

3 September 2010

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Dear Gareth

Draft New Zealand Energy Strategy – Developing our Energy Potential (and the Draft New Zealand Energy Efficiency and Conservation Strategy)

Business New Zealand is pleased to have the opportunity to provide a submission to the Ministry of Economic Development on the Draft New Zealand Energy Strategy – Developing our Energy Potential (and the Draft New Zealand Energy Efficiency and Conservation Strategy), dated July 2010.¹

Introduction

Business New Zealand welcomes the new strategies and the four priority areas. In their stronger focus on environmentally responsible economic development, they appear to reflect a better balance between the role that Government can play in improving industry and sector-wide settings, and the conditions required by market participants to deliver the outcomes sought. More specifically, the Government looks to focus on ensuring that the energy sector is able to move efficiently along a least cost expansion pathway by:

1. identifying and removing market failures;
2. ensuring that participants face strong incentives within a market-based framework to compete aggressively; and

¹ Background information on Business New Zealand is attached in Appendix One.

3. facilitating timely investment and support of new technologies in which New Zealand has a comparative advantage.

BusinessNZ supports this approach. BusinessNZ believes that decentralised, competitive energy markets remain the best, most flexible and adaptable means of delivering effective and efficient outcomes for consumers, relative to an alternative of centralised control.

Some Pitfalls Associated with Sector Strategies

While sector strategies can be powerful policy tools that galvanise sector engagement and drive positive outcomes they are just as easily the reverse, raising expectations of action that cannot be easily delivered or sliding into policy prescriptions that force non-market outcomes to eventuate. Picking winners and coddling losers is often the outcome, even if not intended, and resources get redirected across sectors in search of more favourable treatment.

The problems with the 2007 energy strategies are well known - they were essentially used to underpin aspirations for carbon neutrality and aggressive carbon emissions reductions. In being so framed, it was no longer apparent that markets and market mechanisms would be relied upon to deliver competitive, least-cost outcomes, as policy settings were re-tuned to be directive in order to assure the Government that certain outcomes would occur. The technology restriction-type interventions such as the light bulb ban and the new baseload thermal generation ban had their origins in the 2007 strategies.

At this level, strategies essentially become de facto central plans with hidden additional costs being imposed on end consumers as a result.

Moving the Energy Sector Forward

In contrast, the new strategies appear to be concerned with establishing a coherent framework within which reliable energy can be delivered at least cost (including environmental costs). In doing so, they appear to recognise and promote the benefits from:

1. flexibility: markets operate at their most effective where the participants in them have the flexibility to form their own views of future demand paths and supply costs, future system needs, technologies and invest accordingly. Fettering participants' options by dictating their choices inevitably risks raising prices and exacerbating security of supply challenges;
2. diversity: there are inevitably many paths and potential solutions available to achieve the desired outcomes. A portfolio approach provides for system resilience. Interventions aimed at foreclosing options or forcing specific outcomes should be avoided; and

3. innovation: technological and productivity gains are critical to delivering efficient market outcomes for consumers with competitive pressures most likely to be best at delivering these.

In essence, while the strategies seem to recognise that the use of regulation to deliver more efficient outcomes has its place in the policy maker's toolbox, they also seem to appreciate that you can't regulate away market fundamentals. Non-market approaches can't make the cost drivers go away. For example, in the electricity market, no amount of regulation will make it rain.

The Goal

The purpose of setting a goal is to clearly articulate what is sought from subsequent policy interventions. This enables proposed policy interventions to be assessed in terms of their expected effectiveness in delivering on the goal, and monitored in terms of their actual delivery. Goals that are too determinative, or multi-faceted, risk stifling the consideration of feasible and innovative alternative responses.

BusinessNZ supports the goal outlined on page six of the New Zealand Energy Strategy (the 'NZES'). However, there are two concepts that it considers need to be made more explicit, these being:

1. least-cost – a market can be competitive, but not least-cost if regulatory barriers are present that prevent the least-cost expansion path from being discovered; and
2. a stable investment climate - the energy strategy should foster a stable investment climate. Such a climate is more conducive to long-life capital intensive developments, and will lower basis risk thereby encouraging the right investments to be made (by both the supply and demand-sides) at the right time.

The 1st point could, for example, be inserted in the first bullet point as ... "least-cost, competitively priced energy and increasing", while the 2nd point could be inserted in the second sentence after "... environmentally-responsible development, within a stable investment climate and efficient....."

Actions Consistent with the Strategic Direction set in the Goal

Some have already criticised the strategies for not being clearer about how its goal is to be delivered. This criticism misses the point. While it is more than appropriate that the strategies outline the actions consistent with the strategic direction that have already been taken, each proposed future action needs to be assessed on its own merits in a manner that demonstrates it delivers a net public benefit to New Zealand as a whole.

This high-level approach is to be applauded but places a high burden on officials to be thorough in their subsequent analysis of each proposed future action. Sometimes the cost of dealing with a market failure can exceed the cost of the failure (this is known as Government failure).² Just because a particular proposal is targeted at delivering a certain outcome does not mean that it is a sound intervention. Interventions need to address a clearly identified market failure such as the failure of competition, the provision of public goods, incomplete markets, or information failures. A well constructed regulatory impact statement must form a part of this analysis.

A market failure occurs where the market mechanism fails to allocate resources efficiently. Types of market failure include:

1. social inefficiency – where external costs and benefits are not accounted for;
2. allocative inefficiency – where society does not make products and services at minimum cost that are wanted by consumers;
3. technical inefficiency – where the production of products and services is not done using the minimum amount of resources; or
4. productive inefficiency – where the production of products and services is not done at lowest factor cost.

The focus of the strategies on, amongst other things, the provision of information, the reliance on the emissions trading scheme to internalise the environmental cost of carbon, and competition to deliver secure and affordable energy is consistent with addressing market failures.

A view of a desirable future is also a critical component in the overall strategic framework. Helpfully, these views have been set out on pages four and five of the NZES.

BusinessNZ considers that these pages contain useful information as such future-orientated statements both indicate the origins of the identification of potential market failures, as well as the ‘touchstones’ or guiding principles against which regulatory solutions can be assessed. In addition to addressing market failures, interventions must also be aligned to a view of the future. This feedback loop enables the resilience of the interventions to be tested and provides guidance to the detail of the policy settings.

While BusinessNZ welcomes these statements of a desirable long-term future, they seem slightly disconnected from the broader detail of the strategies. While largely presentational, BusinessNZ considers that the information contained on pages four and five of the draft NZES would sit more comfortably *after* the overarching goal on page six. The expectation is,

² Sources of government failure include market distortions, welfare impacts, disincentive effects, short-termism, electoral pressure, impact on environment, regulatory capture and imperfect knowledge.

presumably, that attainment of the goal will simultaneously contribute towards attainment of the desirable long-term futures outlined. These statements of desirable futures are also set at a lower level of specificity than the overarching goal for the entire sector.

And in order to more clearly demonstrate the alignment of the proposed actions contained in the NZES, it would also be useful to see the twelve areas of focus aligned against the statements of desirable long-term futures.

Combined, the approach contained in the strategies is considered to be more likely than not to provide a style of regulation that is stable and conducive to timely investment in essential long-lived energy infrastructure. However, these benefits will only be secured in combination with strategies that are durable. See below for more on this point.

Addressing Trade-offs Between Competing Policy Objectives

The supporting commentary makes it clear that all the players must pay attention to the inherent tensions and trade-offs needed to deliver the energy policy and that is where the greatest non-market risks remain. There are many areas where energy policy settings overlap with and sometimes contribute towards other policy objectives. While climate change policy is the most obvious, other areas such as social welfare policy (e.g. affordability) and environmental policy (e.g. resource consenting) are others.

Targeting policy solutions to deliver on competing objectives is highly problematic. Recent changes made by the Government to the electricity market regulator's objective statement appear to reflect this concern. The desire to avoid inherent tensions and trade-offs in delivering energy policy are also explicitly recognised in the NZES, particularly in the goal.

If the primary goal for the energy sector is the least-cost (including environmental costs) delivery of reliable energy to end consumers, policy makers must ask what interventions are required to achieve it and in doing so, deliver a net public benefit, or overall welfare improvement for all New Zealanders.

The outcome of such an assessment might impinge negatively on other policy objectives, such as climate change objectives. This does not mean that the initial policy response is inappropriate, or that achieving climate change objectives is less important. Instead it means that incremental changes to energy market policy settings that are targeted at other priority policy objectives must be able to stand or fall on their own merits. In other words, they must be assessed – on a case-by-case basis – on the extent to which the balance between the detriments to the energy sector objective is outweighed by benefits of achieving the other objective. Where the benefit outweighs the detriment, the trade-off should be made in a way that continues to allow competitive pressures to be brought to bear.

In practical terms this might be the result of a simultaneous desktop analysis but conceptually the exercises are distinct and transparency of the analysis is important to ensure that a new least-cost path can be found.

Comments on the NZEECS

BusinessNZ welcomes the more measured approach to energy efficiency contained in the draft New Zealand Energy Efficiency and Conservation Strategy (the 'NZEECS'). BusinessNZ has a strong interest in energy efficiency issues on behalf of its members. It strongly supports energy efficiency and the role it plays in meeting New Zealand's overall energy demand needs.³ This is driven by a desire to ensure that from a 'New Zealand-inc' perspective that policy proposals enhance society's overall well-being by:

1. making businesses more productive. That the practical implementation of any solutions are, as a whole, cost effective and do not impose any undue or unexpected transaction costs on third parties;
2. providing the appropriate incentives for innovation in the production, use and consumption of energy; and
3. being efficient solutions, and ultimately in the best long-term interests of end-consumers. BusinessNZ wishes to ensure that any solutions result in enhancements for businesses and consumers and meet their risk profile needs.

However, BusinessNZ does not believe that justification for Government intervention in the energy market to promote energy-efficient products has always been as robust as it should have been. As a result, BusinessNZ is less sanguine about the efficacy of energy efficiency targets, particularly aggressive absolute reduction targets that require significant tranches of Government subsidies to be achieved.

In a commercial environment, energy efficiency drives investment where cost can be avoided. Businesses and consumers will react to rising energy prices. Attempting to increase the level of energy efficiency by regulation may not be optimal.

The attainment of aggressive energy efficiency targets also have a cost that must be borne by either taxpayers, businesses or consumers. Previous use of analytical devices such as an artificially low discount rate simply served to lower the intervention threshold and justify a cost that would not have otherwise been incurred.

³ Where energy efficiency means a change to energy use that results in an increase in net-benefits per unit of energy. In other words, reducing energy consumption by investing in equipment or changing behaviour where the cost of making the reduction (that is, the investment or the cost of the behavioural change) is less than the cost of the energy that would otherwise have been used.

In this regard, BusinessNZ was pleased to see the following bolded statement:

“Decisions on proposed initiatives will be based on a full assessment of costs and benefits.”⁴

This is to be welcomed, as is the emphasis on improved access to information, and capability as the levers available to facilitate enhancements in energy intensity. In adopting this approach, the new NZEECS recognises that attempting to decrease the level of energy intensity per \$/GDP by regulatory fiat (i.e. by setting mandatory targets) is unlikely to encourage an optimal response.

While ‘doing-nothing’ is not necessarily the right approach, neither is intervening on some vague expectation that society as a whole will be better-off. BusinessNZ approaches this issue with two principles in mind, these being that:

1. any policy intervention must be targeted at a clear market failure and deliver a clear net public benefit. The case must be made that a socially sub-optimal level of energy efficiency is being achieved by private means; and
2. the cost of the intervention aimed at delivering the efficiency gain must not be more than the benefit from the gain itself.

Neither of these principles are particularly novel. However, increasingly, the pursuit of energy efficiency has become an end itself, rather than a means to an end and this has occurred at the risk of losing sight of the bigger-picture – that is, why energy efficiency is important, particularly to the business community. For example, it is apparently simply assumed that it is important and appropriate that New Zealand align with the OECD average for energy intensity.

The Rationale for Intervening

Though some energy-efficient products appear to be economically ‘good buys’, many consumers and businesses continue not to invest in them. This may confuse some observers, who assume that this is caused by some type of market failure or worse, unwillingness to become more energy efficient. This is not the case. The rejection of these products by some market participants is a reflection of their differing trade-offs between energy-efficient products and other goods.

⁴ Draft New Zealand Energy Strategy – Developing our Energy Potential (and the Draft New Zealand Energy Efficiency and Conservation Strategy), page 20.

Greater account needs to be taken of well known features of the energy efficiency “debate”, such as:

1. investment decisions about purchasing energy-efficient goods incur opportunity costs, and
2. there are non-monetary cost components of investments that can exceed the investment price of the asset. These include transaction costs, measurement and evaluation costs, the risks and uncertainties associated with the investment, and its quality of service.

Other observers sometimes refer to factors affecting investment decisions as ‘market barriers’. These facets are no more barriers than failures, but simply a reflection of how markets work. Businesses and individuals often have imperfect information, different risk profiles and different preferences (reflected, for example, in high discount rates).

This is true in other markets for example, for MP3 players and groceries, as well as those for energy-efficient products. It is precisely for this reason that good public policy practice is to intervene only when public welfare can be unambiguously enhanced.

Subsidising holidays would reduce stress-related illnesses and subsidising vegetables would reduce heart disease so that health expenditure could be deferred and the potential benefits that seem to be ignored could be realised. But such proposals are not being made because policy makers recognise that the relevant benefits are largely private benefits. The same argument applies to the deferral of electricity generation expenditure.⁵

The market failure analysis outlined above needs to underpin any case for Government action to encourage energy efficiency. The evidence of ‘problems’ may simply be symptoms of an energy efficiency market yet to reach maturity, rather than actual problems demonstrative of the need for additional regulatory intervention.

There is little dispute about the distortions that misdirected interventions create in the market. Indeed these distortions are sometimes referred to as a positive feature of the policies, designed to combat the aforementioned “barriers” in the marketplace. Poorly targeted subsidies are one of the more distortionary methods that can be employed to influence the market – they create artificial gains and losses to consumers and producers, without necessarily creating any public good.

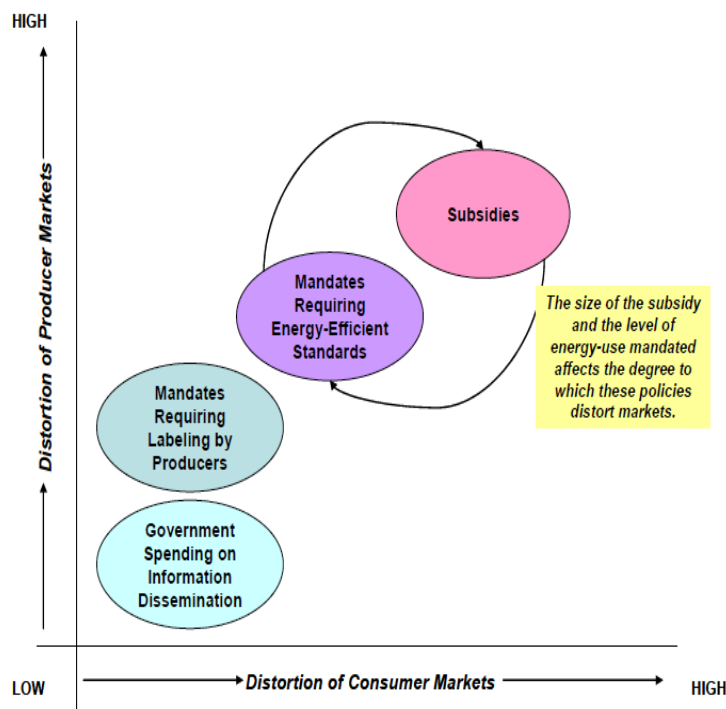
As shown in the diagram below, the least destructive methods are mandatory (or voluntary) labelling for products which use energy and government spending on information dissemination (including access to information from

⁵ Put another way, electricity is not priced below long-run marginal cost (‘LRMC’) so there is no allocative inefficiency to fix.

energy service companies). Therefore, BusinessNZ agrees with the statement in the NZEECS that says:

“With better access to credible information about their energy use and the options available to them, businesses will be able to make smarter energy decisions.”

Selected Methods of Government Intervention by their Potential Market Impact



One category that is not included because of the range of potential outcomes is that of voluntary agreements. These agreements are between businesses and governments and generally set targets for customer energy-efficiency (in the case of electricity companies) or energy-use (in the case of industrial concerns). The agreement about targets is sometimes accompanied by a *quid pro quo* on other matters of concern to the business.

While there is little empirical evidence of the link between decreasing energy intensity in these economies and voluntary agreements, such programs have previously been widely adopted in many jurisdictions, such as:

1. Australia - Energy Smart Business Program;
2. Canada - Industry Program for Energy Conservation (CIPEC);
3. Japan - Keidanren Voluntary Action Plan on the Environment;
4. Netherlands - Long-Term Agreements on Energy Efficiency; and

5. The United Kingdom - Energy Efficiency Best Practice Program, Make a Corporate Commitment Campaign (MCCC).⁶

In light of these examples, and their potential ability to deliver least-cost energy efficiency benefits, BusinessNZ believes that the Ministry of Economic Development and the Energy Efficiency and Conservation Authority must thoroughly and explicitly contemplate other methods of intervention if it is decided that the government needs to mediate between players in the energy market. Therefore BusinessNZ welcomes the news that a review of Energy Efficiency and Conservation Authority's existing business programmes is underway and we look forward to participating actively in it.

Energy Efficiency and Conservation Authority and the NZETS

Of particular interest to BusinessNZ is a role for the Energy Efficiency and Conservation Authority in assisting businesses mitigate and adapt to the new cost of carbon and its impact on businesses profitability. New Zealand finds itself in a position of early adopter of an economy-wide carbon price. Regardless of the reasons behind this, we now need to seize the strategic initiative this position affords us by moving New Zealand businesses away from business-as-usual into a lower carbon intensive future.

The broadening of the emissions trading scheme on 1 July 2010 means that all businesses will now face a higher cost of energy. Many of these are small-to-medium sized entities who compete in international markets and will be unable to recoup these costs. As such, the reality for such businesses is that the effect of the scheme is mostly stick and not carrot.

But these businesses face real difficulties in their efforts to transition to 2012 and beyond. These relate to the absence of information about the scheme and how existing firms can better understand, adapt and mitigate carbon emissions, through to barriers that impede the uptake of low emissions technologies and processes. Many businesses are, for example, current technology-dependent and unable to easily transition to more carbon and energy efficient technology.

A well designed programme carefully targeted at addressing these issues could form the centre-piece of demonstrating a more integrated, cohesive and strategic cross-Government approach to addressing the challenges of shifting the economy towards a lower carbon efficient future.

A Durable Strategy?

This question arises from the markedly different approaches taken to the 2007 strategies and the current draft strategies. While strongly supporting the overall direction and intent of the new draft strategies, BusinessNZ has

⁶ Worrell, Ernst and Price, Lynn, "Barriers and Opportunities: A review of selected successful energy-efficiency policies", 2003 and World Energy Council, "Energy Efficiency: A Worldwide Review", 2004.

concerns about their durability and what this means for the investment environment and the least cost delivery of reliable energy to end-consumers.

In this regard, parallels can be drawn between the work underway on the infrastructure plan and the NZES. Businesses have signaled to the Government that in order for the infrastructure plan to have any long-term value for businesses it needs to be durable in the long-term. This is as true for the energy strategies.

As noted above, criticisms have, of course, already been leveled at the NZES as not being clear enough about how its goals will be achieved. Should future governments move away from the current understanding as to the tools available to deliver good energy sector outcomes and how they will, even in broad terms, be applied this will result in increasing basis risk (as the value of an investment made under one approach risks being expropriated under another approach).

The new thermal baseload generation ban is a case in point. This policy was predicated on the view that new renewable forms of generation (geothermal and wind) were cheaper than new thermal baseload generation. This implied officials second-guessing market outcomes with all of the risks attendant on them doing so. Specifically, developers of new renewable generation faced the risk of new thermal baseload generation actually being cheaper, and on the inevitable removal of the ban, being faced with assets that were under-utilised and no longer earning a profitable rate of return. BusinessNZ considers that had the thermal ban endured for longer than it did, developers of new renewable generation (or more likely, their financiers) would have been reluctant to face this risk, resulting in worsening, not improving security margins.

Therefore, the Government has an important role to play in ensuring that the policy settings which impact on the energy sector support long-life investments which are consistent with the desirable long-term future. If the strategies are to be useful addition to the overall public policy landscape, this role must be to reduce operating uncertainty and lower basis risk. To do this, it must deliver a consistent and coherent policy framework for business. There are three aspects to this:

1. it should help inform investment decisions by both developers and users. While judgement will inevitably be required (the strategy should contribute to reducing operational risk, but can never eliminate it), they will look for the removal of uncertainty that arises from such factors as regulatory opportunism and the absence of policy stability;
2. it should allow businesses (both energy users and investors) to marshal their international and domestic resources more efficiently; and
3. it needs to be pitched at a sufficiently high level so as independent as possible from politics and the political cycle. It is recognised that governments will always make political commitments to the electorate

and that the nature of these commitments may vary markedly between different Governments. The intention is not to try to constrain this. However, independence from day-to-day politics would:

- a. provide a greater possibility of durability or longevity. In other words, that the framework within which the specific details occur would be more robust as to changes of Government, rather than driven by it. Businesses would therefore be more likely to act upon it; and
- b. assist with achieving a bipartisan approach. A bipartisan approach is desirable given the long-life nature of the assets involved. The benefits of a robust and durable energy strategy are as real as, for example, independent monetary policy and bipartisan trade and foreign policy.

Ultimately, success of the current approach to the new energy strategy will be dictated by the extent to which the Government can quickly embed its approach to the energy sector into practical outcomes.

Conclusion

There is no such thing as a free lunch. Market participants will react to the incentives they face. Where these signals or incentives diverge from the delivery of energy at least cost (including environmental costs), someone in the market – most likely end consumers – will pay. This erodes consumer confidence in the ability of the energy market to deliver competitive outcomes.

BusinessNZ, therefore, welcomes the draft strategies. They signal a measured, more proportionate and balanced response to delivering reliable energy at least cost (including environmental costs) to consumers both big and small. The signal of flexibility and choice embedded in the strategies should help provide the energy markets with a clearer direction, within which the participants can compete to supply at least cost (subject to a cost of carbon), reduce emissions, advance renewables, and continue to provide security of supply.

BusinessNZ looks forward to working with both the Ministry of Economic Development and the Energy Efficiency and Conservation Authority in the finalisation of these strategies.

Yours sincerely



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APPENDIX ONE: ABOUT BUSINESSNZ

Encompassing four regional business organisations (Employers' & Manufacturers' Association (Northern), Employers' Central Chamber of Commerce, Canterbury Employers' Chamber of Commerce, and the Otago-Southland Employers' Association), BusinessNZ is New Zealand's largest business advocacy body. Together with its 58 strong Major Companies Group, and the 70-member Affiliated Industries Group (AIG), which comprises most of New Zealand's national industry associations, BusinessNZ is able to tap into the views of over 76,000 employers and businesses, ranging from the smallest to the largest and reflecting the make-up of the New Zealand economy.

In addition to advocacy on behalf of enterprise, BusinessNZ contributes to Governmental and tripartite working parties and international bodies including the ILO, the International Organisation of Employers and the Business and Industry Advisory Council to the OECD.

BusinessNZ's key goal is the implementation of policies that would see New Zealand retain a first world national income and regain a place in the top ten of the OECD (a high comparative OECD growth ranking is the most robust indicator of a country's ability to deliver quality health, education, superannuation and other social services). It is widely acknowledged that consistent, sustainable growth well in excess of 4% per capita per year would be required to achieve this goal in the medium term.