

**WRITTEN QUESTION TO THE MINISTER FOR INFRASTRUCTURE
BY DEPUTY R.J. WARD OF ST. HELIER
ANSWER TO BE TABLED ON TUESDAY 4th JUNE 2019**

Question

Given, with the adoption of P.27/2019 as amended, the States agreed that there exists a climate emergency in Jersey and requested the Council of Ministers to develop a plan for carbon neutrality by the end of 2019, will the Minister advise whether there will be any reassessment of the use of renewable energy sources at the new Les Quennevais School (such as solar panels, greywater, and electric car-charging points) and, if not, will he commit to undertaking such a reassessment as a matter of urgency, given the potential impact of the use of such sources on the School's carbon footprint?

Answer

The New school has been designed and assessed to be highly energy efficient with defined sustainability and environmental parameters carefully costed to give the best value and return on investment over the life of the building. In addition to the CO2 reduction measures inherent in the design, the building will achieve a BREEAM (Building Research Establishment Environmental Assessment Method) rating of Very Good. To achieve that score, the new premises will feature, amongst other items;

- 4 Electric vehicle charging points
- 100No. Photo Voltaic Panels with system output of 30kWP
- 100% LED lighting complete with automatic regulation to daylight
- 11 Electric Air Source Heat Pumps
- Extensive metering enabling us to monitor and manage areas of high load.

Carbon Reduction

Target energy rating for building type and size in accordance with Jersey bylaws is 29.01kWH CO2/m2/annum. The as designed building achieves 26.6kWH/m2/annum which is an improvement on the bylaws.

Photo Voltaic Solar Panels

The system installed saves 18,000kg CO2 per annum.

The 160m2 PV system equates to approximately 5% of the total Electrical load of the whole site, saving approx. £4.5K on electricity bills per year. In real terms would be enough to light an entire floor of the school!

Air Source Heat Pumps

The Air Source Heat Pumps will save 88% CO2 in comparison to the equivalent gas boilers, contributing to a saving of approximately £3K on the annual energy bill.

BREEAM – Very Good targeted and expected to be achieved

The BREEAM measures proposed which would contribute to carbon/energy reduction include, in addition to those items identified above:

- Energy efficient lifts
- Low flow water fittings
- Construction materials with low environmental impact
- Building fabric – increased insulation thicknesses
- Low NOX boilers