Australian Institute of Architects

ACT Chapter

Response to Electricity Feed in Tariff Scheme

ACT Government
Department of the Environment, Climate Change, Energy & Water

SUBMISSION BY

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PURPOSE

- This submission is made by the Australian Institute of Architects (Institute) to the ***ACT Government Department of Environment, Climate Change, Energy & Water***
- This submission has been prepared with the assistance of the ***Peter Overton as a representative of the Institute's Sustainability Committee***
- At the time of this submission the ACT Chapter President of the Institute is ***Mr David Flannery***
- The contact at the ACT Chapter is Melanie Croaker

INFORMATION

Who is making this submission?

- The Australian Institute of Architects (the Institute) is an independent voluntary subscription-based member organisation with approximately 9,900 members, of which 6,070 are architect members. Members are bound by a Code of Conduct and Disciplinary Procedures.
- The Institute, incorporated in 1929, is one of the 96 member associations of the International Union of Architects (UIA) and is represented on the International Practice Commission.

Where does the Institute rank as a professional association?

At approximately 9,900 members, the Institute represents the largest group of non-engineer design professionals in Australia.

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Introduction & Overview

The Australian Institute of Architects (the Institute) has incorporated sustainability of the built environment into its charter since 1991 when the ESD objectives of the International Union of Architects was adopted as an Institute policy commitment.

The issues raised in this Options Paper are relevant to several of the current Institute Policies, namely:

- Housing Affordability Policy
- Urban Design Policy
- Sustainability Policy

The following comments do not attempt to address all the questions posed in the Options Paper for Feed-In-Tariff Scheme Expansion, but, rather, identify certain questions which have particular resonance for members of the Institute and the practice of architecture in the ACT. The key areas which will affect the on-going work of Institute members, and also represent subject areas where the Institute can most effectively comment are:

- Scheme structure – questions relating to caps on the scheme.
- How the scheme may be applied to existing building stock.
- Likely future effects on building design and brief development.
- Equity issues for the broader community.
- Government building procurement policy and briefing.

Building construction and infrastructure development are critical elements of the ACT economy. Because of the lack of industrial development in the ACT, a very high proportion of the total energy use and greenhouse gas emissions results from building operation and construction. Any measures which have the effect of lowering operational energy from buildings will have a relatively higher impact on the ACT emissions profile in comparison to the other states.

Further, as a city state possessed of a single level of government, the ACT is in a unique position to bring about legislative measures affecting built environment policy with relative ease, and can also act as a model for new types of legislation given its close proximity with the Federal Government and high visibility to the remainder of the Australian community.

The Institute would consider the evolution of low carbon development, through expansion of the Feed-In-Tariff scheme in the ACT, beneficial to both the local economy and a valuable example of leadership and reform for the broader national economy. It is entirely consistent with the aims expressed in the Institute's Sustainable Development Policy, which in part recommends government action to:

Where energy limits are not applicable, similarly encourage subsidy of energy efficiency improvements by allowing an energy retailer to structure pricing to recoup its subsidy by retaining resulting savings until 'break even' point.

And further:

Encourage an economy wide application of renewable energy, through strategies such as increasing the price of energy from non-renewable resources to reflect its true costs, and, initiating a legislative process to protect solar access rights and to expand renewable energy rebates.

On the first question raised in the options paper concerning structure and the use of caps, cross reference will be made to a response written by the John Grimes, the CEO of the Australian Solar Energy Society, which drew on recent discussions held with interested members of that organization.

With respect to the specific questions:

Question 1(page 11)

Do you believe there should be a cap on the Scheme if it is expanded? If so, what form should the cap take? Do you believe an annual cap is appropriate? If so, do you believe it can be administered equitably?

This question implies agreement with the concept of expansion of the scheme itself. As an inherently self adjusting, market-based mechanism feed-in tariffs have proved themselves valuable in Europe for kick-starting rapid investment in alternative energy technology and are seen to be the most cost effective method for providing incentives to the private sector which can be adjusted over time as the generation technology matures and baseline energy prices increase. The gross metered feed-in-tariff presently operating in the ACT is the most effectively-structured example presently operating in Australia and should provide a model for other State schemes (as has been the case with the revised NSW scheme.

At the moment, only a system cap is used (at 30kW) and no overall generation cap is in place. Expanding the scheme to allow for commercial scale installations above 30kW capacity would achieve two extremely valuable sustainability objectives:

a) The inherent inequity of the present scheme, which disadvantages both renters and a further approximate 30% of ACT households who do not have the necessary solar exposure or space availability to mount PV equipment, would be addressed by the expanded scheme. Potential would exist for participation by community groups, body corporates, and renters as well as commercial interests wishing to invest in larger clean scale power generation.
b) The vast stock of existing buildings, which are largely beyond the cover of building fabric energy efficiency provisions contained in the BCA, could contribute to emissions reductions by way of clean energy production. While energy efficiency measures are the low-hanging-fruit of

building emissions reduction, it is not possible to rely on new-building efficiency bonuses if short-term progress is to be made.

The KPMG modeling presented in the options paper correlated effects of six increasing energy price impacts (each being below the no-cap prediction of $426/annum /household energy cost increase, based on a 75% premium payment to participating households over a five year period). The conclusions suggested increase in benefits in line with higher participation (due to less restriction from imposed caps on renewable energy production), but also predicted reducing returns over the medium and long term, and alluded to limits on growth relating to existing infrastructure capacity.

Variation over time which will inevitably affect the retail price of energy and the capital cost of solar PV generation equipment was not taken into consideration in the KPMG modeling. These factors would mitigate the negative impacts identified for the higher production level options over medium and long term durations.

The AuSES response paper points out that experience in Europe has indicated that infrastructure will not be significantly stressed until solar power production has reached between 10% and 20% of total generation. Total installed PV capacity in the ACT is presently less than 0.2% and thus, even large increases should present no real problem for existing grid infrastructure in the short-medium term. AuSES has recommended that a cap would be appropriate for systems above the present threshold limit of 30kW peak power, principally in the interests of maintaining equity for the general population. The level has been suggested as 15MW per annum reducing by 1 MW per annum over 10 years. The Institute recognises the technical expertise which AuSES has at its disposal and is in support of this recommendation.

Question 3 (page 21)

Do you consider the Clean Economy opportunity to be a significant factor in considering the potential expansion of the Scheme? Would you support the Government taking action to sustain the short-term employment growth arising from that expansion? What sort of actions would you support?

The Institute has been heavily involved in Built Environment Education in the ACT for many years, and annually runs programs aimed at all levels of education, from Primary through to Tertiary. The 2009 series of lectures dealing with Development of Environmentally Sustainable Cities is a good example of similar programs aimed at the Design Practitioners and the public at large. .Government support for BEE programs, particularly those focused on Sustainable Design, is critically important in establishing the awareness and skill-base needed for clean-energy industry and businesses to take hold in the ACT. Reinforcement of a “Clean Economy” in the ACT is entirely consistent with the objectives expressed in the Institute Sustainability Policy, and would present many new employment opportunities architects and the building industry in general.

Question 5 (page 27)

Do you think access to the Scheme should be extended to community-owned generation sites? Should owners or occupiers of unsuitable properties be able to access the Scheme through alternative means? Do you have any views on how the issues identified by the ICRC could be addressed?

In order to logically extend the scope of the FIT scheme, it is essential that community groups and body corporates gain access to opportunities presented by the legislation. This is principally an equity issue, as mentioned above, and the Institute sees extension to both commercial scale investors and non-profit community groups as an integral part of any solution aimed at mitigation of emissions from the existing building stock.

Regulation

In terms of regulatory aspects, there appear to be two basic classes of investor which would need to be catered for:

a) Community Groups and Body Corporates who are participating in the scheme simply in order to access similar benefits currently available to individual owner occupiers.
b) Commercial Enterprises who are wishing to invest in large-scale energy generation for profit.

While existing tax and corporations law would logically apply to the second group, a more flexible approach would better suit the former, perhaps making use of cooperative models rather than traditional business structures. Previous comments have already addressed the issue of capacity limits, and similar rules should apply to both classes of investor. In terms of regulation acting to prevent multiple installations being attributed to the same investor, it would be prudent to maintain an overall register to cover constituents of a community group or body corporate, and cross check to ensure that an individual owner occupier was not receiving income more than once for different installations.

Where, however, an individual was deriving income from a bona fide commercial enterprise investing in large-scale generation equipment, and complying with relevant company and income tax regulations, this should not preclude participation as an individual owner occupier. There is a logical consistency in keeping the two classes of participants separate from a regulatory standpoint.

Financial

From an equity point of view, it seems logically consistent to maintain a division between investors seeking to primarily offset their own infrastructure and maintenance costs by recourse to the FIT and larger scale investors seeking profit from the scheme. In line with the comments made above, it is logical to maintain a tax-free approach to income from community-funded, cooperative-type installations, however, installations which are profit driven should be taxed in the conventional way. As the income generation from the investment is essentially the product of a government incentive, further tax breaks on company income could be difficult to justify, but this judgement would best be made by the ATO. Taxation policy could be used in the incentive equation, however, as the FIT reduced over time.

Revenues and costs for community installations would have to be administered in the same way as any other common property managed by a body corporate, and would presumably be split equally among the participating individuals.

Operational

The question of available space is a particularly relevant one for the Institute. Vast areas of empty rooftop presently exist within the territory, even when considering only government-owned buildings. The experience in Germany indicates that many private industrial building owners have participated in the FIT program by leasing out suitable rooftop space to power generation companies, and a similar response could be expected in the ACT if legislation made such arrangements mutually beneficial.

At present, the art and science of Building Integrated PV design is still in its infancy and will present a challenge for architects over the near-term future. It is essential that flexibility is offered in the design and siting rules relating to plant and equipment if quick progress is to be made in devising architecturally successful solutions to building integration of PV systems.

No rights to sunlight are incorporated in any Australian planning instrument at present, and this issue will become quite critical if small scale distributed energy production is to play a more significant role in Australia's suite of power generation options. The recent solar access study commissioned by the ACT government was a commendable start to giving legislative teeth to solar access, but it was quite limited in scope and did not include vegetation within its terms of reference. Avoidance of this issue will not be possible if successful development of distributed power options is to occur over the coming decade.

Conclusion and Recommendations

The expansion of the Feed-In-Tariff is a positive element in the suite of programs under development by the ACT Government aimed at increasing energy security and independence and achieving the target emission reductions described in the four action plans of the ACT Climate Change Strategy. The Australian Institute of Architects is generally in agreement with the thrust of this expanded FIT policy and acknowledges that some aspects of the policy will present further opportunities for employment, and also some challenges to the local building design professions. The Institute would encourage the ACT Government to continue its efforts to work with representative industry bodies to ensure that sustainable design education becomes a prime focus for the local building industry and design professions. The Institute wishes to congratulate the ACT Government on its commitment to the further development of renewable energy infrastructure and the role that distributed generation can play in this process.