



## REPOWER NT: 10-POINT PLAN

Our Repower NT: 10-Point Plan sets out ten actions for the NT Government to repower the NT with renewable energy, creating thousands of new jobs and lowering power prices.

By executing the 10-Point Plan, the NT Government can capture an incredible opportunity to turn NT's abundance of solar resources into jobs, drive economic growth and secure affordable energy for all Territorian communities.

We call on all parties to commit to:

### Deliver the 50% renewable energy target by 2030

A renewable energy target helps grow thousands of NT jobs and lower power prices in the Territory. It provides governments a firm framework within which to build complex policy, turning promises and ambition into a concrete goal, and provides local NT solar companies a stable set of conditions within which to operate their businesses.

By completing the 11 recommendations and 50 enabling actions of the Roadmap to Renewables, the NT Government can deliver the renewable energy target whilst maintaining the affordability of NT's energy supply and without compromising network reliability and security.

### Solar for all new NTG Buildings, including social and affordable housing

Here in the Territory, the Government purchases roughly one-quarter of the Territory's total energy consumption – that's huge! It means the government is in a unique position to influence the uptake of renewable energy in the Territory, much more so than the governments of other states and territories.

The NT Government can lead the way by using renewable energy for its own operations – including social housing, schools and hospitals – provided by local NT solar companies. And it should mandate the installation of solar panels for all new government buildings.

### A feasibility study of an HVDC transmission line between Darwin and Alice Springs

Transmission lines are the arteries of the electricity system. And with the cost of High Voltage Direct Current (HVDC) transmission decreasing, more and more regions across the world are using this technology to efficiently move electricity over long distances.

The Northern Territory Government should undertake a feasibility study, including cost benefit analysis, of building an HVDC transmission line between Darwin and Alice Springs. This line could then facilitate the rollout of renewable energy, increase energy security and reduce power prices. It would help link up energy-intensive industries with large new renewable energy zones from right across the Territory.

Authorised by Shar Molloy, Environment Centre NT, 3/98 Woods Street Darwin, NT, 0800

## **Community renewables program to support solar in regional and remote NT**

Regional and remote NT, including Indigenous communities, stand to benefit the most from cheap renewable energy – yet too many remain shut out of the solar revolution. A community renewables program could help fund feasibility studies, create seed money, award grants, and employ regional renewable energy coordinators to support communities in their engagement in large and small-scale renewables projects.

## **Establish NT as a Renewable Energy Territory and a renewable hydrogen pilot plant**

The NT Government should announce a major new strategy to establish NT as the Renewable Energy Territory. Renewable energy electricity generation should be endorsed as a whole-of-government initiative and placed as a central pillar of the NT's economic policy.

As the world transitions to renewable energy, the Northern Territory's abundance of sunshine means we have an exceptional opportunity to prosper in this new era. Our report *The 10 Gigawatt Vision*, written in conjunction with *Beyond Zero Emissions*, showed that by 2030, the NT Government could help drive investment in 10 gigawatts of renewables, creating over 8,000 new jobs and over \$2 billion in revenue. An ambitious renewables strategy can spark a vibrant manufacturing sector in the Territory, with export opportunities in energy infrastructure, zero-carbon electrified manufacturing and minerals processing.

The NT also needs to kickstart a clean, innovative, safe and competitive renewable hydrogen industry that creates jobs and benefits all Territorians, beginning with a renewable hydrogen pilot plant.

## **Set a local content target for all large-scale renewable energy projects to drive NT manufacturing**

With smart policy support, a large proportion of renewable energy infrastructure can be manufactured in NT. Manufacturers aiming to establish their sustainability credentials will be attracted to the NT's abundance of affordable, clean energy. Up to a third of renewable energy jobs could be in manufacturing.

In return for underwriting renewable energy development, the NT government should require local production of equipment. One of the biggest potential employers is battery manufacturing, with further opportunities from making transmission components. In the past, attempts were made to develop a large battery factory in Darwin, but were held back by a lack of guaranteed procurement.

Renewable technologies are mature enough to power even the most energy-hungry manufacturers and can replace fossil fuels in production of a wide range of materials including food, beer, glass, bricks and cast metal. And an advantage for a small economy like the NT is that many electrical heating technologies, such as heat pumps, can be installed as small, modular units. This can help foster an economy of reduced scale as smaller equipment requires less space, and facilities can be decentralised and sited close to raw material sources or product markets

## Review training programs to grow skills of the local labour force

The renewable energy industry is supported by a diverse workforce, including tradies and technicians, machine operators and drivers, and labourers. And with the right support, many Territorians workers will be able to successfully transfer from fossil-fuel industries into renewables.

A review of the structure and suitability of the NT's relevant training systems across the renewable energy industry would ensure the labor force aligns with industry needs and delivers certainty of career pathways. Traditional apprenticeships, short courses, group training schemes and inputs from higher education institutions should be considered as areas for review.

## Introduce a time-of-use tariff

A time-of-day tariff is a mechanism to price electricity according to the time of day. During peak times, such as during weekday evenings when the network is most congested, electricity costs the most. By implementing a time-of-day tariff, that peak period could become an opportunity for solar and battery owners to sell energy back to the grid and get the most bang for their buck from their investments.

The NT Government should introduce a time-of-day tariff to continue to encourage greater uptake of rooftop PV and battery storage systems in the NT. It would enable consumers to reduce their electricity costs during the most expensive times of the day, promote energy efficiency, and increase reliability and security by reducing demand pressure on the system at times of high demand.

## Establish an ancillary services market

The Northern Territory Government should unbundle costs associated with ancillary services from current electricity generation by Territory Generation. The unbundled pricing models and the proposed structure and timing of implementation of an ancillary services market within the Northern Territory Electricity Market (NTEM) should then be communicated to industry

The Government should also report on financing options and possible methods of measuring and recovering financial returns on investment in ancillary services, such as batteries. Renewable energy generators may need to contract for these services and at the moment the benefit received for these services is not easily quantifiable.

## Initiate a reverse auction process for renewable energy power purchase agreements

Here in the Northern Territory, it's important to assure investor certainty. The Government should develop a procurement policy and commercial terms for renewable energy projects in the Northern Territory that have clear evaluation criteria to ensure competitive tendering processes.

Power Purchase Agreements (PPAs) should be offered through a reverse auction process. Not only would this create greater investment certainty, but it could generate greater competition in the market, which in turn may put downward pressure on wholesale electricity prices.

## How can the NT pay for the 10-point plan?

**Many of our plans for boosting the amount of renewable energy generation in the Territory can be implemented with low capital investment and limited financial risk. Here's how.**

The NT Government could offer developers **Power Purchase Agreements (PPAs)** through a reverse auction process.

A power purchase agreement is a contract for the purchase of electricity between a developer and a customer. In this agreement:

- The developer arranges the installation of a solar energy system on a customer's property at little to no cost
- That developer then sells the power generated to the host customer at a fixed rate, that is typically lower than the local utility's retail rate
- This lower electricity price basically offsets the customer's purchase of electricity from the grid, while the developer receives the income from these sales of electricity

PPAs might range from 10 to 25 years and the developer remains responsible for the operation and maintenance of the system for the duration of the agreement. What happens to the solar energy system at the end of the PPA's term is also laid out in the contract.

A **reverse auction** turns the concept of an auction on its head – that is, the typical role of the buyer and seller at an auction are swapped around. Instead of buyers bidding high enough to win, sellers bid low enough to win the chance to supply what the buyer wants.

In this case the buyer is a state or federal government and what it wants is megawatt hours of on-demand clean electricity supply.

Power purchase agreements and reverse auctions were most recently proven successful in the Australian Capital Territory's move to 100 per cent renewable energy electricity consumption. Not only would this policy create greater investment certainty, it would generate greater competition in the market and put downward pressure on wholesale electricity prices.