Mr Anthony Williamson
Principal Policy Officer, Energy Sector Development Division
Department of Primary Industries
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15 April 2011

Re: Expansion of the Victorian Energy Efficiency Target

Dear Mr Williamson

In March 2011 the Department of Primary Industries (DPI) released a Regulatory Impact Statement (RIS) on the expansion of the Victorian Energy Efficiency Target (VEET). The Energy Efficiency Council has prepared this submission in response to the RIS.

The Energy Efficiency Council is the peak body for energy efficiency services and products in businesses and government, and its members have a global turnover in excess of $200 billion each year. The Council brings together Australia's expertise in energy efficiency to support the development of policy and programs. Incorporating expert advice into the design of energy efficiency policy and programs significantly improves their effectiveness and reduces the risk of unintended consequences.

The Energy Efficiency Council strongly supports the VEET and the expansion of the target. The VEET delivers substantial benefits to households and businesses and is one of the most effective ways that governments can contain rising electricity prices. The Council welcomes the new Victorian Government's commitment to retain and expand the VEET.

The Energy Efficiency Council strongly recommends that the VEET scheme is harmonised with the NSW Energy Saving Scheme and South Australian Residential Energy Efficiency Target as a first step to developing a single, national Australian energy efficiency scheme. The Council welcomes the Federal Liberal Party's support for a single national energy efficiency scheme.

Global and local evidence shows that a well-designed VEET scheme reduces energy bills. The UK has had an energy efficiency obligation on energy suppliers since 1994. An extensive evaluation of the last phase of the scheme (Energy Efficiency Commitment phase 2) found that it delivered $12.7 billion of benefits to households. Every dollar spent by energy retailers delivered $9 worth of benefits to households.

There are clear justifications for the VEET, which include reducing energy prices, improving energy affordability for households and improving the competitiveness of Victorian businesses. These justifications are set out in detail in Section 1, but in summary the VEET scheme:

- Tackles regulatory failures that result in network companies, which are highly regulated regional monopolies, over-investing in infrastructure and under-investing in demand-management (energy efficiency, distributed generation and reducing peak demand).
- Addresses information and behavioural barriers that prevent consumers, particularly households, from investing in cost-effective energy efficiency projects.
- Overcomes misaligned incentives between landlords and tenants.
- Creates jobs and supports the development of an energy efficiency industry.
- Drives market transformation that pushes up the quality and drives down the costs of energy efficient products and services.
- Reduces greenhouse gas emissions and mitigates risks from rising global fuel prices.

The Energy Efficiency Council makes a number of recommendations for the VEET scheme:

- The VEET should be harmonised with the NSW Energy Saving Scheme and South Australian Residential Energy Efficiency Target as a first step to developing a single, national Australian energy efficiency scheme.
- The VEET should be expanded to at least 5.4 Mt CO_2^{e-} per annum. This should be complemented with a cap on the permit price, to ensure that the program drives down the cost of energy.

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- The RIS significantly understates the net benefits of an expanded VEET. Although the RIS should consider reductions in generator profits, these should not be treated as a simple offset to the benefits of reduced household and business energy bills.
- The VEET scheme should be expanded to all businesses. While sites that are subject to the Environment and Resource Efficiency Plan (EREP) and Energy Efficiency Opportunities (EEO) programs should not receive support for projects that they are mandated or already likely to undertake, they should still receive support for projects with payback periods over 3 years (EREP) and 2 years (EEO), as these are genuinely additional.
- The inclusion of businesses in the VEET scheme will allow for simpler monitoring and compliance, as it will allow for energy savings to be accurately measured, verified and audited. DPI should focus on its process for allocating VEET certificates that are generated from measured energy saving projects (as opposed to deemed savings), based on the International Performance Measurement and Verification Protocol (IPMVP).

Please contact me on 03 8327 8422 should you require further information on any of the issues raised in this submission.

Yours sincerely

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1. Why the Victorian Energy Efficiency Target is essential

There are clear justifications for the VEET. The primary justification is the regulatory failure around distribution and transmissions networks. Network companies are planning to spend over $40 billion on additional infrastructure over five years. These costs are passed directly on to energy consumers, and 68 per cent of recent increases in energy prices are due to this expenditure on the network. While some of this expenditure is necessary, it could be substantially reduced through wise investment in demand-management (energy efficiency, distributed generation and reducing demand at peak times).

Ideally, network companies would invest in demand-management when it is cheaper than investing in additional network capacity. For example, a demand-management program on Magnetic Island in Queensland recently reduced peak-demand by 20 per cent, avoiding $17 million of expenditure on a new undersea cable. However, regulatory failures mean that network companies systematically under-invest in demand-management and so over-invest in network infrastructure. Expanding the VEET will help to contain spending on network infrastructure by driving investment in efficiency when it's cheaper than supply infrastructure.

The second justification for the VEET is addressing well accepted information and behavioural barriers that prevent consumers, particularly households, from investing in energy efficiency. There is substantial evidence for the existence of these barriers, including multiple studies on appliance purchase where households have been found to apply irrationally high implicit discount rates, often reaching several hundred percent per annum. The VEET scheme helps address these barriers by:

- Providing an incentive that makes energy consumers focus on energy efficiency, and
- Incentivising third-parties to improve consumers' energy efficiency on their behalf.

The VEET scheme can also address misaligned incentives between landlords and tenants. Although a tenant might benefit from energy efficiency improvements to their building, it is generally too difficult for the landlord to negotiate a share of these benefits. As a result, landlords tend to under-invest in the efficiency of their properties. However, as VEET certificates can be claimed by the party that makes the investment in energy efficiency, they provide an incentive for landlords to make investments in the energy efficiency of their properties.

Global and local evidence shows that a well-designed VEET scheme reduces energy bills. The UK has had an energy efficiency obligation on energy suppliers since 1994. An extensive evaluation of the last phase of the scheme (Energy Efficiency Commitment phase 2) found that it delivered $12.7 billion of benefits to households. Every dollar spent by energy retailers delivered $9 worth of benefits to households. The energy saving target was met 23 per cent more cost-effectively than originally estimated by the UK Government.

There are also many other market failures that impede energy efficiency. While alternative policy mechanisms may be the best way to address these market failures, it will take many years to implement the policies that will fully address the market failures. In the meantime the VEET is a critical transitional mechanism to progress energy efficiency and develop the efficiency market.

As a result, the VEET scheme helps to develop an energy efficiency industry that will be critical to help Australia adjust to inevitable rises in electricity prices. Energy efficiency investments have a significant local economic multiplier effect, with studies by the US Department of Energy estimating that each dollar invested in energy efficiency generates US$2.32 in local economic activity, US$0.84 more than equivalent expenditure on petroleum and gas.[i]

The VEET scheme already supports 1,200 jobs, and its expansion will result in companies hiring and training new staff. The Victorian Greener Government Buildings Program has already provided Energy Efficiency Council members with the certainty that they need to invest in hiring and training additional staff. It is estimated that this program alone will create at least 250 new jobs in a range of skilled and professional roles. The expansion of the VEET will create additional jobs and expertise that will help businesses become more competitive - ClimateWorks estimates that further improvements in energy efficiency could save the Australian economy $5 billion per annum.

Although these drivers alone justify the VEET, it will also reduce greenhouse gas emissions and mitigate risks from rising global fuel prices. Energy efficiency is the largest potential source of emission reductions to 2020, and cutting emissions through efficiency strengthen the economy.

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2. Expansion of the Target

The Energy Efficiency Council strongly supports the expansion of the VEET to at least 5.4 Mt CO_2 equivalent per annum from 2012-2014. The modelling in the RIS clearly states that the benefits of the VEET were substantially greater with a larger target. Setting the target at 5.4 Mt CO_2^{e-} per annum delivered $1 billion more in energy savings than setting the target at 2.7 Mt CO_2^{e-}, delivering between $2.9 billion and $3.9 billion in total savings to households and businesses.

In fact, the net benefits of a higher VEET would be substantially higher than indicated in the RIS, primarily due to the inappropriate methodology for subtracting reduced generator profits from the benefits. Under the current DPI methodology, reduced generator profits account for around 90 per cent of the 'costs' of the expanded VEET, indicating just how critical it is to treat this issue correctly.

While DPI should consider how much the VEET reduces generator profits, the current methodology for subtracting these reduced profits from the benefits of VEET make an implicit assumption that each dollar of reduced generator profits is equivalent to a dollar of household and business energy savings. This is an incorrect assumption. At the very least, this issue should be made explicit by ensuring that the benefits of VEET are not presented as a single figure, but as three lines 'benefits in savings to households and businesses', 'program costs' and 'costs of reduced generator profits'.

One of the issues that complicates treating generator profits as a 'cost', is that it implicitly assumes that the VEET is operating in a level playing-field and is creating a transfer of welfare from generators to energy users. In fact, the VEET is operating in a market where the regulatory distortions mentioned in section one are already having distributional effects, transferring welfare from households and businesses to network companies and generators. Rather than creating a transfer, the VEET is correcting an existing transfer.

The Energy Efficiency Council has a strong incentive to ensure that energy efficiency policies are well designed, as problems with energy efficiency policy negatively impact members' business. The key risk that could emerge from setting a high target is that the scheme will invest in energy efficiency that is more expensive than supply-side options. However, capping the penalty price of the scheme is the appropriate mechanism to address this risk, rather than setting a low target. A cap on the penalty price would provide a safety valve that prevents inappropriate expenditure from occurring.

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3. Expansion of the VEET to businesses

The Energy Efficiency Council strongly supports the extension of the VEET scheme to businesses, but argues that the VEET should be extended to all businesses, not just Small to Medium Enterprises (SMEs). There are four main justifications for extending the VEET to all businesses.

Firstly, the VEET should be harmonised with other state energy efficiency schemes, particularly the NSW Energy Saving Scheme, as a critical step in developing a single national energy efficiency scheme. The NSW Energy Saving Scheme includes households, SMEs and large businesses, and so the VEET should be applied to households, SMEs and large businesses.

Secondly, large businesses account for 61 per cent of Victorian energy use, and SMEs only account for 15 per cent of Victorian energy use. As a result, there are expected to be substantially more cost-effective energy savings opportunities in large businesses than in SMEs. The deeper the pool of potential energy savings, the greater the benefits of VEET and the lower the certificate price. Therefore, including all businesses in the VEET would deliver both substantial benefits to these businesses and greater reductions in Victorian energy prices. The Council can see no justification for excluding these businesses from the VEET.

Third, it is generally simpler to find, implement, monitor and verify energy efficiency opportunities in large businesses than in SMEs. Large businesses are likely to generate a small number of relatively large projects, which allows for very robust measurement and verification of savings and only requires a handful of audits. As a result, including large energy users in the scheme will substantially increase the pool of potential energy savings at the same time as reducing the average auditing and compliance cost per certificate.

Finally, while sites that are subject to the Environment and Resource Efficiency Plan (EREP) program should not receive support for projects that they are mandated to undertake, sites that are subject to EREP and the Energy Efficiency Opportunities (EEO) program should receive support for projects with payback periods over 3 years and 2 years respectively, as these are genuinely additional.

The Energy Efficiency Council supports the principle that the VEET should only support investments in energy efficiency that are genuinely additional to business-as-usual. The energy efficiency industry does not benefit from programs that subsidize energy efficiency retrofits that were going to happen even in the absence of the program.

The Council agrees that sites subject to the Victorian EREP program should not receive support for projects that payback within 3 years, as these sites are already mandated to undertake these projects. While the Federal EEO program does not mandate investment in any project, many companies subject to EEO have invested in projects that have payback periods that are less than two years.

However, extensive data gathered through the EEO program indicates that participants are failing to implement projects that have payback periods over two years, despite returns on investment that often exceed 20 percent. Similarly, few EREP participants invest in attractive projects with payback periods over 3 years. There are a number of reasons for this, including the way that longer payback period projects are budgeted and the performance metrics used for some senior staff.

Therefore, the Energy Efficiency Council strongly recommends that sites that are subject to EEO or EREP should be able to generate VEET certificates for projects that payback in more than 2 years and 3 years respectively, as these are genuinely additional.

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4. Measurement and verification and compliance

As noted in section three, the inclusion of larger businesses in VEET will allow for simpler monitoring and compliance. Firstly, compared to households and SMEs, large businesses are expected to generate a small number of relatively large projects, which allows for simpler auditing and verification. Secondly, larger projects allow for robust measurement and verification of savings.

The Council strongly argues that DPI should focus on certificate generation from projects where energy savings are accurately measured and verified, rather than 'deemed' savings.

The first reason for focusing on measured savings is that it encourages companies to invest in cost-effective, integrated energy efficiency projects that deliver the deepest energy savings and the best returns on investment at that site. The actual energy savings that arise from the installation of a deemed product will vary on a case-to-case basis. While deeming is an effective method for estimating average savings in cases where measurement and verification are not economic, we should be encouraging companies to focus on tailored projects where savings can be measured and verified.

The second reason for focusing on measured savings is that measurement and verification support compliance. Energy bills are independent, third-party sources of data that support simple auditing and compliance processes. The National Australian Building Rating Scheme (NABERS) is based on energy bill data for this reason.

In order to estimate energy savings from a project, this data needs to be corrected for a number of factors. Again there is already a robust tool for ensuring this: the International Performance Measurement and Verification Protocol (IPMVP) that was developed by the US Department of Energy. The Energy Efficiency Council promotes the use of this tool in Australia as we believe that it encourages companies to focus on genuine energy savings, which builds the quality and reputation of the energy efficiency industry.

We believe that if DPI encourages the use of projects with measured and verified energy savings, based on real energy bills, the IPMVP and an effective audit process, the VEET will deliver substantial genuine energy savings with low risk of non-compliance. As a result, including large energy users in the scheme will substantially increase the pool of potential energy savings at the same time as increasing the simplicity of auditing and compliance.

[i] National Renewable Energy Laboratory 1995, *DOE/GO-10095-196, Energy Efficiency Strengthens Local Economies,* U.S. Department of Energy (DOE)

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