



factsheet PRICING POLLUTION AND THE ROLE OF COMPLEMENTARY MEASURES

MYTH

If you have a pollution price then you don't need other clean energy measures.

FACT

A pollution price is central to how we begin to effectively address carbon pollution levels, however, it's not the only policy measure we need to undertake. Complementary policies, that drive renewable energy development, promote energy efficiency and promote farm sector solutions, also need to be an important part of Australia's holistic and lower cost response to climate change.

Until new clean energy technologies become cheaper, in relation to older dirtier energy sources, they will not see large scale deployment and use. Specific government interventions, such as renewable energy targets and other support subsidies, are critical, and have driven the global boom in clean energy investment.

We do need a pollution price to drive systematic change across the entire economy, however, by themselves, limits and price signals will not achieve pollution reduction targets at the lowest cost or as quickly as needed.

The accelerated deployment of clean energy technologies will drive reductions in business and technology costs, which over the long-term, will make reductions in pollution cheaper – the so called '*learning by doing effect*'.

Like any new technology, as Australian companies and industries adopt clean energy processes they will find ways to reduce their costs through greater economies of scale and more efficient business models. Companies will also learn how to better integrate these new technologies into their existing energy systems. These cost benefits are then passed on to the community at large, as costs become lower than they would have been without this initial critical mass of technology take-up.

For example, Suzlon is one of the world's largest wind companies. Since the company began working in Australia, it has reduced its costs by developing systems for pre-installation of cabling into tower manufacturing to reduce on-site installation costs. Suzlon has worked with wind tower manufacturers to adapt generic tower designs to suit Australian manufacturing capability, and undertaken studies that assist in the adaptation of design specifications for local markets e.g. OH&S standards, hot weather operating conditions and local grid connection requirements.

The experts from the OECD's International Energy Agency (IEA) recently examined the pros and cons of having additional policy support for clean energy. They looked at the short-term and long-term view costs and benefits, and concluded that: "*Looking farther into the future, the prominent role of RE [renewable energy] technologies in mitigating climate change becomes more important. Current policies pave the way for making their necessary large-scale deployment affordable, thanks to learning-by-doing processes in the broad sense of the term.*"¹

The IEA recommends the optimal response by any government should be to include pollution pricing and policies that will encourage innovation and accelerate market deployment of clean energy, which then encourages learning by doing.

Independent modelling commissioned by The Climate Institute concluded that the Renewable Energy Target improved the cost effectiveness of Australia's policy mix and reduced the required investments, in meeting long-term pollution limits, by AU\$10 billion. This was due to fast-tracked market experience and innovation, and by making clean energy cheaper (*Figure 1*).

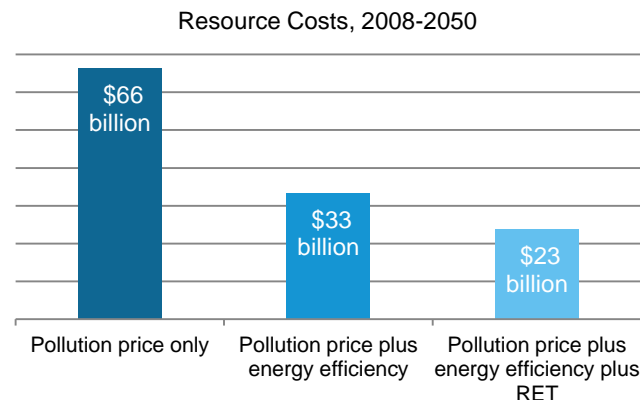
Research for The Climate Institute highlighted the critical role of the Renewable Energy Target in maximising employment and investment opportunities in regional Australia prior to 2020.² This is especially important as the relatively modest starting price will, by itself, initially just drive a shift from coal towards gas powered energy.

Energy efficiency action unlocks low cost pollution reduction options, reduces energy imports and makes our industries more internationally competitive. At the household level, it would also help Australians better manage their energy bills.

Modelling undertaken for the Prime Minister's Task Group on Energy Efficiency, forecast that the establishment of a National Energy Savings Initiative would save households between \$50 and \$245 per year. More recently, modelling for the Victorian Government showed that extending their energy efficiency scheme would deliver a net benefit of \$1.9 billion to \$2.6 billion to the Victorian economy.

A pollution price is critical to Australia's future. However, it is not a panacea. Overcoming systematic barriers to clean energy uptake and energy efficiency, remains critical to ensuring we don't just reduce pollution levels but that we become a cleaner, smarter, more efficient and a more competitive economy at the same time.

Figure 1: The total economic cost of achieving an 80 per cent reduction in electricity emissions by 2050. Measures to improve energy efficiency reduce costs by around 50 per cent due to a reduction in the need for new power stations and reductions in fuel costs (e.g. coal and gas). The Renewable Energy Target reduces costs further by encouraging Australian companies to innovate and find cheaper ways to use renewable energy.



¹ Cédric Philibert, Interactions of Policies for Renewable Energy and Climate, Working Paper, International Energy Agency, Paris, France, 2011.

² The Climate Institute (2011), Clean Energy Jobs in Regional Australia, <http://cleanenergyjobsmap.climateinstitute.org.au/>