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# Economic and Employment Benefits of a National Energy Efficiency Program

# A Green Economic Stimulus

In September this year KPMG, the Brotherhood of St Laurence and Ecos Corporation released a proposal for a National Energy Efficiency Program (NEEP) targeting low income and disadvantaged households. Under the program permit auction revenue would be used to conduct a home visit and retrofit 3.5 million households across Australia (see www.bsl.org.au<sup>1</sup>). The home visit and retrofit program would lead to the creation of approximately 40,000 new jobs at a time when economic commentators are forecasting a rising unemployment rate.

Since the release of that report the global economy has suffered a series of unprecedented economic shocks. The Australian economy has not been immune with most commentators projecting that Australia has entered a period of decline in economic growth. While the prospect of recession is up for debate, the fact that most leading indicators of economic activity point to a period of lower growth is not.

The Australian Government, along with governments around the globe, are now considering a host of measures to stimulate the economy. The NEEP program should be considered as a matter of priority. This report details the economic benefits it provides.

<sup>&</sup>lt;sup>1</sup> KPMG 2008, A national energy efficiency program to assist low-income households, KPMG, Brotherhood of St Laurence and Ecos, September 2008, <a href="http://www.bsl.org.au/pdfs/KPMG\_national\_energy\_efficiency\_program\_low-income\_households.pdf">http://www.bsl.org.au/pdfs/KPMG\_national\_energy\_efficiency\_program\_low-income\_households.pdf</a>

# Summary of the economic and employment benefits from the NEEP

If the NEEP were implemented in full the fiscal stimulus would have the potential to:

- Stimulate economic growth in a variety of sectors including retail trade, up by 2.8%, and printing up by 1.37%, and wholesale trade up by 1.12%
- Create 40,000 new jobs through both the direct employment of 'home visit' and 'installation' teams and indirectly through employment in industries producing energy efficiency appliances and measures
- Shift households expenditure from carbon intensive utilities sector (paying for electricity) to more productive uses in the wider economy such as groceries
- Stimulate the growth of a household energy efficiency service sector and the demand for household energy efficiency goods
- Stimulate demand in the building sector

Importantly this economic stimulus would occur as the NEEP is achieving its primary goal – to protect low income households from the impact of price rises associated with the CPRS. Significantly energy and other prices will continue to rise as the carbon cap is tightened over time<sup>2</sup>. The benefits to households and the community need to be assessed over the period that the measures will generate savings (15-20 years).

The main NEEP report (released in September) detailed the benefits to households and the wider community:

- 1 The cost of the CPRS on low-income households is approximately \$16.7bn over the period 2010/11–2021/22 in net present value terms.
- 2 The cost of a National Energy Efficiency Program (NEEP) to assist low-income households in mitigate the increased cost is approximately \$8.7bn in NPV terms over the same period.
- 3 The savings to households from the NEEP are approximately \$14bn, meaning that the net benefit to the community from NEEP is approximately \$5.3bn.

It is important to note that the net benefit outlined above is essentially measured by the saving made on the household energy bill by low-income households that participate in the NEEP. However, from an economic perspective the implementation of the NEEP is likely to have broader benefits. Indeed, the \$11.2bn (\$8.7bn in NPV terms) to be spent in the implementation of the NEEP would be a powerful fiscal stimulus for the Australian economy.

<sup>&</sup>lt;sup>2</sup> This is unlike the GST where the price rise was a one-off hit.

# Economic stimulus from a National Energy Efficiency Program

The sub sectors of the economy that benefit the most from the fiscal stimulus, and therefore create the most jobs, are related to the manufacture of energy efficiency appliances and the retail distribution of those appliances.

Sector	% change in output	Increase in output (\$ millions)
Retail Trade	2.80	1,650
Wholesale Trade	1.12	548

### Table 1 Summary of the economic impact for sub sectors of the economy from the NEEP

## Shift household expenditure from energy to productive sectors

The modelling undertaken above is likely to be a conservative estimate of the benefits of the NEEP because it does not account for the households shift in expenditure from energy to more productive sectors of the economy.

Studies undertaken in California have identified the significance of this cost shift:

When consumers shift one dollar of demand from electricity to groceries, for example, one dollar is removed from a relatively simple, capital intensive supply chain dominated by electric power generation and carbon fuel delivery. When the dollar goes to groceries, it animates much more job intensive expenditure chains including retailers, wholesalers, food processors, transport, and farming. Moreover, a larger proportion of these supply chains (and particularly services that are the dominant part of expenditure) resides within the state ...<sup>3</sup>

# Job Growth from a National Energy Efficiency Program

Economic modelling conducted by KPMG showed that 40,000 new jobs will be created from the National Energy Efficiency Program. The employment benefits will be in jobs directly engaged in the delivery of the NEEP program and indirect job growth through the multiplier effect. The employment benefits will arrive at a time when the economy is likely to experience job losses and as such, will help constrain the rising unemployment rate. Furthermore, since the NEEP is designed to respond to the CPRS, there is a low lead-time on the creation of the 40,000 jobs.

Completed November 2008; released 18 December 2008

<sup>&</sup>lt;sup>3</sup> David Roland-Holst 2008, *Energy Efficiency, Innovation, and Job Creation in* California Centre For Energy, Resources, and Economic Sustainability, (Ceres), University Of California,

<sup>&</sup>lt;http://are.berkeley.edu/~dwrh/CERES\_Web/Docs/UCB%20Energy%20Innovation%20and%20Job%20Creation%20 10-20-08.pdf >, p28