

## Towards a Decentralised Energy Future

MEFL works to reduce greenhouse gas emissions through active, on-the-ground programs to increase the uptake of energy efficiency measures and renewable energy technology. We envision a future in which all households can access renewable technologies to power their homes and lifestyles, and where decentralised energy solutions enable regions to cater for their own energy needs via local distribution networks and community-scale generation. The Moreland community is active and progressive on climate change and MEFL is in a unique position to advance this energy vision in Australia.

The Victorian and Federal Governments have taken some important steps towards achieving a more sustainable energy future: at the Federal level this includes ratifying the Kyoto Protocol, setting a date for an Emissions Trading Scheme and increasing the Mandatory Renewable Energy Target (MRET); and at the State level, the announcement of the Victorian Energy Efficiency Target scheme, the Victorian Renewable Energy Target (VRET) and the 5 Star Standard for residential buildings. However, whilst these steps signal a willingness to tackle climate change, they need to form part of a comprehensive strategy to decentralise our energy network and provide genuine and ongoing support for a community that wants to take action.

The most recent Victorian and Federal Government budgets dealt some disappointing blows for renewable energy: at the Federal level, the decision to place a means test on the photovoltaic rebate program effectively cuts out many of those households who would be in a position to make use of the rebate due to the relatively low income threshold that has been set; and, at the State level, the proposal for a feed-in tariff that only applies to net electricity production from photovoltaic systems under 2kW capacity provides little financial incentive for decentralised energy generation. These decisions are already proving disastrous for the fledgling solar industry and appear to contradict both Governments' stated desire to support renewable energy. Further, the ad hoc nature of energy policy to date sends mixed messages to householders about their role in reducing our contribution to climate change.

### What is Decentralised Energy?

Decentralising our energy network provides one of the most significant opportunities to reduce domestic greenhouse emissions. Centralised energy networks such as our current system involve massive inefficiencies due to transmission losses and, more significantly, waste heat from power stations. A decentralised energy (DE) system that produces energy close to where it is consumed provides the opportunity to dramatically reduce greenhouse emissions. There are two key components of a DE system:

1. Buildings (industrial, commercial and residential) generate power through solar, wind or cogeneration units; and
2. Local networks distribute heat and power, supplemented by community scale plants generating close to the point of demand.

In the UK it is estimated that shifting to a DE model could halve the electricity sector's emissions within a few decades. In Australia, where most of our emissions come from electricity generation, implementation of a DE system would dramatically reduce our contribution to climate change.

Other benefits of establishing a DE system include enhancing energy security by reducing overall demand, increasing the number and diversity of energy sources and constraining financial risks through lower capital requirements; and driving technological innovation and creating jobs.

## Creating the Right Incentives

MEFL believes that the community is anxious to act on climate change and wants to embrace energy efficiency and DE solutions. Governments at all levels must take the lead to ensure that householders and the wider community can overcome existing financial and other barriers to improving energy efficiency and investing in renewable generation. This will require a comprehensive, farsighted approach to policy making and MEFL believes that an appropriate policy package would include:

- > The continuation and incremental increase of the MRET and VRET
- > A national renewable energy FiT that creates significant financial incentive for the broad uptake of a range of systems, including solar, wind and cogeneration
- > A photovoltaic rebate program sufficient to provide incentive for those households who would otherwise be unable to afford to install solar panels
- > Protection for low income households through safety nets and the provision of targeted energy efficiency programs

### ***National Feed-in Tariff***

Based on the experience of over 40 countries worldwide, MEFL believes that a robust national feed-in tariff will be essential to the establishment of an effective DE system. A strong FiT would work to complement, rather than hinder, existing renewable energy targets by setting a price for energy generated under the targets and thus creating an incentive for households, businesses and community enterprises to participate in energy generation. A national FiT should comprise the following components:

- > A mandated price of 60 cents per kWh for systems up to 10kW
- > A mandated price of 48 cents per kWh for systems from 10kW-100kW
- > A guaranteed time period
- > Applicable to the entire output of an eligible system via gross production metering
- > Covers a range of renewable energy generation including solar, wind and cogeneration
- > Available to households, businesses and community entities
- > Exempts low-income households from cost recovery.

MEFL believes that the economic benefits of a national FiT following the model outlined above would outweigh the associated costs. The costs of implementing the scheme would be offset by reduced wholesale electricity prices, as output of solar systems in particular corresponds closely with peak demand, and through avoided costs of new power stations and transmission infrastructure. The international experience supports this position – in Germany, for example, recent Government reports estimate that the savings outweigh the costs of the FiT three to one, resulting in a net benefit to consumers.

The Victorian Government has claimed that the annual cost to consumers of a gross FiT capped at 250MW would average \$100 per household; however, a comprehensive analysis by the Alternative Technology Association (ATA) reveals a number of serious flaws in the Victorian Government's calculations, and predicts that the actual cost to households would be an average of **80c per month** over the life of the scheme. Importantly, unlike the Victorian Government's figures, the ATA's calculations include an exemption from cost recovery for low-income households.

### ***Solar Homes and Communities Plan***

MEFL believes that solar power is an integral component of a decentralised energy system. Solar energy has a number of advantages, including ease of installation, reliability and accessibility of technology and potential to reduce peak demand. Through our work with the Moreland community MEFL has found that householders are increasingly keen to contribute to the fight against rising emissions, and that many place high value on the potential role of solar power as part of their individual response. The former Photovoltaic Rebate Program made solar power a reality for more than 2800 Victorian residents and community groups, and there are many more that are eager to come on board.

MEFL believes that an effective rebate scheme would support the introduction of a national FiT by enabling households and community entities to meet the high capital costs of installing solar systems in order to take advantage of the FiT. However, the recent decision to limit eligibility for the photovoltaic rebate to households with a gross income of less than \$100,000 appears to have priced a significant portion of households out of the market for solar. Further, this decision is already having serious negative impacts on the solar industry at a time when the growth of the sector is crucial and should be supported by policy.

MEFL is concerned that the Federal Government's decision to set the means test at \$100,000 gross household income has been based on insufficient data. MEFL calls for a thorough inquiry into what constitutes an appropriate income threshold to ensure the rebate can deliver maximum effect for the community and the solar industry.