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13 September 2019

Committee Secretary
Inquiry into sustainability of energy supply and resources in NSW
Committee on Environment and Planning
Legislative Assembly
Parliament of NSW

Dear Committee,

Thank you for the opportunity to make this submission to your Inquiry into the sustainability of energy supply and resources in NSW.

Our submission presents preliminary findings from a research project titled *Rural Communities and Renewable Energy: A Socio-economic Study in NSW*, conducted by The Australia Institute and University of Sydney Environment Institute. The primary researchers are Professor Linda Connor (Anthropology) and Dr Beck Pearse (Political Economy) from the University of Sydney and Dan Cass (energy policy) from The Australia Institute.

The research will continue through 2019 but we wish to take the opportunity presented by your Inquiry to raise issues that we have uncovered in the project.

Please note The Australia Institute will also make a separate submission on NSW domestic coal use and the export coal industry.

We wish to communicate to the Committee our key preliminary finding, which is that the lack of a national process for local engagement and planning of energy infrastructure reduces the benefits of this development and risks creating conflict in rural communities. We also make a policy recommendation arising from our key finding.

Our study asks three sets of questions, which overlap with your Terms of Reference 1, 4 and 5:

- A.** What social and economic changes are associated with renewable energy development in rural and regional areas of NSW?
- B.** What are the benefits? How are the benefits of renewable energy distributed? Through what political economic processes?
- C.** What are the impacts of renewable energy developments on rural environments and social relations? How are they managed, negotiated, and between whom?

Our study uses qualitative methodologies including interviews, groups discussions, media and document analysis, in order to capture the range of economic, social and environmental changes people are experiencing with large-scale renewable energy developments.

Since October 2018, we have conducted 8 fieldtrips. Our study documents a diversity of perspectives and experiences of renewable energy development. The study so far has generated more than 40 interviews and discussions with local government, resident, landholder and rural/regional businesses and renewable energy industry representatives.

The two study areas are the Central West / Central NSW Tablelands and New England regions of NSW. These areas of the state include Renewable Energy Zones (REZ) identified by AEMO in the Integrated System Plan (ISP) and Potential Priority Energy Zones identified by the NSW Government. Our research zones were chosen in order to understand the impact of existing renewable energy developments, in areas that are likely to experience much more development in the future.

The ISP is a welcome development and necessary for Australia to meet the challenges of decarbonisation and the technological transition in electricity supply. It will lead to new infrastructure in REZs in rural areas and upgrades to transmission to connect this additional supply.

The ISP is an infrastructure development plan that supports and facilitates government policy and has the support of all governments through COAG Energy Council. Regarding regional NSW development, AEMO's ISP has been informed through public and private engagements with NSW council groups, NSW government, TransGrid, local developers, consumers and others. The NSW government has a transmission infrastructure strategy which is somewhat consistent with the 2018 ISP.

The major renewable energy project pipeline overseen by the NSW Department of Planning and Environment signals that the state could be on track to install enough wind and solar infrastructure to secure full decarbonisation of the grid by 2050.

The ISP will mean significant impacts in rural Australia but we found evidence that people in the rural communities we visited have not been consulted about it. This included, for example, someone in an office-bearer role in an important local commerce representative body. There is a lack of local planning and engagement with communities impacted by the ISP and REZs and this poses a threat to the implementation of the ISP.

With respect to Terms of Reference 1 (The capacity and economic opportunities of renewable energy) and 4 (Effects on regional communities, water security, the environment and public health) the overall picture is positive. Renewable energy developments in the Central West and New England regions are bringing diverse benefits to those rural communities.

For example, local procurement and employment associated with renewable energy developments can bring economic benefits to smaller rural towns in particular. Local contracting for materials and services such as gravel, truck and crane hire is welcomed by

local businesses. Whilst there are relatively few long-term jobs in large-scale renewable energy compared to the education or services sectors, the employment and other economic benefits they bring are valued by communities.

Interviewees explained that the construction jobs brought by large wind and solar developments can be very significant. Flow on effects include temporary increased demand for local accommodation and rental properties, and for local hospitality and retail businesses. Even the small numbers of jobs operating a large-scale wind farm are welcome, because they are well paid, skilled and endure for a long time.

Drought and economic conditions in Central West and New England regions of NSW are extremely difficult. In some locations, local business chamber and council representatives observe that the employment and associated economic activity created by renewable energy projects has played a modest role in masking some of the economic effects of drought during project construction phases.

However, with regard to Term of Reference 5 (Opportunities to support sustainable economic development in regional and other communities likely to be affected by changing energy and resource markets, including the role of government policies'), there are some potential employment and other benefits that fail to materialise.

For example, a REZ will see multiple large installations built over many years, which should provide a pipeline of quality jobs and apprenticeships for trades such as electricians. But the experience in the zones we have investigated indicates that these employment benefits are not fully realised. Each project developer and their contracted partners tend to bring their own electricians, contracted through companies with which they have an ongoing relationship. There are even fly-in, fly-out employees in roles including security guards.

A better model would see government play a coordinating role to maximise economic benefits, improve local skills and employ skilled locals. This would involve local councils, chambers of commerce, trade unions and TAFE institutions as well as national government and industry bodies including the Clean Energy Council.

There are also deficits in the benefit-sharing models, which could be easily improved. Farmers who lease land to wind farms find rents paid for hosting turbines and related infrastructure can provide much appreciated drought relief. Farmers who sell parcels of land for solar farms can receive many times the commercial value of the land, which can be put to use reducing debt or investing in the farming enterprise.

Wind farms have created neighbour benefit sharing schemes in order to recognise the wider group of landholders experiencing changes in visual amenity, beyond the boundary of the wind farm. Landholders eligible for neighbour payments have raised issues about the process of determining payments and the level of compensation offered. Neighbour payments are benefit sharing schemes that are rarely used by solar farms. This means that farms neighbouring a large solar farm may get no economic or other tangible benefits. This can contribute to conflicts between neighbours.

All energy systems have local and wider environmental impacts. Large-scale renewable energy projects cause land use changes. Needless to say, the climate impact of fossil fuels is highly destructive and already impacting rural communities and that the social cost of carbon is much greater than the local environmental impact of renewable energy. But the social, economic and environmental changes from renewable energy can be managed better.

We have observed that there are conflicts about the use of what interviewees describe as 'prime agricultural land' being turned into solar farms. Neighbouring landholders have also raised concerns about property devaluation. There is a need for rigorous quantitative analysis to determine the evidence for and scale of these issues. Two preliminary commissioned studies by the NSW Valuer General have not so far been able to create the evidence base needed to clarify the issues. Qualitative evidence indicates some very productive land is being turned from agriculture to energy production, without assessment of the impacts.

The privatisation of energy generation means that wind and solar companies are entitled to compete for the best locations for their developments. A key factor that drives siting includes finding a favourable location in the distribution or transmission network. This can encourage developments on very good farming land and in sites that are of scenic value.

The solution to the inappropriate siting of renewable energy developments is better planning consultation but also grid augmentation. The funding and planning of transmission and distribution networks needs to provide good grid locations for renewable energy that consider the value of farm land and community amenity.

Large-scale renewable energy developments can bring significant benefits to rural areas. However, there is no coherent, integrated planning process that proactively involves rural communities in the siting and timing of projects or their integration into local economies and communities. As a result, this reduces benefits and can create negative impacts which will ultimately present hurdles to the development of energy infrastructure in Australia.

However, our research has indicated that there is little or no general community awareness of the ISP in the Central West and New England regions. There is wide support for clean energy but no understanding that major developments are planned in these areas. Most communication about projects is from the project developers and it is thus piecemeal and does not present the vision of the ISP or the rationale behind it. The result of this disconnect is that people do not feel they have a stake in the developments, even where they bring benefits to their communities.

We would like to share with the Committee our preliminary policy recommendation, under Term of Reference 6 'Any other related matters'). Our research indicates that there needs to be more work done by state governments and COAG Energy Council on ensuring energy development in Australia is orderly and equitable.

Securing a just energy transition for rural communities will need to be part of broader reforms to energy system planning.

We wish to highlight that despite the national importance of the ISP, there is no national body charged with the responsibility of community consultation and planning to enable the ISP and REZ's to be delivered in rural areas. This is not a criticism of the Australian Energy Market Operator, nor any particular network company or project developer.

It is in the interest of all states, energy consumers and local communities that the ISP is well planned and delivered in rural areas. This will reduce negative impacts of large energy developments, help make the NEM more reliable and reduce the cost of energy for all consumers.

We propose that the Inquiry should consider how the ISP can be explained to NSW communities and adapted to accommodate their needs and concerns. There will need to be trade offs, for example between local impact and the cost to taxpayers or energy consumers, but these need to be made explicit and transparent.

We suggest that the NSW Minister for Energy could propose to COAG Energy Council there should be consideration for a national rural energy development function. This could be a role with the Federal Department of the Environment and Energy. Other locations for this body include under the COAG Energy Council Secretariat, as a project of Regional Development Australia, or under one of the existing energy agencies. It would work proactively with rural communities, local and state governments, networks, developers and AEMO to facilitate the ISP.

One option for this function is to update the Terms of Reference of the National Wind Farm Commissioner to be technology agnostic and include all significant infrastructure in the NEM, including transmission and distribution networks and existing hydro, coal and gas operations. We note that the Minister updated the Terms of Reference in 2018, on advice from the Climate Change Authority (CCA), to include large scale solar and storage developments as well as wind farms.

The title of the Commissioner is now inaccurate and should be updated to include the actual remit of the current role. Until this happens the role will be confusing and may deter complaints regarding non-wind developments that will deprive rural Australian of their access to this important service.

The CCA commended the Commissioner and recommended the extension of the role for 3 years, to 2021. The Commissioner may be the appropriate agency to take on a more proactive role in the ISP, addressing the issues that our preliminary findings highlight for the Committee. The Commissioner would work closely with the State Renewable Energy Advocates in jurisdictions that have one.

That would mean there is a federal statutory agency engaging with communities about ISP projects. This could be done as a trial in NSW and could focus initially on the priority, Group 1 projects. The Commissioner could report to COAG Energy Council and the ESB and make recommendations for the future of this work. Appropriate budget would need to be provided.

We are happy to provide further detail if required.

Yours sincerely,

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