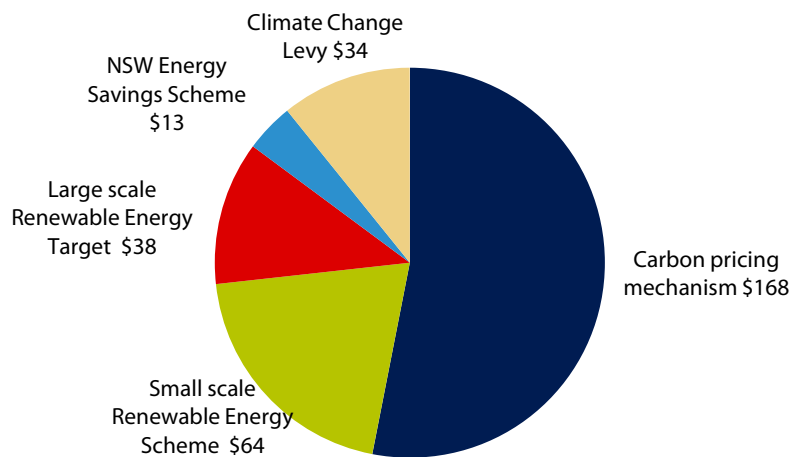
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## Impact of green schemes on regulated retail electricity prices in NSW

From 1 July 2012, the cost of complying with green schemes will contribute around \$316 on average to an indicative regulated electricity customer's bill in NSW (refer to Figure 1).<sup>1</sup> For customers with larger than average electricity usage (greater than 7MWh) the impact of green schemes will be larger in dollar terms.

In percentage terms the costs of complying with these schemes has been the fastest growing proportion of a customer's bill over the past two years.

**Figure 1 Contribution of green schemes to customer bills in 2012/13 (\$, including inflation)**



**Note:** Costs calculated for a typical customer using 7MWh per year. Includes GST and energy losses. Forecast inflation is 1.6%. The costs of individual green schemes above do not add to the total of \$316 due to rounding.

The introduction of the carbon pricing mechanism from 1 July 2012 will be the largest **average** contributor to regulated customer bills in 2012/13, costing around \$170.

The next largest contributor to customer bills in 2012/13 is the costs of complying with the Renewable Energy Target scheme (costing around \$102). The Renewable Energy Target scheme is comprised of the LRET which costs around \$38 in 2012/13, and the SRES which costs around \$64 in 2012/13. The costs of complying with the SRES in 2012/13 also includes a 'catch up' component for additional costs incurred in 2011/12.

<sup>1</sup> This analysis outlines the costs that these green schemes add to a typical customer bill for a given level of consumption. It is not intended to provide an estimate of the costs of the schemes relative to the benefits they provide. There are a range of studies that have analysed the benefits of these schemes, for example, Databuild found that the ESS delivered net benefits to electricity customers (Databuild Research and Solutions, *ESS Cost Effectiveness Analysis*, October 2011).

## Commonwealth Government's Household Assistance Package

The Commonwealth Government's Household Assistance Package is designed to assist low and middle-income households with increases in the cost of living including energy (electricity and gas) as a result of the carbon price.

The Household Assistance Package will increase the disposable income of low- and middle-income households in 2 ways:

- ▼ providing government payments to low-income and middle-income households<sup>2</sup>
- ▼ providing tax reforms targeted at low- and middle-income households.

The package has been designed so that:

- ▼ all low-income households will be eligible for assistance that *at least offsets* their *expected average* price impact from the carbon price
- ▼ middle-income households will be eligible for assistance that *helps them meet* their *expected average* price impact, and
- ▼ households with people who have a relevant concession card and face higher essential electricity costs due to medical condition or disability will be eligible for additional assistance.<sup>3</sup>

Commonwealth Treasury estimates that around half of the increase in the cost of living is associated with increases in energy bills.<sup>4</sup> In undertaking our analysis we have assumed that around half of the income provided as part of the assistance package is to meet increases in energy bills. We found that for most low-income households the additional income provided to assist with higher energy bills is likely to exceed the increase in energy bills due to the carbon price. While some households with higher than average energy usage may experience energy bills that exceed the portion of additional income provided to assist with higher energy bills, they are likely to represent only a small proportion of all low-income households.

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<sup>2</sup> For example, all households that receive a Centrelink pension or allowance will receive compensation payments, as will households that qualify for Family Tax Benefit A or B. These households will initially receive a one-off, lump sum payment before 1 July 2012. They will receive subsequent payments as part of (or at the same time as) their regular payments.

<sup>3</sup> <http://www.fahcsia.gov.au/about/benefits/Pages/CleanEnergyFuture%E2%80%93HouseholdAssistancePackage.aspx>

<sup>4</sup> <http://archive.treasury.gov.au/carbonpricemodelling/content/overview/page8.asp>

## Mitigating future electricity price increases

Given that reducing emissions in the electricity sector and in the wider economy has implications for electricity prices, it is important that emissions reduction is done in the most efficient and cost-effective way.

In addition to achieving the principal aim of reducing carbon emissions, many of the current schemes are also designed to offer industry assistance, reduce customers' energy bills and address financial hardship. This has implications for the efficiency and cost effectiveness of the schemes as well as implications for the costs they impose on electricity customers and governments.

Once the carbon pricing mechanism is operational, it is likely many of the existing mitigation programs at the state and territory levels will need to be redesigned and some may become redundant. By ensuring that the schemes are complementary to the carbon pricing mechanism, unnecessary costs can be minimised.

For example, the NSW Government has announced it will cease the NSW Greenhouse Gas Reduction Scheme on commencement of the carbon pricing mechanism on 1 July 2012.

IPART supports a review of the current set of schemes, with a view to redesigning or closing those that do not complement a carbon pricing mechanism and we have made a number of recommendations for consideration within our submission to the Commonwealth Government's current review of Australia's future energy needs.<sup>5</sup>

For example, IPART has recommended that with the introduction of a carbon price the need for a Renewable Energy Target (RET) scheme should be reviewed. If it is retained, then the scheme should be reviewed to minimise the cost impacts to electricity customers.

Ensuring our State and Federal carbon reduction schemes are as efficient and cost-effective as possible is one way of ensuring that future increases in electricity prices are no more than necessary.

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<sup>5</sup> IPART, *Strengthening the Foundation for Australia's Energy Future - IPART's submission to the Draft Energy White Paper 2011*, March 2012.