



Environment Centre NT

protecting nature | living sustainably | creating a climate for change

Thank you for the opportunity to comment

The Environment Centre of the Northern Territory (NT) is the peak community sector environment organisation in the Northern Territory.

The mission of the Environment Centre NT is to

- protect and restore biodiversity, ecosystems and ecological processes,
- foster sustainable living and development, and
- cut greenhouse gas emissions and build renewable energy capacity.

The Environment Centre NT (ECNT) works by

- advocating for the improvement of environmental policies and performance of governments, landholders, business and industry;
- partnering on projects and campaigns with conservation and climate organisations, governments, Indigenous organisations, community groups, businesses, and landholders;
- raising awareness amongst community, government, business and industry about environmental issues and assisting people to reduce their environmental impact;
- supporting community members to participate in decision making processes and action;
- recognising the rights, aspirations, responsibilities and knowledge of the Territory's Indigenous peoples; and,
- acknowledging that environmental issues have a social dimension.

While broader climate change is beyond the terms of reference, we feel it is very important to clearly state that the reason for a Renewable Energy Target is to reorientate the global economy to achieve carbon emission reductions to mitigate against climate change in accordance with our responsibilities to meet our responsibilities under the Paris Agreement.

We welcome the Labors commitment to ensuring the NT energy supply is comprised of 50% by 2030. We consider that there are many opportunities to drive renewable energy investment now that should be adopted by the NT government. In particular we recommend that:

- Shorter-term targets are developed for 2020 and 2025 and are clearly articulated to give strategic direction and a clear transition pathway for this term of government. Without this the NT government cannot provide certainty to investors and businesses, but also risks

future government terms to abolish the target or reduce the level of ambition. We have seen this in recent years with the previous Labor Government's Green Energy Taskforce, and ongoing disruptions to energy policy at the Federal level.

- The NT Government lead the way by using its own purchasing power to ensure it sources locally sourced renewable energy for its own operations. This can be done through a number of mechanisms, most successfully through reverse auction schemes similar to that in operation in the ACT and now Victoria. Labor Governments in South Australia and Victoria have recently showed this leadership by investing \$300 million worth of local renewable energy generation, and up to \$45 million in energy storage.

- Work to maximize onsite solar and storage across NT government owned facilities, and leased facilities. There is now a strong business case for governments to invest in their own onsite solar generation.

- The NT Government work to facilitate a consortium of local businesses and industries to develop corporate Power Purchase Agreements with renewable energy developers. Examples of this include the WWF renewable energy buyers forum, and the Melbourne Renewable Energy Purchasing Group

- Work with the local community to facilitate greater access to renewable energy for renters, low-income households and apartment dwellers. We recommend the NT government work to establish community energy projects by providing host sites and supporting community organisations to work through the legal, technical and financial barriers.

- Examine opportunities for precinct scale energy for new developments, where local renewable energy generation can be shared locally between businesses, including opportunities for energy storage at Charles Darwin University.

- We recommend that investment and incentives for renewable energy are complimented by parallel programs to increase energy efficiency and demand management/demand response. Demand management, energy efficiency and storage technologies like batteries will be important pillars in the move to a higher % of renewable energy to deal with peak demand and critical peak demand.

- We welcome the ongoing commitment to publicly owned networks. This allows for network planning decisions to be made based on the long term interests of Territorians and not just shareholders, and to make decisions based on environmental, social and economic outcomes, not just economic objectives.

- Promoting distributed generation and interconnected microgrids could build energy resilience for Territorians. This is particularly important given the climatic extremes the Territory experiences, and the impacts of climate change going forward.

- Gas is not a transition fuel. Tackling climate change requires moving away from all fossil fuels, and although gas may be less emissions intensive than coal, it is still a fossil fuel and has no place in our energy mix if we are to fully decarbonize by 2050. It is important to

ensure that decisions to retain gas in the short term do not lock in the technology for decades to come. Furthermore, recent studies are finding that methane emissions from unconventional oil and gas production are 10-15 times higher than currently reported. <http://www.tai.org.au/content/review-current-and-future-methane-emissions-australian-unconventional-oil-and-gas-production>

- We welcome the retention of the 1 for 1 feed in tariff, and recommend the NT Government look into rebates for early adopters of battery storage like Adelaide City Council. The costs of batteries is rapidly falling, however providing government incentives could help to grow the industry in the NT. Batteries also provide other services to the networks including helping managing peak demand so there is a shared incentive to ensure solar systems are delivering mutual benefit to households and networks.
- It is important that the transition to renewable energy considers opportunities to support low-income households in accessing new energy technologies and energy efficiency. The biggest barrier to low income households is the upfront cost of these technologies, so the NT government could look at no or low interest loans for solar PV systems that could be paid back through property rates, or through their power bills. Darebin City Council in Melbourne, provides solar to pensioner households at no upfront cost and the householders pay back the cost of the system through their quarterly council rates. The payments that are made are below the savings that are delivered to the energy bills through the solar system, ensuring that the pensioners are cash flow positive from day one. This scheme is now expanded across 22 councils in Victoria and also is offered to other low income households, renters and social housing.

The model essentially works by the council (or government) providing the upfront cash for the solar system to the household, and then the household pays back the loan through their council rates property charge. In the case of Darebin City Council where the program first started, this loan was interest free, but in other councils it is low interest over 10 years. It is based on careful modelling we have done to ensure that the savings the householder gets from the solar system is higher than the amount they have to pay back through their rates. This is important, and is part of the program design to screen participants based on their daily energy use habits, i.e. targeting households with high daytime energy use.

More information here:

<http://www.naga.org.au/solar-for-low-income-households.html>

- We recommend the NT government provide a fund for growing renewable energy in the broader community, similar to the Victorian Government's New Energy Jobs Fund, a \$20 million program designed to support Victorian-based projects that create long-term sustainable jobs, increase the uptake of renewable energy generation, reduce greenhouse gas emissions and drive innovation in new energy technologies.
- The NT has enormous opportunity for large scale solar PV and solar thermal farms, that could be connected to the Darwin grid or provide power to off grid mines. The mining industry is shifting rapidly to low cost renewable energy generation for its own operations.

We recommend that this is a mandatory requirement of any new mine or mine expansion proposal as part of an Environmental Impact Assessment.

Other information for consideration:

Reverse Auctions

The ACT Government has run two reverse auctions to drive investment in 400 MW of wind generating capacity (2014 and 2015). Combined, the ACT's supported wind farms will deliver about 50% of the Territory's electricity supply from renewable energy sources in 2020. This will reduce emissions by 1.9 million tonnes in that year. The auction involves a Request for Proposal (RFP) process which sets out the detailed terms of participating in the auction, how proposals will be considered in relation to 'value for money', and the overall governance framework. Supported projects can be located anywhere in the National Electricity Market.

The elegance of this solution is not within the auction process itself, but the evaluation criteria applied which allocated a 20% weighting to community engagement and 20% to local economic development benefits. This approach has incentivised energy providers to innovate in new ways not previously seen in the energy market. Whilst the generation facilities are located in NSW, successful tenders have delivered on their commitment to support local economies by establishing the generation control centres in the ACT, investing in local TAFE courses to support renewable skills and establishing a community investment fund to facilitate residential batteries trials.

The Victorian Government will shortly launch its own auction scheme as the primary mechanism to deliver on the State's recently legislated renewable energy target of 40% by 2025.

Invest, Own and Operate Offsite Renewable

The NT government could look at opportunities to build offsite renewable energy plants. Sunshine Coast Council (SCC) have commenced building a 15MW solar farm that will offset more than 100% of council's electricity consumption across its facilities and operations. The off-site facility will cost council \$50M to construct and a further \$10M to operate, but will generate \$22M in savings over the lifetime of the asset (30 years). The farm is being built on 24 hectares of a 49 hectare site as is in within close proximity to a 33kV transmission line where it connects to the network. The investment decision was made after an exhaustive four-year process, including a business case that was independently reviewed by an investment bank and a business advisory firm with experience in the commercialisation of renewable energy technology.⁹

Newcastle is pursuing a similar solution has completed an expression of interest (EOI) for a 5MW solar farm to be built on an ex-landfill site. The EOI seeks a proponent to: design, construct, operate and maintain the solar farm and provide retail services that maximise the value from the generation asset.

ECNT case study:

We would like to highlight concerns we have regarding extreme variations in quotes we recently to have solar panels installed on our office roof. We sought quotes to access the funding under the NT Governments 'Immediate Works Grant'. The requirements of this grant is that the labour cost component is greater than the materials cost component of any works. To install solar panels for our office we were advised that the meter board and circulatory board for the entire building of four offices would need to be upgraded and replaced. We received two quotes – one of \$13,000 where the materials component was higher than the labour cost and another of over \$20,000 where the labour component was vastly higher than the materials component. The first quote was from a reputable company whose work and opinion we trust. We would like the panel to consider what industry standards, guidelines or advisory service can ensure quality and reliability as the industry explodes in the NT.

The Environment Centre NT would like to acknowledge the assistance of Rob Law in putting together this submission. Please contact us if we can assist in any way further in this inquiry.