



Dunsborough Primary School

24th October 2021

Hon Christopher Tallentire MLA
Chair
Education and Health Standing Committee
Minister for Education and Training
By email: laehsc@parliament.wa.gov.au

Dear Mr Tallentire,

INQUIRY INTO THE RESPONSE OF WESTERN AUSTRALIAN SCHOOLS TO CLIMATE CHANGE

Dunsborough Primary School welcomes the opportunity to provide input into the Education and Industry Standing committee inquiry into the response of Western Australian schools to climate change.

Dunsborough Primary School is the largest school in the growing south west regional town of Dunsborough with a student population of 737 students and 84 staff.

Sustainability has been an ongoing focus at Dunsborough Primary. As stated in our Business Plan 2020-2022 under our school values, "Dunsborough Primary School understands that climate change is impacting our community and ecosystems. We are committed to reducing our carbon emissions and preparing our students to succeed in a changing world".

DUNSBOROUGH PRIMARY SCHOOL RESPONSE TO TERMS OF REFERENCE (ToR)

Dunsborough Primary School (DPS) provides the following comments in relation to installation of solar PV and batteries for consideration by the Standing Committee.

In December 2018, Dunsborough Primary School installed 27kW of PV panels and a 20 kW inverter to add to its existing 9.5kW of solar. The school community fundraised the entire \$24,000 required for the PV installation. The DPS School Business Plan 2020-22 has the target of further reducing the school's energy consumption by at least 20% by 2022 through the use of renewable energy (solar).

Apart from the financial returns, there was an acknowledgement that as climate anxiety increases there needs to be avenues for people to contribute to solutions.

The 2018 solar PV project sought to engage widely resulting in strong support from students, staff, parents and the community. Funds were raised with donations from the local Bendigo Community Bank and the Dunsborough Lions Club. A photographic print was designed by local business Christian Fletcher Photography that was sold to parents and the general public with 100% of proceeds donated to the PV project.

<https://www.bdtimes.com.au/news/busselton-dunsborough-times/school-goes-solar-as-it-sets-example-ng-b88824640z>

Students also held their own fundraisers towards the PV project.

The promotion of the fundraising through the local press and local business raised the profile of the school in a positive way and gave the community the opportunity to act on climate change.

<https://vimeo.com/344025631>

a. The co-benefits of climate actions in schools

- Projects through the school build community engagement develop a sense of agency for the school and the community.

b. Climate change mitigation and adaption actions currently being undertaken in schools, and the benefits they are achieving

- The 2018 Solar PV project was initiated through the school board and P&C and quickly gained support and buy-in from all parts of the school community.
- Students and teachers were engaged in the project and motivated to access this data online and use it in class. The PV system inverter is connected to the internet where output through the inverter is displayed.
- Following the installation of the additional 27kW of solar panels at DPS at the end of 2018, electricity costs fell by over \$3,700 in 2019 despite an increase in student population. Because of the strong community support, the PV system was able to be purchased through donations and fundraising and not through the school budget or loans so cost savings are immediate. With Tier 1 solar panels purchased and a 20 year performance warranty, the panels will continue to provide cost savings for the school for many years to come. Solar PV now generates over 20% of school electricity consumption.

c. Barriers that schools encounter in undertaking climate action and how these can be addressed

- A barrier to expansion of the DPS solar system is the Western Power upfront application fees.

For projects with combined existing plus proposed inverter size less than 30kW, the application cost is free. Note that DPS is now at the 30kW limit. For systems between 30kW and 150kW which is the size of whole of school sized systems, the Western Power enquiry fee is \$250 and the application fee is \$5,000. The scale of school community based funding projects at our and many other similar schools is in the \$5,000 to \$20,000 range. The cost of adding another incremental batch of solar panels consisting of a 20kW inverter plus panels is approximately \$20,000. The \$5,250 of upfront fees with the possibility that installation of additional panels is not approved is a significant barrier.

- A further barrier to DPS solar system expansions is a lack of access to information on the Solar Schools program, the rollout of the Virtual Power Plant Project and the Schools Clean Energy program.

The \$5 million Solar Schools Program was launched by the McGowan Government on the 11th of September 2020. This program involves 30 schools participating with Horizon Power, which is outside the South West grid.

<https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/09/McGowan-Government-launches-solar-schools-program-for-regions.aspx>

An additional 10 schools are participating in a \$4.4 million School Virtual Power Plant (VPP) pilot project which was announced in September 2020.

<https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/09/Student-power-Schools-to-transform-into-Virtual-Power-Plants-as-part-of-recovery.aspx>

The first participating school, Kalgoorlie –Boulder Community High School, had its battery installed in August 2021 with the VPP to be in operation late this year. An additional six schools were also announced with the VPP budget expanded to \$8.8million.

<https://www.solarquotes.com.au/blog/kalgoorlie-boulder-vpp-mb2131/>

Budget papers for the 2021-22 WA Budget show \$35.2 million allocated to the Schools Clean Energy Program, details of which are unknown.

The McGowan Government is also installing community battery storage systems as part of the Distributed Energy Resources Roadmap. The intention is for these batteries to form a Virtual Power Plant (VPP) with local households given the opportunity to utilise the battery to theoretically store excess daytime solar generation for evening use.

A VPP is exactly what DPS now requires for future expansion of the school's solar system for the school and community's benefit and would welcome the installation of a community battery onsite. Unfortunately, with no detailed information on the roll out of the School VPP project or Schools Clean Energy Program, no process for schools that are not involved to apply for these projects and no indication of eligibility in the future for these projects, Dunsborough Primary is in the position of "wait and see".

With high application costs to do any further solar additions set against the possibility of being selected in the schools VPP project, DPS is now on hold with regards PV expansion.

d. What more can be done to support schools to respond to climate change

- The 2018 DPS solar project was a highly engaging project with involvement of students, teachers, parents and the broader community significant publicity. More information on the VPP project or Schools Clean Energy Program could mean DPS would be able to plan and fund raise if required for future Solar PV.

Recommendation 1: More information to be provided to schools on the WA Government's Schools VPP and Schools Clean Energy Program. Schools and their community are keen to know about and be involved in uptake of renewable energy.

Recommendation 2: A process or application system for WA schools to apply for involvement in the WA governments Schools VPP and Schools Clean Energy Program. Provide options for schools not initially selected to fundraise and provide contributions towards being involved in a VPP school project.

Recommendation 3: Consideration to be given to installation of Community Battery Systems on school sites and allow schools to have access to the battery system. Schools could form the hubs for local VPP's and the VPP could be promoted through the school community. The battery would also provide system capacity for the school to increase the amount of solar PV they can install without adversely impacting voltage and frequency in the local electricity network.

Please do not hesitate in contacting us should you require further information about the commentary provided in this submission.

Yours sincerely

Michael Baldock
Chairperson
Dunsborough Primary School Board