

## SUBMISSION TO TASMANIAN ENERGY SECURITY TASKFORCE

August 30th 2016

### **1. What are the specific risks to Tasmanian energy security that you think the Taskforce should consider?**

- ❖ **Reliance on the Bass Link Cable**
- ❖ **Hydro's blatant reduction in lake levels for a quick buck despite drought conditions**
- ❖ **Proposed sale of Bell Bay Power Station**
  - Matthew Groom as energy minister and the other Liberals must take some blame for our recent power crisis. They must have known months ago when we were in drought conditions that the holding capacity of the lakes was diminishing alarmingly and yet they did nothing to curb Hydro's blatantly taking advantage of exportation of power to the mainland to boost their income or to fire up the Bell Bay power station. In fact at one stage they were going to decommission or sell it. This failure of the Bass Link cable should put an end to plans for a second one.
  - The Bell Bay power station should be maintained as a back-up
  - I would draw your attention to an interview on the ABC with Dr Ronlyn Duncan <https://soundcloud.com/abcnorthtas/tasmania-power-crisis-dr-ronlyn-duncan-says-robust-critique-lacking-when-basslink-first-proposed> who a few years ago, as part of her PhD research conducted an in depth analysis of the Basslink Cable and was not impressed with the handling of the matter. She says that government focus at the time was on obtaining the necessary regulations to construct the cable and little attention was given to possible failure at a future date. Anyone against the scheme who was concerned and forthright about their views was pilloried- a not uncommon happening in Tasmania! The plan was evidently changed at one time to help avoid metallic corrosion but it was new technology and she was not certain whether it had ever been tried and tested anywhere else before being part of the plan. Surely if that were the case then much greater research should have been involved before it was installed.

### **2. Which potential energy security solutions should the Taskforce consider?**

- Australia as a whole could be doing so much more to invest in renewable energy. We are lagging way behind many other countries see <http://www.climatecouncil.org.au/uploads/ed4518226c655546cc529390c7cd4a8f.pdf>
- Tasmania already receives around 80-90 % of its power from renewable sources so it would not take much to achieve 100%.
- Instead of wasting money on a second cable, installation of a solar/thermal power plant similar to the one proposed for Port Augusta would be a much more viable use of funds and would provide base load power <http://www.adelaidenow.com.au/news/south-australia/revealed-proposal-for-12bn-solar-thermal-power-plant-at-port-augusta/news->

[story/58e18b826e4ecedfb57a9d11dc5fe7ba](http://www.dopemagazine.com/tech-thursday-hemp-graphene/) The proposed site for the Pulp Mill could be used maybe.

- More wind farms too would add to our renewable target
- In New Zealand when I worked for a local electricity company they had the capacity to remotely switch off water heaters at peak times. Is that done here?? If not maybe that should be investigated.
- Householders wishing to add to the number of solar panels on their roofs at present would have the price paid for the electricity they produce reduced from 28.23 cents kwh to around 6 cents kwh which is a big drawback. Retention of the higher rate would be a good incentive for consumers to install more panels
- I applaud the recent announcement of solar panel loans and would also suggest that it is made mandatory for all new homes to have panels and water tanks installed.
- Zinc-bromine batteries which are cheaper to produce than the current lithium variety and are used to store solar power would make it financially viable for Tasmanians to go “off grid” thus reducing the amount of power needed to be produced by Hydro Tasmania. In fact there is current research by Dr David Mitlin of Clarkson Uni in New York into industrial hemp as a replacement for graphene in super capacitors at a quarter of the cost which will make them even more affordable in the future. See; <http://www.dopemagazine.com/tech-thursday-hemp-graphene/>
- Retrofitting all public buildings with solar panels and changing street lighting to LED as the Launceston City Council is about to do would also help.
- Investment in renewable energy projects such as wind farms should be made easier for investors and maybe more funds and staff given to the AMC which is conducting research into wave technology. Considering we are an island surrounded by sea what better way to help produce power.
- One of the easiest ways to reduce power consumption is to persuade consumers to use less. Maybe a media campaign with numerous hints on quick and easy ways to save power in the home and workplace could be launched.
- We need to investigate the work of an engineer called Allan Jones who was employed by the Woking Borough Council in the UK back in the 1990’s. He was able to reduce the city’s power usage from the centralised energy source by 80%. Not only that but he was able to produce electricity at a price of 9p per kilowatt hour as opposed to the grid’s price of 10p. He had been given the mandate to update the town’s heating system and did it by installing 80 combined heat and power units throughout the town complemented by masses of solar panels. By 2004 Woking was producing 80% of its own power and had dropped its CO<sup>2</sup> emissions by 77%... see <http://www.abc.net.au/radionational/programs/saturdayextra/allan-jones-getting-off-the-grid/3195950>

### **3. What international examples of water storage management practices should be considered by the Taskforce when reviewing Hydro Tasmania’s approach?**

Never let the lakes run down so much in the future

**4. What economic opportunities and risks are there for Tasmania associated with a second Bass Strait interconnector, and how would it improve Tasmania's energy security?**

It should never be considered. It is too much of a gamble and we would be better off to spend the money on wind farms or more solar installations.

**5. How might the Taskforce consider the role for gas generation in Tasmania relative to other options to maintain energy security and the associated costs and risks?**

The Bell Bay Power Station should be retained but only used as a last resort as it is not classed as renewable energy, being a fossil fuel.

**6. How could the potential expansion of renewable energy generation in Tasmania help long term energy security without creating increased costs for consumers?**

I fail to see how it would make electricity more expensive as the costs of solar installations are decreasing all the time.

**7. Which renewable energy technologies and products present the best opportunity for Tasmania and why?**

My answers at Question 2

**8. Are there other climate change related implications for energy security in Tasmania?**

If the weather becomes drier and hotter it would be even more logical to install more solar projects so that we can conserve the water in the Hydro Lakes, plus as mentioned in Section 2 make solar panels on roofs and water tanks mandatory for all new buildings.

**Addendum**

It is no wonder that the lakes were drained during 2015 when you consider the obscene amounts paid not only in salaries but also in executive bonuses to Hydro chiefs. Thankfully the bonuses are not to be paid this year and I would hope never again.

**From Estelle Ross**