

TOPIC 3: Population, sustainability, climate change and water

Internationally, feed-in tariffs have fast become the incentive of choice for increasing the uptake of solar and other renewable energy technologies, being implemented in over 45 countries, states or provinces internationally.

South Korea, Switzerland, Germany, Japan and even Great Britain all have more solar systems feeding more power back into the electricity network than does Australia. Japan has 100 times as much installed solar power than we have locally, and Germany now more than 500 times Australia's total.

Since introducing feed-in tariffs in 2000, Germany has doubled the proportion of electricity it generates from renewable energy sources, reaching the 2010 target of 12.5% three years ahead of schedule. As a result of this success, Germany has recently increased its national renewable energy target to 27% of all electricity generation by 2020. Around 400,000 homes in Germany have solar panels on their roofs, compared with around 9000 in Australia.

In addition to increased adoption of renewable energy, feed-in tariffs result in the building of a local renewable energy industry. Germany now employs nearly a quarter of a million jobs in renewable energy, with 23,500 jobs in solar panel manufacturing alone. This is a direct result of their successful implementation of feed-in tariffs.

The good news about feed-in tariffs is that they are both an effective and efficient means of increasing the adoption of renewable energy. Recent research in Europe has shown that feed-in tariffs result in faster and cheaper deployment of renewable energy technologies than mandatory target schemes.

The feed-in tariff payments are funded by a levy on electricity consumption. When spread across a broad consumer base, with exemptions to low-income and disadvantaged consumers to protect the vulnerable, this cost is reduced to a small portion of a customer's total electricity bill.

Solar photovoltaic (PV) systems generate electricity at times of peak demand – hot sunny afternoons – when wholesale prices frequently skyrocket. By closely matching peak demand, solar electricity generation reduces supply constraints, and consequently the wholesale electricity prices, at these times.

Further, they do so at or near the point of demand, reducing the need for expensive poles and wires to deliver electricity to our doors. With Australia earmarked to spend in the order of \$24 billion in network infrastructure over the next five years, any means to reduce this will result in savings to consumers. The German government has recently concluded that the economic benefits of feed-in tariffs outweigh the costs.

ATA urges the federal government to implement their election commitment and introduce a national feed-in tariff scheme – one which is progressive and effective, and goes one step further than the disappointing schemes introduced by South Australia and Queensland. Australia is uniquely blessed with renewable resources, and Australia has the opportunity to be a world leader in renewable energy as an essential element in addressing climate change.