

28<sup>th</sup> January 2011

Budget Policy Division  
Department of the Treasury  
Langton Crescent  
PARKES ACT 2600

Dear Treasurer,

The Clean Energy Council (CEC) is the peak body representing Australia's renewable energy and energy efficiency industries. Its priorities are to:

- create the optimal conditions in Australia to stimulate investment in the development and deployment of world's best clean energy technologies;
- develop effective legislation and regulation to reduce energy demand and improve its efficient use; and
- work to reduce costs and remove all other barriers to accessing clean energy.

The CEC advocates the development of policies on behalf of its members at federal and state government levels and promotes understanding of the industry and its potential through channels such as industry events, forums, conferences, newsletters and publications.

The clean energy industry includes generation of electricity using wind, hydro, solar, biomass, geothermal and ocean energy as well as the emerging technologies and service providers in the energy efficiency sector, which includes solar hot water and cogeneration.

The CEC welcomes the opportunity to provide a submission to the 2011-12 Budget process.

### **The importance of the clean energy industry to Australia's future**

The single largest factor affecting clean energy development and deployment within Australia remains policy uncertainty. While the Australian Parliament last year reformed Australia's Renewable Energy Target (RET), which will help to deploy over \$20 billion in clean energy investment and create more than 55,000 direct jobs, there remains a large amount of work to develop appropriate policy settings and establish a long-term sustainable clean energy industry in Australia.

While Governments overseas, including major trading partners, are pursuing or have established a price on carbon, Australia continues to lag behind the rest of the world, with no clear path to meeting our international obligations and bipartisan supported emissions reduction targets.

The Pew Environment Group found in 2009 that investment in clean energy remained strong with countries such as China, the US and Brazil attracting \$34.6 billion, \$11.8 billion and \$7.4 billion in investment respectively. Australia's investment in clean energy during the same period was \$1 billion.

The delay in supporting this investment is to the detriment of Australia being able to meet our international obligations but also to the detriment of the jobs, investment and innovation that would flourish within our borders with the appropriate Government leadership and bipartisan support.

The Clean Energy Council therefore supports four key planks of policy reform, consistent with approaches taken overseas to reduce greenhouse emissions:

- A price on carbon;
- support for the rapid deployment of proven clean energy generation;
- acceleration of the development of new and emerging clean technologies; and
- encouragement of more efficient use of energy.

The reality is that the transition to a cleaner economy requires investment, just as any other pieces of infrastructure delivering a public benefit. The public benefit associated with investment in clean energy lies in the avoided costs of the impacts of climate change and the innovation and technological advancements delivering cheaper clean energy generation.

The CEC urges the Federal Government to seriously consider these long-term benefits in the 2010/2011 budget process.

The CEC makes the following general comments on allocations of funds for renewable energy:

- Funds for clean energy are currently unfocussed and dispersed out into smaller funds cutting across a range of portfolios. These funds have to date also not been allocated strategically.
- While there have been billions of dollars announced for renewable energy projects a very small proportion of this has actually been spent. It is critical that funds make their way into on-ground projects to deliver certainty to the investment community. The CEC recommends the Government closely audit unspent funds from the Clean Energy Initiative in 09/10 and for this to be directed back into clean energy programs which will actually deliver on-ground projects swiftly in the 10/11 budget.
- Funds to date have not been allocated accordingly to a clear framework or plan for the energy industry. The absence of such a commitment does not provide the industry or investment community with clarity about the Government's intentions.

The CEC strongly supports the role of ACRE in the development and advice to the Government on effective policy support for renewable energy. The CEC would also support ACRE's role being extended to provide advice to:

- Ministerial Council on Energy
- Minister for Energy
- Minister for Climate Change & Energy Efficiency
- Australian Energy Market Commission, particularly in relation to transmission to ensure the objective of renewable energy project deployment is prioritised in reviews
- Climate Change Committee in relation to the establishment of a carbon price and the re-investment of revenue into clean energy generation technologies
- Council of Australian Governments

The CEC also notes that on the day of this submission being lodged the Government announced further cuts to renewable energy and energy efficiency projects amounting to over \$1 billion.

The CEC does not support the Government's decision to cut funds to an industry which will fundamentally mitigate further climate-related disasters in the future. Better targeted, researched and executed schemes developed in partnership with industry need to be delivered as soon as possible to set Australia on the path to meeting its emissions reductions targets and to build a cleaner economy.

### **Budget Initiatives:**

#### **1. Allocation of returns from a carbon price into clean energy investment**

The transition to a decarbonised economy requires a coordinated strategy that constrains greenhouse gas emissions, encourages investment in new energy infrastructure and accelerates development of clean energy technologies.

The implementation of an emissions trading scheme imposes the constraint on emissions. The CEC supports the rapid introduction of such a scheme. Specifically, some of the revenues from the scheme should be used to help immunise lower income households from higher energy costs and to be invested in accelerated development and investment in clean energy technologies.

Whilst acknowledging that in the period up to 2013 all the expected revenues from the auction of permits have been allocated, beyond that the CEC believes a portion of the revenue from the scheme should be dedicated to ongoing clean energy technology development. This will ensure a sustainable revenue stream for the development of early stage clean energy technology, and subsequently support a growing portfolio of clean energy technologies that can achieve future abatement targets at lower costs. The long term impact will be cheaper carbon abatement.

Revenue should also be prioritised toward easing the cost to unduly affected low income households, including by promoting energy efficiency and other measures which can further reduce the impact of a carbon price on these householders.

### **Recommendation:**

The CEC recommends that a significant proportion of the proceeds from the auction of CPRS permits are allocated to both lessen the impact of rising energy costs to Australian households and accelerate the development and deployment of low carbon technologies.

## 2. Clean Energy Growth Fund

In 2009 the Australian Government announced the Building Australia Fund (BAF) to be managed by Infrastructure Australia.

The BAF evaluation criteria by which projects are assessed under the *Nation-building Funds Act 2008* includes the criteria that the projects should assist in “developing Australia’s cities or regions; and/or enhancing international competitiveness; and/or improving Australia’s ability to address climate change and adaptation effects”.

Clean energy infrastructure, including grid upgrades and new generation assets are well captured by the intention of the fund, yet in 2009 not a single renewable energy project was approved.

While the CEC notes the Government’s commitment to budget neutrality it re-iterates the need for the Government to continue driving investment into infrastructure, particularly that which delivers sustainable long-term economic growth and increased productivity. The CEC feels the same principle should apply when considering the allocation of disaster relief funds to Queensland. The challenge is substantial, but there are opportunities for smart and effective re-building.

The clean energy sector is a key example of investment delivering a long term benefit to the country, putting Australia on the path to a more sustainable future.

### **Recommendation:**

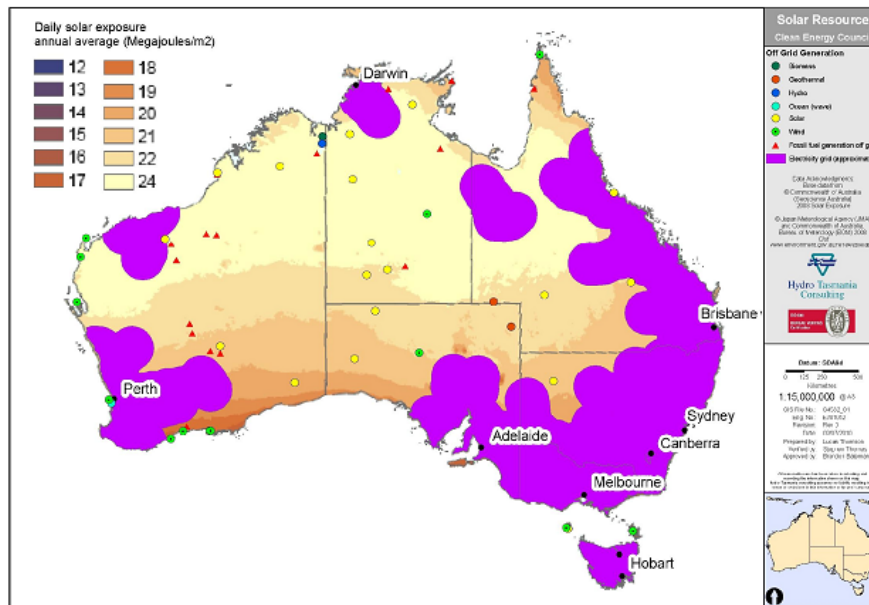
That the Government dedicate 10% of the Building Australia Fund to clean energy and energy efficiency projects. This fund could be developed in co-ordination with leading superannuation funds.

## 3. Off-grid renewable energy

The CEC strongly supports the development of policies and programs to ensure the delivery and development of hybrid and off-grid projects. In particular off-grid locations coupled with large users such as mines, remote communities and agricultural stations are facing rising costs of diesel and transportation of fuel. Renewable energy provides these users with an alternative power source without relying on such global fuel price increases or new grid connection costs.

Off grid systems can often be deployed to the following markets: Households, Pastoral Stations, Communities and Indigenous Communities, Tourist Facilities, Small Industrial projects, Pumping and Irrigation, Mine Sites and Mini-grids or Island communities.

Regions of Australia that would benefit from off-grid renewable energy program support can be seen in the below diagram. The purple area is that which is serviced by the electricity grid, making the larger region outside of this applicable for off-grid projects.



Entura Consulting (2010) – Improving off-grid renewable energy opportunities

A recent report completed for the Clean Energy Council by Entura Consulting found there are three major factors affecting the economic viability of off-grid systems. These are:

- Diesel Generation Costs
- Grid Connection Costs
- Renewable Energy Costs

Diesel generation is the most common form of energy generation in off-grid locations. The cost per unit of diesel is on the rise. Entura Consulting assumed a diesel price of \$1.40 per litre, increasing at a rate of 2.5% p.a. These are considered to be reasonable assumptions, and in fact, it is possible that the price will increase at a faster rate and that the price may not remain this low in the short to medium term. There are a wide range of other impediments that mean cost effective renewable energy is not being adopted.

There are currently a range of barriers to uptake for off-grid renewable energy. Such barriers include:

- **Cultural barriers:** In many organisations assessing renewable energy projects is simply more complex, new and the organisation may have to make upgrades and expansion quickly without having the time to set up a new project assessment process.
- **Energy supply security:** Large users like mining corporations require a high level of supply security. The intermittent nature of renewable energy means that hybrid systems and storage also need to play a role.
- **Uncertainty around price triggers:** Both the uncertainty around REC prices and the introduction of a carbon price contribute to investor uncertainty and project deployment.

- **Diesel excise:** The level of Federal Government subsidy applied to diesel fuels also impacts the costs comparison of alternative fuels.
- **Split incentives:** Community service obligations on distributors

Many of these barriers relate to financial challenges with clean energy deployment. The kinds of support mechanisms Governments can use to address this and support off grid projects include:

- Grant Programs such as the previous RPPGP
- Taxation incentives for off-grid renewable energy projects
- Loans for renewable energy projects

The Federal Government could provide grant funding similar to that provided by the RPPGP that was closed in 2009. While this scheme was imperfect, there was considerable off grids renewable neegy deployed under this program and it consequently had strong industry support.If the Government were to provide direct grant funding under application, the fund would need to provide long term certainty and be adjusted to cater for both small scale and large scale projects.

Typically the support required in terms of co-contribution from the Government for any off-grid grant program would need to be a 1:1 ratio with private investment.

The administration of such a program should ensure that project application timeframes allow sufficient time for developers to deliver applications for the optimal projects to be progressed through the funding rounds. It is often the case that larger, integrated projects which could potentially deliver greater returns require longer planning timeframes.

#### **Recommendation:**

The CEC supports the establishment of a grant program for off-grid renewable energy projects. The program would provide a step towards building more sustainable communities in remote and rural Australia.

The CEC would support \$200 million over four years being allocated to this initiative.

#### **4. Tax incentives for clean energy**

The provision of tax incentives to support research and development is an important way Governments can drive research and development into clean technologies. While the Federal Government currently operates a research and development tax credit scheme, the scheme could be expanded to provide more coverage for the cleantech sector.

The current scheme restricts the availability of depreciation deductions on R&D assets, as an additional incentive the Federal Government could consider removing these restrictions. Increased eligibility for the scheme would also improve its effectiveness.

The draft report by SKM for the CEC on Bioenergy Barriers in Australia 2010 comments that ‘possible measures to compliment private sector investment include subsidies, grants, tax incentives or other incentive schemes to support a socially optimal level of research and development.’

In May 2010 as part of the Resources Super Profits Tax policy the Australian Government announced a resource exploration rebate (RER). As announced at the time, such a rebate would *‘significantly benefit small, pre-profit exploration companies. Small exploration companies currently do not get a tax benefit from their deductible exploration expenses until they become profitable. Compared to larger, more diversified companies, these smaller companies face a competitive disadvantage because losses they generate from exploration often cannot be used to offset other taxable income.’*

This initiative was abandoned after the Government’s changes to the Minerals Tax reforms.

The CEC supports the Federal Government implementing a clean energy resource exploration grant program. The costs of resource assessment can provide a barrier to clean energy project developments, particularly in the geothermal sector.

#### **Recommendation:**

The CEC supports the removal of the restriction of the availability of depreciation deductions on clean energy R&D assets. Increased eligibility for the scheme would also improve its effectiveness.

The CEC supports the original scheme design for exploration rebates - companies could receive a refundable tax offset at the company tax rate for their exploration expenditure, eg: for a company in a tax loss position that spends \$1 million on exploration, providing an immediate cash benefit of \$300,000.

The CEC supports the Government allocating \$100 million annually to this initiative.

### **5. Emerging Renewables fund extension and delivery of on ground projects**

The Federal Government announced during the election campaign the establishment of a \$40 million Emerging Renewables Fund. The CEC supports the principle of this fund, however is concerned that it is insufficient to deliver the on-ground project delivery that the emerging technologies sector requires.

The support of clean technologies in early stage development is critical to driving down the costs of clean energy over time and potential capitalisation for Australia on a growing international clean energy marketplace.

Many emerging technologies often face a large upfront capital hurdle before progressing to market deployment where revenue subsidies can take effect.

The challenge for these companies lies in raising the upfront capital in an environment of minimal on ground project experience within Australia. This phase of development especially for large scale renewable energy projects makes it less likely for venture capital finance to provide support, given the relatively short turnaround time for returns expected by VC fund managers.

The most effective role for Governments to play in this phase of development is to support companies overcome the upfront capital hurdles and to delivery certainty relating to revenue subsidies available at the next phase of development.

Of critical importance to technologies in this phase of development is establishing on ground project experience within Australia. With this objective in mind, ACRE could focus its efforts on minimising timeframes for project delivery and in areas that can harness Australia's competitive advantage:

- our unique resources in geothermal and abundance of marine, biomass and solar resources provide a perfect test bed for pilot projects
- high quality research and University facilities and highly skilled workforce
- value capture from intellectual property and technological breakthroughs increase our export potential in a growing international marketplace

The Government's support should not be short-term focussed only on the delivery of the renewable energy target, but rather on the effective development of technologies that will play a key role in the energy mix out to 2050 and beyond.

#### **Recommendation:**

The CEC supports the extension of this fund to \$400 million over 4 years, with the funds being dispersed swiftly in the early years.

### **6. Energy Efficiency**

The Prime Minister's Task Group on Energy Efficiency recently presented its report to Government around key actions to improve energy efficiency within Australia.

A key recommendation of the report was to build 'an energy efficiency culture in Australia through a long-term, nationally integrated strategy.'

While the development of energy efficiency measures will be a core part of the Government's delivery of a carbon price and associated revenue allocations, the CEC supports this recommendation being pursued regardless of and separate to the establishment of an emissions trading scheme.

Effective behaviour change has delivered impressive results in emissions reductions and importantly reductions in household bills internationally. The CEC supports a national marketing campaign to educate the Australian community about the need to improve energy savings and to promote energy efficiency as a means of achieving this.

Effective communication should always be matched with appropriate supporting information and tools for consumers to give effect to the behaviour change.

Complementary policy measures that ensure the value of energy efficiency improvements are reflected in asset values like mandatory assessment policies should be fast-tracked.

Access to capital is vital to bring energy efficiency projects and products to market. In buildings, energy efficiency is often focused on a specific project, rather than being ongoing and providing a pipeline of projects. Capital support in the form of tax incentives, low interest loans, specific R& D funding and project funding for demonstration projects is required to bring energy efficiency technologies to the market.

Additionally the CEC would support mechanisms to deliver energy efficiency technologies that have been applied overseas including:

- Introducing a loading on existing depreciation rates for energy efficient assets; and
- Reducing the write off period for capital allowances by reducing or capping the effective lives of new and retrofitted energy efficiency investment.

#### **Recommendation:**

The Australian Government should implement effective strategies to address the challenges in accessing capital for the development and deployment of energy efficiency technologies through grants, specific R& D funding, tax incentives and low interest loans.

That the Australian Government supports a national marketing campaign to effectively communicate the benefits associated with actions taken around the household to improve energy efficiency and reduce household bills. This should be matched with a strategy to deliver to households the tools and information they need to give effect to this behaviour change. The Government should work closely with electricity retailers in the delivery of this strategy, given their existing relationship with the customer base.

That mandatory assessment programs are fast-tracked to ensure property values are able to properly capture the benefit of energy efficiency investments.

The CEC would support \$400 million being allocated to this initiative over the next four years.

#### **7. Transmission think tank and grid study**

Mature clean technologies are best supported by Government, firstly by way of policies reducing regulatory burdens and increasing project delivery certainty and secondly by delivering certainty in the form of a long term revenue subsidy.

Support to reduce regulatory burden and increase project certainty includes:

- facilitating grid connection of renewable energy projects, placing them on a level playing field with connection of traditional energy generation sources and incentivising

network service providers to take into account generation as well as demand in their planning

- reducing over burdensome planning and regulatory regimes
- increasing certainty in connection and planning timeframes

In supporting the deployment of mature renewable energy sources, access to the transmission and distribution grids must be addressed.

This has been recognised internationally, with the USA Department of Energy (**DoE**) working with the wind energy industry to forecast and plan the development of the grid in future years by 2030.

The DoE's National Renewable Energy Laboratory, which has undertaken a number of grid integration studies to model what is required for the transmission grid to successfully connect renewable energy.

**Recommendation:**

That the Australian Government establish a transmission think tank to commission studies and research in effectively advising on grid planning matters.

That the Australian Government through ACRE undertake a similar grid integration project to the DoE in Australia, in conjunction with National Electricity Market (**NEM**) participants' technology providers and the Australian Energy Market Operator (**AEMO**). Such a project will complement existing work conducted by AEMO but will provide further valuable information to market participants as well as policy makers.

If you would like more information about this submission please contact myself or Policy Manager Lauren Solomon on (02) 9929 4100.

Yours sincerely



Russell Marsh

Policy Director