

A balanced approach to meeting future energy demand

New Zealand is a small dynamic country located at some distance from international markets, but we are confronted by the same challenges of energy security and climate change as the rest of the world.

The best means of meeting these challenges is to ensure energy markets are effective and efficient and that the cost of greenhouse gas emissions is factored in. This approach will encourage efficient energy use, the development of resources where it is economic to do so and the minimisation of environmental impacts of energy supply and use.

New Zealand has sought to apply these principles both domestically and, via its participation in various international organisations, on the world stage.

Domestic efforts

Our domestic energy policy is articulated in the New Zealand Energy Strategy 2011-2021¹. The goal is for New Zealand to make the most of its energy potential through the environmentally responsible development and efficient use of the country's diverse energy resources.

The strategy focuses on four priorities to achieve this goal – diverse resource development, environmental responsibility, efficient use of energy, and secure and affordable energy.

Diverse resource development

Diverse resource development encompasses the development of both renewable and non-renewable energy sources. The Government has a target for 90 percent of electricity generation to be from renewable sources by 2025, providing this does not affect security of supply. In 2010, renewables contributed to 74 percent of electricity generation.

Commercial enterprises will ultimately be best placed to identify the lowest cost generation mix, with the Government's role limited to ensuring that there are no undue barriers to invest in generation of any type and that the environmental effects are priced in wherever possible. New Zealand's emissions trading scheme is the primary economic motivator for generators to move to a lower emissions future.

The Government is also keen to make New Zealand a highly attractive global destination for petroleum exploration and production investment. Most of New Zealand's territory is yet to be explored, and the potential for further development of petroleum resources is significant.

¹ <http://www.med.govt.nz/sectors-industries/energy/pdf-docs-library/nz-energy-strategy-lr.pdf>.

New Zealand is already seen as a stable and pro-investment environment. An important step to further attract investors is to ensure regulatory settings are world-class. We are in the process of reviewing our regulatory settings to ensure our upstream regulatory settings meet this objective.

A new approach to the allocation of petroleum exploration permits has now been implemented. The new approach is based on the regular (annual), predictable, managed tenders of exploration blocks (“block offers”), which have previously been carried out on a more ad hoc basis. This approach draws more closely on publicly available seismic information and is better suited to foster competitive work programme bids from suitable investors.

We have had some success in attracting new capable and experienced operators such as US-based Anadarko into the Canterbury and Taranaki basins, Brazilian company Petrobras in the Raukumara Basin, and US-based Apache into the East Coast of the North Island. In addition, operators with an existing presence in New Zealand have been expanding into new basins such as Austrian-based OMV and Shell in the Great South Basin.

Environmental responsibility

The New Zealand emissions trading scheme is the primary means to reduce emissions in the energy sector, and all other sectors of the economy. The Government has set a target for a 50 percent reduction in New Zealand’s greenhouse gas emissions from 1990 levels by 2050. New Zealand is willing to commit to reducing greenhouse gas emissions by between 10 percent and 20 percent below 1990 levels by 2020, if there is a comprehensive global agreement and certain conditions are met.

Energy efficiency

Energy efficiency measures help reduce costs, make houses more comfortable and reduce greenhouse gas emissions. The Government has invested over NZ\$180 million since July 2009 in an energy efficiency programme to retrofit homes with new insulation and/or clean heating. More than 150,000 homes have benefited from the scheme so far.

Secure and affordable energy

Secure and affordable energy is best achieved through competitive markets. Competition in energy supply provides choice to consumers, places downward pressure on prices and incentivises efficient investment.

Where competition in energy supply is not possible due to natural monopolies, particularly electricity networks and gas pipelines, targeted regulation is applied. Elsewhere, competition between market players is encouraged and fostered, with Government retaining a general oversight role. This includes an understanding of

the overall resilience of New Zealand's networks and other infrastructure. Recent under-investment in the national electricity grid is now being addressed and Transpower, the national transmission line owner and operator, is planning and undertaking significant investment, including projects such as the upgrade of the inter-island link and a major new line into Auckland.

New Zealand is a founding member of the International Energy Agency. One of the obligations of membership is that New Zealand must hold 90 days of oil reserve supply.

International efforts

Reducing fossil fuel subsidies is one area which offers immediate benefits in terms of mitigating energy demand, reducing carbon dioxide emissions and providing some relief for stretched public budgets.

At the Copenhagen climate summit in 2009, developed countries agreed to US\$30 billion in funding during 2010-2012 to combat climate change. That same year, more than US\$400 billion was spent globally on subsidies for fossil fuels, a key source of emissions contributing to global warming.

In other words, at the same time as countries were mobilising resources to address climate change, they were spending more than 10 times that amount on subsidising production and consumption of carbon. Even now, as countries are beginning to put in place mechanisms to price carbon, many are still subsidising carbon. Isn't the polluter supposed to pay, rather than be paid?

Production subsidies, such as subsidies for coal production, inhibit innovation and the development of cleaner technologies, and they reduce incentives to produce and use fossil fuels more efficiently. This occurs amid growing global concern about energy security.

Consumption subsidies which intend to lower the price of fossil fuels are no better. For example, subsidies for transport fuels are seldom effective in assisting the people they are designed to help. The essential energy needs of vulnerable groups must be met. But there are better ways to do this than through universal fossil fuel consumption subsidies which most often benefit richer people more, because they use more fossil fuels.

Fortunately, the world is beginning to grasp the incoherence of fossil fuel subsidies. In 2009 and again in 2010, G20 and APEC leaders signalled their political commitment to reform and elimination of inefficient fossil fuel subsidies. This is important and welcome leadership from the world's largest economies.

To support these reform initiatives, a group of non-G20 countries has emerged including Costa Rica, Denmark, Ethiopia, Finland, New Zealand, Norway, Sweden and Switzerland. Known as the Friends of Fossil Fuel Subsidy Reform, this group is

encouraging G20 and APEC countries to implement their political commitments as soon as possible, and for others to follow their example.

The global climate will be a clear winner. IEA research indicates that removing subsidies could reduce global carbon dioxide emissions by up to 5.8% by 2035.

In addition, reducing fossil fuel subsidies would free up funding for other purposes, for example to help mitigate and adapt to the effects of climate change. According to the 2010 Report of the UN Secretary General's High-level Advisory Group on Climate Change Financing, redirection of the money spent on fossil fuel subsidies could potentially finance up to \$8 billion dollars a year of mitigation and adaptation activities².

There would also be good news on the energy security front. Universal phase-out of fossil fuel subsidies by 2020 would cut global primary energy demand in 2035 by 5%³. A cut in demand of this magnitude would help reduce the risk of future oil shocks and smooth out energy price volatility.

The reform of fossil fuel subsidies deserves to be much higher up the agendas of both climate change policy and general economic reform processes. Successful phasing-out of subsidies should start immediately, with the elimination of subsidies that are obviously inefficient and cause the most damage to state budgets and the climate. Transition measures to support subsidies phase-out may need to be implemented in parallel.

We welcome the OECD's establishment of an inventory of support to fossil fuels in OECD countries. The OECD inventory increases transparency of the scope and range of support to fossil fuels and its publication on a regular basis will benefit international efforts to reform fossil fuel subsidies and support green growth.

Conclusion

As a small island nation disconnected from international energy infrastructure, New Zealand's strategy for meeting future energy demand focuses on the balanced development of all of our resources, and ensuring that domestic energy markets operate efficiently to incentivise investment. This market-based approach extends to New Zealand's efforts in the global context to encourage the reduction of inefficient fossil fuel subsidies that encourage greenhouse gas emissions and discourage the development of new energy resources and technologies.

² UN, Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing, 5 November 2010, p. 6.

³ IEA 2011 World Energy Outlook

Ensuring that global energy markets operate efficiently while taking account of environmental effects is, in our view, the most effective way to ensure global energy security of supply and the reduction of environmental harm.