



NSW Energy Efficiency Trading Scheme

A response to the NSW NEET Discussion
Paper by Enact Energy

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Development

11th July 2008

Introduction

Enact Energy is a multi award winning firm of energy efficiency consultants based in the UK. Managing Director Adrian Wright established Enact Energy in 1996 and personally has over 15 years of experience of home energy conservation projects and home energy rating systems. Last year, Enact Energy managed the installation of energy conservation measures worth more than 70 million Australian Dollars into UK homes, funded by fuel companies through the Energy Efficiency Commitment (EEC).

The HEAT Project was established by Enact in 1997 and through the use of over 100 sub contractors has helped to install insulation and renewables into around 300,000 homes. Working in partnership with over 100 Local Authorities, Enact undertakes a large scale marketing campaign offering householders grant funded energy conservation measures. Approved contractors are then commissioned to complete the works and the energy savings sold to one of four fuel company partners.

Having established itself as one of the UK's leading energy conservation companies, Enact Energy is now looking to expand overseas and has already opened offices in Spain and Portugal. It is hoped that the NSW Energy Efficiency Target (NEET) and other targets in Victoria and South Australia will provide the opportunity for Enact to invest in a new office in NSW with the creation of new employment opportunities both directly and through sub contractors.

Having worked with fuel companies under the Energy Efficiency Commitment in the UK for many years, we hope to be able to use our experiences to help fuel companies achieve their NEET targets by running large projects targeted at home energy conservation. We also hope to be able to work closely with the NSW Government to help it in some way to meet its commitment to reduce household greenhouse gas emissions.

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1. Overview

Enact Energy fully supports the Department of Environment and Climate Change in announcing a major new energy efficiency package which will revitalise the component of the Greenhouse Gas Reduction Scheme.

2. Relationship of NEET to national policies

It is important for the NSW Government to ensure a strong alignment with the other energy efficiency schemes in Victoria and South Australia. This will ensure a smooth delivery of projects rather than the need for three individual separate projects with different administration. At present there are subtle differences between the South Australian and Victorian energy efficiency schemes and we would encourage the NSW Government to work together to make certain a better cohesion.

4.1. Scheme coverage and liable parties

Enact Energy feels that under NEET both NSW electricity and gas retail licences should be included in the new scheme. Firstly, energy efficiency savings can easily be achieved via natural gas. Secondly, it would assist harmonisation with scheme in the other states like South Australia and Victoria. Thirdly, we feel that it is easier to implement both electricity and gas at the beginning of NEET rather than introducing this at some point in the future.

4.2. Determining the total energy savings requirement

Clearly some research will be required to identify the capacity within the energy saving industry to be able to cope with a particular target. However, setting the bar too low will not encourage companies to expand and take up the challenge of the target. It is therefore worth considering a higher target over a longer period to allow the businesses to expand. At present we have not seen any indicative carbon savings figures for NEET and cannot therefore give any comment regarding an overall target. I would welcome the opportunity to see any such figures if they are available and would then be happy to give my opinion.

Phasing of an energy conservation programme such as NEET is absolutely critical to ensure not only the achievement of targets but also the sustained and supported growth of the industry required to undertake the physical works.

In the UK, the energy efficiency industry has suffered over 10 years of turbulent workloads due to the stopping and starting of Government led grant schemes. Most recently the transition between Energy Efficiency Commitment 1 (EEC1) and EEC2 (see separate comment at end of this report), where installers were encouraged to expand and then suffered 2 years with little or no work. Around 10% of UK insulation installers have gone out of business in the last 3 years as a result and many more now refuse to expand any further, seriously hampering the UK Governments ability to achieve its Kyoto targets.

To encourage the energy efficiency industry to grow and to provide short term stability, we would recommend phases of no longer than 2 years to prevent the potential for long periods where works are not undertaken for unforeseen circumstances. Longer term targets should also be set to give interested parties the confidence to invest for the future. Despite its transitional teething troubles, EEC has done this by providing firm commitments to save energy until 2020.

4.3. Determining energy savings obligation for each liable party

In the United Kingdom the Government's Carbon Emission Reduction Target (CERT) sets a target on fuel suppliers based on their customer numbers, this may be a more straight forward way to divide up the target amongst suppliers. With CERT, an annual check of customer numbers is made and the suppliers target increased or decreased as necessary. We feel that the savings should be expressed as greenhouse gas emissions as an ideal unit to use.

A company such as our own can generate carbon emission savings in bulk and there is no reason why the cost should be any higher for a smaller company than a larger one. We believe it would make sense to include smaller companies within NEET from the outset, that way as their customer numbers rise past what would have been a potential trigger point they will already be within the framework. Administration costs could potentially be higher for smaller companies so consideration could be made to a streamlined reporting process for companies below a certain size.

4.4. Penalty

Under EEC in the UK, fuel companies run a potential fine of 10% of their turnover which is a level high enough to ensure that the targets are achieved. In the UK, a number of fuel companies went out of business having not met their EEC targets so consideration should be given to an annual target backed up by a fine which could perhaps be refunded at the end of a cycle if the overall target is met.

5.1. Sectors and activities

With an energy saving target set it is imperative that efforts are concentrated on those measures which will save the largest amount of energy. These would be measures such as insulation, low energy lighting, fuel switching (e.g. electric to gas), heating upgrades etc. Caution should be exercised with low energy lighting to prevent mass distribution of low cost bulbs which may not even be fitted, or worse still sold on by the recipient. If renewables are funded under a different programme then these should be excluded unless there are plans to phase out funding elsewhere.

Funding should not be provided for properties to meet minimum legal requirements. It is also debatable whether a certificate should be provided for making new homes slightly better than the minimum 5 star requirement. The energy saving here would be minimal and larger savings would be achievable in older properties with poor insulation and inefficient heating. It could be a requirement that each certificate has to be signed by the householder as a declaration of financial or behavioural additionality. In the UK this has to be done by landlords of social housing properties.

A simple spreadsheet format would be ideal, similar to that used in the UK CERT. With property types down one side e.g. 3 bed detached house and a carbon dioxide emission saving score listed for each of the various types of measures e.g. wall insulation, various thickness of loft insulation, heating upgrade etc.

Evaluation of existing measures should be discouraged to prevent distortion of the market (see end of this document). It is important for installers and manufacturers of energy saving products to have a clear idea of how to grow their businesses to meet future NEET requirements. Companies who invest heavily in one technology only to

find it devalued in a review could become disheartened and less likely to invest again.

New technologies should be allowed into the market quickly however if they have a clear and quantifiable energy saving. An example from the UK CERT which caused problems was the change in energy savings carried out in the review at the end of EEC1 (2002-2005). The energy savings for loft top ups (lofts where some insulation already existed) were heavily cut. This has led to many hundreds of thousands of homes being surveyed for loft insulation and when the surveyor discovers they have existing insulation, walking away without carrying out any works. For our own company this has greatly increased the cost of marketing because there is a great deal of wastage of leads where works are required but the savings do not make the grants cost effective. Ironically the energy savings for loft top ups have just been increased in the latest review meaning that the industry will now have to go back out and try and find all those homes that they rejected over the last 3 years. This kind of dramatic change to the savings that can be claimed increases costs, reduces the ability for companies to achieve the savings and creates wasted emissions in unnecessary visits to homes where works cannot be completed.

5.3. Certificates

Extreme caution should be taken over who can and cannot issue certificates. In the UK we have to sign detailed contracts with fuel companies before being allowed to supply them energy savings. Full documentary evidence has to be held for audit purposes at our offices and in some cases supplied with every claim. This evidence includes a grant voucher signed by the householder, a benefit declaration form signed by the householder/sub contractor if they are a priority customer and a customer satisfaction form. We are also obliged to submit a 5% technical monitoring report to ensure that our sub contractors are submitting accurate, genuine claims. The integrity of the carbon savings made are critical if the value of the certificates are to remain constant. If all accredited parties are working to the same high standards and are being stringently monitored we would not foresee any problems. If however, people are issuing certificates for "business as usual" works or being dishonest about the works themselves it could devalue the certificates and completely undermine the whole of the NEET.

Other comments

Under the UK CERT, savings must not be double counted, that is to say that if the energy saving is part funded from another Government led scheme, energy savings must not be claimed by a fuel supplier. However, energy saving measures can be part funded by other means such as local authority funding and householder contributions. We believe it is important for the NSW Government to clearly stipulate the rulings on this in any documentation to avoid double counting but also so as not to stifle potential acceptable matched funding sources.

It is vital that the NSW Government track targets throughout the year to identify any issues early and to enable them to plan future targets. As previously suggested, certificates could be issued in the name of the fuel supplier and therefore targets will be tracked on a daily basis with little additional administration. If the above is not possible, it may be worth considering adding the requirement that certificates must be banked within 3 months of issue. If this is not done it may be difficult to track the

total value of certificates issued and the amount held by each fuel supplier. It is useful for the industry as a whole to be kept up to date with the potential market for carbon savings and a quarterly newsletter could do this if a recording process is in place.

Perhaps a requirement should be made for the accredited certificate supplier to visit 5% of the homes and carry out technical monitoring where works have been carried out by them or their contractors. This should be backed up by a similar requirement on the fuel supplier with the NSW Government randomly monitoring 5% of all works including any that have already been monitored.

We believe that the certificates should be issued once the carbon saving measure has been installed. So for example, if loft insulation saves 1 tonne of carbon per annum and the expected life of the insulation is 40 years, a certificate should be issued for 40 tonnes on satisfactory proof that the works have been correctly installed. Certificates should not be issued upfront for works that have not been installed as this runs the risk of works not being completed but potentially the certificate having been sold by the accrediting body.

For the reasons discussed below we would not recommend unlimited banking. It is important to maintain a steady flow of work for the energy conservation industry so some banking should be allowed to prevent funds drying up months or years before the end of a cycle. However, as happened recently in the UK companies may decide to bank up vast amounts of energy savings to carry over into a new cycle and then sit back for a year and spend nothing. This provides the yoyo work cycle which is extremely damaging to the industry. In the UK, fuel suppliers can “cherry pick” their best energy savings to carry over from one phase to the next irrespective of the date of installation. We believe a fairer system would be for fuel companies to only be allowed to carry over savings which have been made after their target has been achieved creating a cut off date. We agree that no borrowing should be allowed.

UK EEC/CERT – Transitional difficulties

EEC runs in 3 year target periods, EEC1 ran from 2002-2005 followed by EEC2 which ended in March 2008. Both the Government Department of the Environment, Food and Rural Affairs (DEFRA) and OFGEM (The UK fuel regulator) declared early on that EEC2 would require twice the amount of energy savings as EEC1 and encouraged the energy efficiency industry to gear up in preparation for the huge increase in work. In response, insulation companies took on more staff and invested in more machinery and fuel companies attempted to ensure that they not only hit their targets but also banked a proportion of their EEC2 target during EEC1. Under EEC, fuel companies were provided with a large spreadsheet which contains various energy savings “scores” for energy savings measures applied to a variety of house types. This EEC spreadsheet is used by fuel companies to track and report against their EEC target. When the EEC programmes move from phase to phase, OFGEM and the DEFRA take the opportunity to look at the energy saving scores of certain measures and amend them for the next round of EEC. The energy scores for EEC2 were dramatically and unexpectedly increased over EEC1 scores due mainly to a change in the UK Government Discount Rate, a figure used to adjust savings where claimed over a long period. An example of this is cavity wall insulation which

overnight saved almost twice as much energy as it did in EEC1. These changes caused the following issues:

Issue 1- Banking

After the warning from OFGEM and DEFRA that EEC2 targets were going to double those of EEC1, fuel companies had planned to over achieve their targets and bank the balance as a head start. Rather than reaching their target and then banking all savings thereafter, under EEC rules, fuel companies could choose which measures they wish to bank regardless of when they were carried out. When banking savings, fuel companies could also choose whether to use the existing EEC1 scoring system or the new EEC2 scores. Having seen the vast increase in energy savings, fuel companies were careful to carry the most valuable energy savings over using EEC2 scores and therefore maximise their value. Most fuel companies had planned to bank around 10-25% of their EEC2 target from work carried out under EEC1. However, once the measures had been carefully selected and the higher EEC2 scores applied, this led to companies starting EEC2 with up to 50% of the whole 3 year target already achieved.

Issue 2 – Phasing energy saving targets

The extra work for the industry as a result of the announced doubling of the energy savings target was all but cancelled out by this sudden change in the way energy savings were scored. Insulation companies who had invested in training new staff and purchasing new machinery were left without work as fuel companies heavily cut back budgets. Some fuel companies actually withdrew funding overnight leaving installers with thousands of completed measures which could not be paid for. The three years of EEC2 between 2005-2008 were supposed to be a time where vast volumes of energy saving works were carried out, in reality less work was carried out than during EEC1 and the industry is desperate for EEC 3 to start to enable funding to be freed up again.

Issue 3 – Consumer confidence

By 2005 as EEC2 started, consumers were beginning to become used to grant funding for energy saving works and to seeing regular marketing messages encouraging them to be environmentally friendly. Ironically as the barriers were broken down and consumers were keen to have the works completed, the grant funding ceased or was heavily cut back. Our own project for example received over 100,000 enquiries in a single year and due to lack of funding we could only help around one third of those who applied. As the fuel companies were way ahead of target, those that did carry on providing funding cut back their grants by around 35%. This new level of grant often does not always provide incentive enough for the householder to have the works carried out and demand has fallen back significantly.

Comments

The transition from EEC1 to EEC2 and the serious problems that were created, highlights how valuable the planning exercise that you are undertaking is. Allowing unlimited banking of certificates runs the risk of creating a stop start scenario where fuel companies hit their targets early and the industry has to be mothballed until the

next phase begins. Early banking of certificates would be recommended because it will allow the NSW Government to gauge how well fuel companies are doing against their targets. A better option may be for you to list the name of the purchasing fuel company on the certificate before issue, therefore allowing you to track how well they are meeting their targets (assuming no trading of certificates is allowed) and judge how high future targets should be set at.

One other key lesson from the above is the need to maintain a steady carbon emission scoring system which does not vary too often. Another example of a loser in the EEC2 spreadsheet alterations were low energy bulbs which had their savings heavily cut. Bulb manufacturers who had geared up production to supply fuel companies with tens of millions of bulbs a year, suddenly saw their order cut to a few hundred thousand.

