

# Support Emerging Renewable Energy Technologies



Australia has immense, untapped renewable energy resources of sun, wind, heat and water. We have some of the top researchers in the world. We have tremendous community support to make the switch from a coal-based economy to a new, zero-emissions, renewable energy economy. With the right policy settings and the right political will, we can make it happen. The Greens believe that one of the most important policy tools is a national gross feed-in tariff for all renewable energy technologies.

## What are feed-in tariffs?

Around the world, the biggest success stories in renewable energy have been in places like Germany, where governments have put in place renewable energy price guarantees, known as feed-in laws. A feed-in guarantees market access for renewable energy at a guaranteed fair price for a reasonable time. This gives investors and banks the certainty they need to lend money to both large-scale developers and householders, to get renewable energy infrastructure built and installed.

The primary objective of the FiT is to provide reliable, long-term financial support for the commercialisation of the broadest possible range of renewable energy technologies, both large and small. It is particularly intended to help those that might not be cheapest or most attractive right now, but could become so with the right investment. Such technologies are generally unsupported by the existing mandatory renewable energy target scheme and short term ad-hoc rebate policies such as the Solar Homes and Communities Program (now ended).

## Recently introduced State and Territory schemes

In recent years, due to a lack of Commonwealth Government action, several States and the ACT have introduced their own renewable energy feed-in laws. This is regrettable because different laws in different States create an unnecessarily complex and inefficient investment environment. Further, all State and Territory schemes, with the exception of the ACT, have one or more fatal flaws, the worst of which is the so called 'net metering'.

Net metering schemes only pay the premium tariff on the net quantity of electricity exported to the grid after accounting for in-home consumption. This contrasts with gross metering schemes, under which owners receive the premium tariff for all electricity produced by their systems (whether consumed at home or exported).

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The very significant advantage of gross metering systems is that owners and lenders can reliably estimate the value of the renewable energy their system will produce. This is much more difficult with 'net metering' systems – which explains why no scheme outside of Australia uses the net-metering approach. Net metering also significantly increases the time needed for the investment to be paid back, reducing the incentive to invest. Net metering, frankly, is a deliberate attempt to set up a 'Clayton's' scheme which looks like a feed-in tariff but achieves very little.

A second major problem with most of the State schemes is that they support only solar photovoltaic energy. This is a major restriction. Most schemes around the world provide feed-in tariffs to a range of renewable energies to promote technological diversification and to maximise the chances of a real breakthrough in the commercialisation of one or more technologies. Again the ACT scheme is better than the other states because it offers feed-in tariffs for technologies other than just photovoltaics, namely wind and solar thermal.

A third major problem with most of the existing State schemes is that only small scale renewable energy generators are eligible to participate in the scheme. This too is a significant deviation from the successful European models. Why would we want to limit the potential of the scheme in this way? The Greens believe that both large and small scale renewable energy generators should be eligible to participate. Once again only the ACT has got this design aspect right.

## The Safe Climate (Renewable Electricity Feed-in Tariff) Bill

As promised prior to the last election, the Greens have introduced a Bill for a national feed-in tariff scheme. This legislation was referred to a Senate inquiry where it received very strong industry support, however the position of both the Government and the Opposition was to simply delay consideration by referring the question of national feed in tariff to the Council of Australia Governments (COAG).

This was a deliberate strategy to delay action because, as the Government knows perfectly well, many of the States have recently introduced FiT legislation – albeit very poorly designed schemes – and they will be reluctant to now alter these schemes. A COAG harmonisation will be at best a recipe for a lowest common denominator scheme. At worst it will mean no action at all with years of deadlocked negotiations.

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The Government's and Opposition's tactics of delay can no longer be an excuse for inaction. COAG has clearly failed to act, and the Greens will ensure that the Senate debate on our Bill resumes after the election.

The Greens Bill would go further than the approaches recently taken by Australian states by:

1. allowing the Minister to apply a feed-in tariff to any technology, not just solar photovoltaics;
2. ensuring that the feed-in tariff is applied to all renewable electricity generated, not just that component which is exported to the grid, which in the case of domestic photovoltaic systems may be negligible. The Victorian and South Australian feed-in tariff schemes are particularly weak in this regard; and
3. establishing a national register which will yield valuable information about the effectiveness of the various renewable energy technologies supported.

The federal government's primary argument against feed-in schemes is that the cost of the scheme will negatively impact low income households. Whilst there will be an impact on households, the experience from abroad indicates the impact is very slight and manageable. The key is to compensate through energy efficiency offsets such as proposed by the Greens through the retrofit of the nation's housing stock. Even a cost impost of a couple of dollars per month on each household can raise enough revenue for a very effective scheme. Furthermore, it must be acknowledged that the Mandatory Renewable Energy Target and any emission trading scheme will also inevitably impact on low income households. Compensation is necessary, but easily achievable through either the income tax and welfare systems, through the distribution of the revenue raised by the sale of permits in the emission trading scheme, or through investment in energy efficiency roll-outs to save householders money on their energy bills. What is important is not the impact of any one particular scheme on low income households, but the sum of all Government policies.

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## Other renewable energy support policies

The Greens' strong support for feed-in laws does not mean that we do not also support the Renewable Energy Target. Rather we believe they are compatible and complementary. The RET should be retained because it provides a backstop, minimum level of renewable energy. The main effect of RET, however, is to support whatever renewable energy technology is currently the cheapest – in practice that mainly includes wind energy and solar hot water systems. The Greens believe that the recent changes to the RET were improvements, but that:

1. The target should be increase from 20% by 2020 to 30% by 2020.
2. Energy efficiency products, such as hot water systems, should be supported a separate scheme (see the Greens Safe Climate (Energy Efficiency Target) Bill.
3. In its current form the RET will, within a few years, constrain rather than promote growth in the solar photovoltaics industry.
4. The RET should not promote the burning of native forest biomass.

Compared to the RET, feed-in laws are tailored to support renewable energy that has a good prospect of becoming competitive in the future – these may include solar thermal, geothermal, solar PV, biomass, tidal, wave and so on. It is important to support a range of technologies for two reasons. First, it is not possible to be certain which technology will end up being most successful and, second, because ultimately if we are to rely completely on renewable energy we will need at least a few technologies working together. When the sun isn't shining we will need to be producing energy from other sources, such as wind, stored solar thermal, geothermal, biomass, wave etc.

Australia could be on the cusp of a renewable energy revolution that will create tens of thousands of jobs and billions of dollars in new infrastructure investment, helping to build us out of the economic downturn by building a zero-emissions, climate friendly energy network. But if we are to see this come to pass, we need to drive the changes from the federal level. A strong, national, gross feed-in tariff for all technologies legislated by the Commonwealth is the best way to do this.