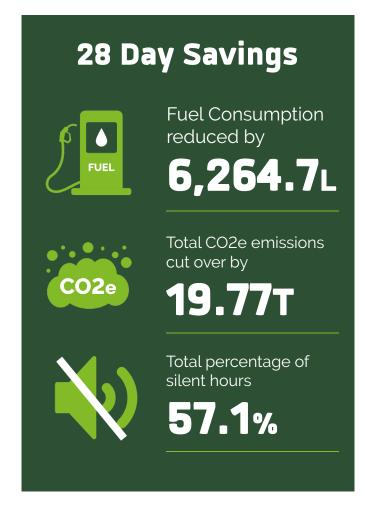
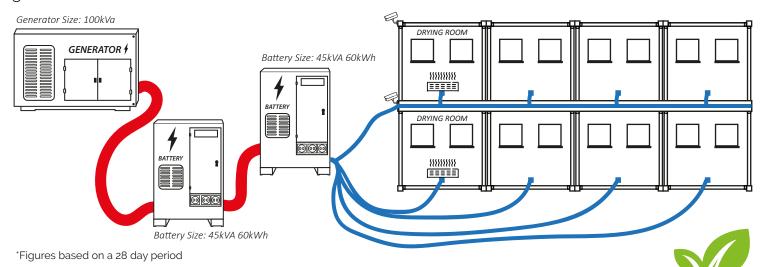


100kVA Day/Night Cascade Battery Hybrid Power Solution

Below is an example of a hybrid power solution combining a 100kVa diesel generator with 2 of our 45kVa 60kWh battery storage systems. In this example we are using the generator to power the site between 6am - 7pm Monday - Friday, 7am -2pm on Saturday and off all day Sunday. The battery takes over from the generator outside of these times delivering a 57.1% reduction in generator run time but maintaining a reliable, constant and silent power supply to the essential site loads. As you can see the generator output feeds the first battery which in turn feeds the second battery. The second battery in the solution controls the generator, starting and stopping it as required. When the generator turns off the first battery takes over, once this battery is depleted it stops supporting the load and the second battery takes over

Both the batteries are connected to the essential site cabins. Overnight we use the battery to keep a constant power feed to the CCTV and security hut but we intermittently turn power to the cabins and drying rooms on and off, keeping them warm but minimising draw on the battery system. This automated control allows a much smaller battery to be used and still deliver a large reduction in generator run time.





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