

25/09/2019

To SCEGGS c/o Sandrick Pty Ltd,

## Energy Efficiency

Council requests additional comments regarding renewable energy systems as shown below.

### Renewable Energy Systems

It is unclear from the plans and ESD Report as to whether any renewable energy elements are proposed as part of the School's masterplan.

Redevelopment of school buildings across Australia commonly includes solar photovoltaics – irrespective of whether supported by government funding or not. The 'payback' is rapid (as little as 5 years is cited in the ESD report) and students themselves widely expect schools to demonstrate commitment to renewable energy.

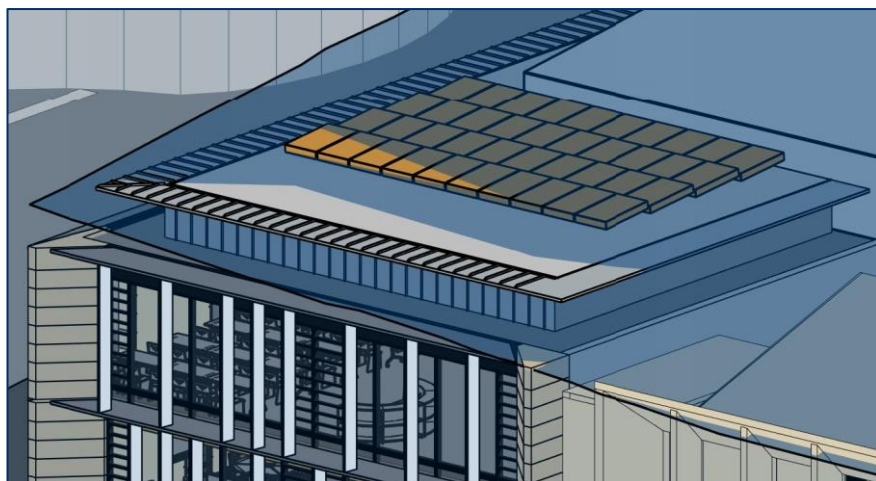
The ESD Report considers solar panels for hot water and seems to ignore heat pump options (page 35 of the Architectural Design Report refers only to "energy efficient hot water systems").

Solar hot water or heat pump hot water solutions are logical to reduce the School's dependence upon mains gas as a fuel source.

It is requested that the applicant provide clarification as to whether any renewable energy elements (specifically photovoltaic or solar/heat pump hot water systems) are proposed for the masterplan and Stage 1 works.

The roof of the new Wilkinson House generally faces north, east and west with minimum shading from adjacent buildings. Photovoltaic cells are proposed to be placed on the areas as detailed in the figure below and will be installed within the building height control limits of the development. The panels will be tilted at an angle to maximise efficiency and be considerate of reflectivity/glare to neighbouring properties. Given the limited amenities within the building, solar hot water systems will not be installed.

Details of future PV cells and Solar Hot Water installations and/or future technologies will be assessed and additional detail provided in the drawings to accompany future Development Applications for the Administration Building and Multipurpose Building.



Sincerely,

Jane Lai

Lead ESD Engineer

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