

4 September 2019

Senate Select Committee - Jobs for the Future in Regional Areas  
Department of the Senate  
PO Box 6100  
Parliament House  
Canberra ACT 2600

**SUBJECT: Senate Inquiry into the Jobs for the Future in Regional Areas - Mega Integrated Lithium Battery Production Facility of 40 GWh in Collie Region of WA**

We refer the Senate Inquiry into the Jobs for the Future in Regional Areas.

Sun Brilliance Pty Ltd through its subsidiary “Sun Brilliance Lithium Batteries Pty Ltd” (yet to be registered) envisages to set up a Mega Integrated Lithium Battery Production Facility of 40 GWh per year in Collie, Western Australia for Automotive, Storage and Industry, which will mainly be powered by Solar & Wind Energy.

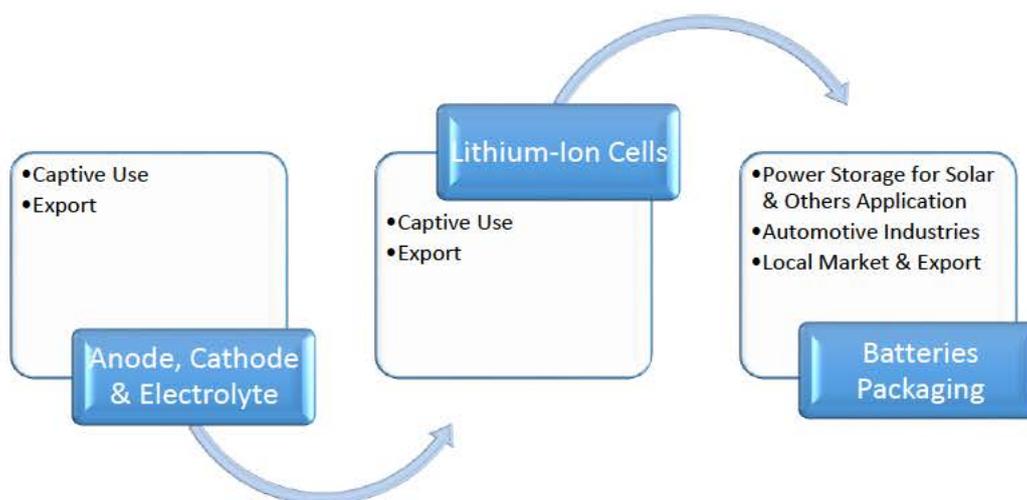
For 40 GWh factory, the Company would need to employ 3,500 skilled, semiskilled and other workers.

In addition, up to 10,000 jobs could be generated in the vicinity in the supplier industry and in production-related service and development areas.

Therefore, setting up of such a large factory (which will be among Top 5 Factories in the World), will transform the job opportunities in Collie Region of Western Australia.

We envisaged to set up the integrated World-Class Fully Automated Manufacturing Facility to produce:

1. Anode, Cathode and Electrolytes
2. Lithium-Ion Cells and
3. Packaging of Batteries for Power Storage for solar power and other uses and automotive industries.



The rapid uptake of electric vehicles and battery-based energy storage systems across the world is driving global demand for lithium-ion batteries.

The new energy revolution and accelerating growth in demand for lithium-ion batteries provides a wonderful opportunity to set up a Mega Integrated Lithium-Ion Battery

Manufacturing Facility in Collie. As the world's largest producer of lithium, with mineral reserves covering 90 per cent of the elements required in lithium-ion battery chemistry, Western Australia has undeniable competitive advantages as Australia needs to move beyond traditional minerals extraction and exports into downstream manufacturing and associated industries.

### **Why Western Australia?**

Western Australia is well placed to seize this opportunity. It has the minerals, the expertise, the standards, the infrastructure and the research capability to become a key player of the global battery value chain. The Western Australian Government is showing a leadership to move into further processing, the manufacturing of battery components and the assembly of energy storage systems because Western Australia has among the largest reserves in the world for all the battery minerals used in the manufacturing of rechargeable batteries. It exploits these reserves to produce large quantities of lithium, nickel, cobalt, manganese and alumina. It also has reserves of high quality graphite suited for battery production, although these are relatively small and currently undeveloped.

**Minerals:** Western Australia exploits to produce 60% of the World's lithium, and other minerals including nickel, cobalt, manganese, vanadium, aluminium and other rare earth metals as well as Western Australia has globally recognised expertise and research capacity in mining and mineral processing.

Currently there are two Lithium Hydroxide processing plants are under construction in Kwinana and Kemerton in Western Australia.

**Infrastructure Facilities:** Western Australia has the World Class infrastructural facilities including roads, airports, sea ports and power generation.

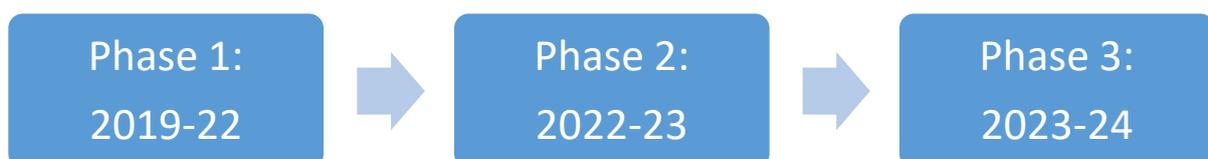
**Research Capability:** Perth is the home for Future Lithium Battery Cooperative Research Centre funded by the Federal and State Governments in April 2019.

**Power:** Western Australia produces and supply at the cheaper rate than anywhere in Australia. In addition, there is a potential to provide solar and wind power to run the Lithium Battery Manufacturing Facility at a reasonably low price.

**WA Government Leadership & Support:** The Labor government provides a framework for Government leadership and clear practical action to deliver its vision by 2025, Western Australia to have a world leading, sustainable, value-adding future battery industry that provides local jobs, contributes to skill development and economic diversification and benefits regional communities. Therefore, the Western Australian Government is committed promoting Western Australia as a prime destination for investment in the battery value chain.

### **Implementation Schedule**

The Battery Manufacturing Facility will be set up in following 3 Phases.

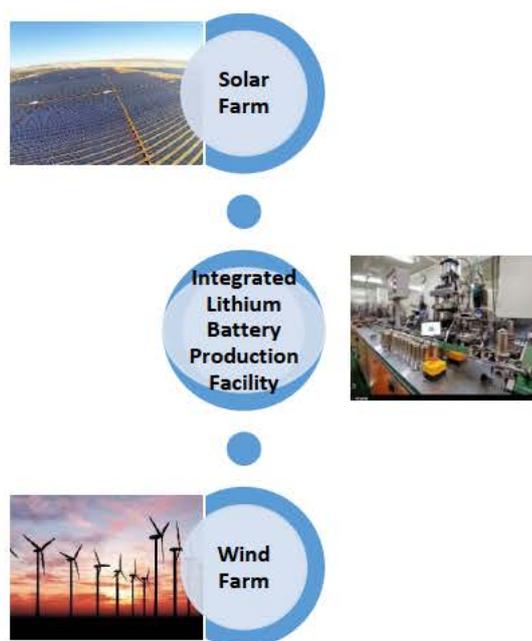


### Estimated Project Cost

It is estimated that such a large production facility of 40 GWh of Anode, Cathode and Electrolyte as well as Lithium-Ion Cells with Packaging Facility will cost A\$2,855 Million.

Sr	Item	Amount In A\$
1	Phase 1 – Manufacturing of Anode, Cathode & Electrolyte including setting up of solar & wind farms	1,000,000,000
2	Phase 2 – Manufacturing of Lithium-Ion Cells including the expansion of solar & wind farms	1,700,000,000
3	Phase 3 –Packaging of Batteries for both renewable power storage and automotive application	155,000,000
<b>TOTAL PROJECT COST</b>		<b>2,855,000,000</b>

The Lithium-Ion Battery Manufacturing Plant will be powered by Solar and Wind Energy, while some insignificant energy will be imported from grid.



Therefore, we seek the support of the Commonwealth Government Australia and WA Govt to convert our plans into the reality to create and provide a large number of new jobs in the Collie Region. The proposed Lithium Battery plant will support Collie through the local economic downturn & job losses due to the closing down of Muja Power Plant and the use of renewable power for transiting into a lower carbon economy.

Yours sincerely

Dr Dilawar Singh  
Director, Sun Brilliance Pty Ltd