



HOTEL ACHIEVEMENT AWARD

THE BEST SUSTAINABILITY PROJECT IN HOSPITALITY FOR THE CROWNE PLAZA HUNTER VALLEY. Our manifestation of Corporate Social Responsibility (CSR)

(N.B. Rebranded to Rydges Resort in May 2023)





The Schwartz Family Company (SFC) is the largest private investor of Hotels and Resorts in Australia so it is socially responsible that we should look to reduce energy footprint across our portfolio which includes the Crowne Plaza Hunter Valley.

Over the last decade, the Crowne Plaza Hunter Valley has carried out the basic energy saving installations including:

- LED lighting upgrades,
- installation of Variable Speed Drives,
- new pumps/motors,
- new energy efficient chillers and assortment of Solar installs ranging from 30KW to 100KW.

These projects minimised cost of utilities, reduced emissions and reduce the carbon footprint.

SFC practices Corporate Social Responsibility (CSR) by encouraging not only the first three of the items below, but all of them:

- Reducing carbon footprints
- Corporate policies that benefit the environment
- Socially and environmentally conscious investments
- Improving labour policies (having introduced HIGA)
- Diversity, equity and inclusion
- Charitable giving (see www.schwartzfoundation.com)
- Community volunteering

In 2021, the Crowne Plaza Hunter Valley commissioned a 5 MW Solar Farm (solar farm No 1) containing 13,000 solar panels, two large 2.5MW Inverters with schletter racking. This solar install is the largest private solar farm in the Southern hemisphere and is located adjacent to the famous Crowne Plaza Hunter Valley 18-hole golf course.

The Project Manager for the feasibility of the solar farm was Paul Briggs, Sustainability and Projects Coordinator for the Schwartz Family Company. Paul comes with a great amount of experience with previous roles with the United Nations and The North Atlantic Treaty Organisation (NATO)



SOLAR FARM No. 1 (5MW)

The Development application for the solar farm, was lodged with Cessnock Council for a period of two years which had to be approved by the NSW Joint Regional Planning Panel and was unanimously determined on the 11 December 2018 . Design documents include.

- Statement of environmental effects assessment
- Geotechnical site investigating and associated activity assessment.
- “Civil aviation safety authority “CASA” due to the proximity of the Aerodrome
- Solar Panel reflective analysis
- Surveyors
- Shade Analysis of area
- Grid / network studies and augmentation and power quality assessment
- Location not to interfere with the local water source “Black Creek”.
- Application for connection (AFC) design certification/negotiated offer -Ausgrid
- Ausgrid for contestable and non-contestable works.
- Development Application
- Project procurement and schedules.
- Energy utilisation/trading options and returns.

The solar farm consists of an area of over 70,000m² which is 17.29 acres or 7.0 hectares of envelope space.

There are 13,350 x 375w (1500v) solar modules installed incorporated with cutting edge percium split cell technology and two x MV power stations centralised inverters incorporated.

There are 267 x 2V25 FS2V UNO ground mount tables with 105,600 metres of DC String/array cable and 4,950 metres of DC “Bus to inverter” cable. The solar farm features 3,350 metres of HV cable (OH) and 670 metres of HV cable (UG) all delivered in 55 x 40-foot shipping containers comprising of solar modules, ground mount racking, cable, conduit etc.

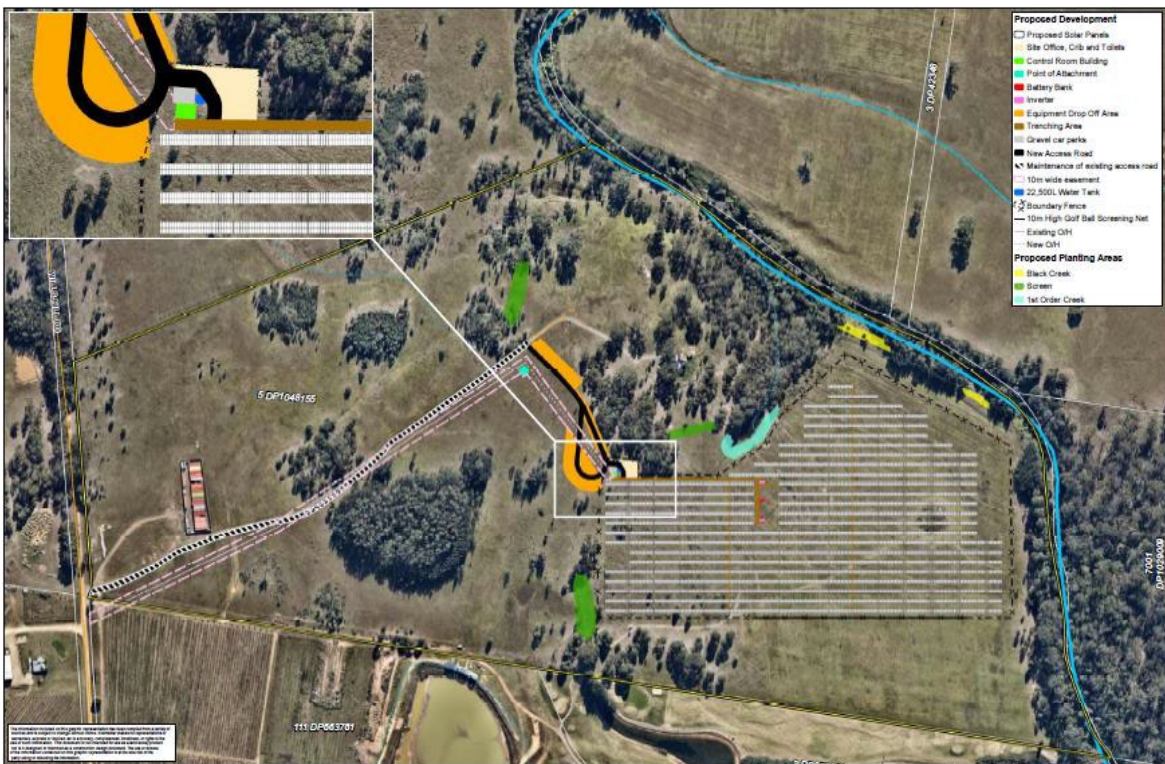
This project is considered innovative as no other Hotel owner or Hotel brand has ever carried out a solar project as large as this throughout the Southern Hemisphere and maybe the Hospitality World. Installing the 5.000MW solar farm will supply around 35% of our hospitality portfolios energy.

As the solar farm project is so innovative, there are endless financial strategies to reduce energy costs and maximise return on investment post project as well as the opportunity to reduce carbon emissions.

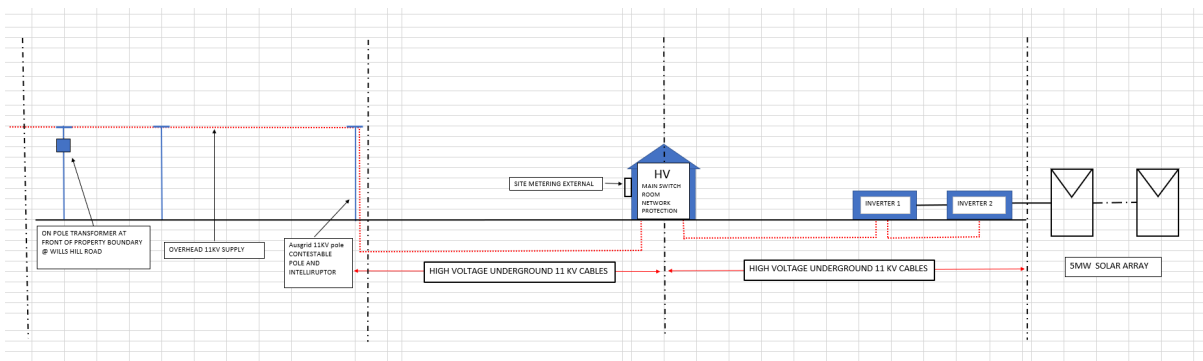
The resort consumes about 1MW of energy (per hour). This solar farm produces 5 MW, or about 5 times the current resort load! The Schwartz Family Company (SFC) portfolio consists of 14 hotels. Unused power from the solar farm is returned to the grid, and redirected to the other hotels in the portfolio. Hence, the energy created will contribute to over 35% of the portfolio’s usage. Iberdrola (energy retailer) manages the farm by using the yield as a net off to supply the Crowne Plaza Hunter Valley energy and the Schwartz Hotel portfolio.

Revenue from March 2021 to December 2020 was a **reduction of \$1,071,199.05** from the Hotels and Resorts energy usage.

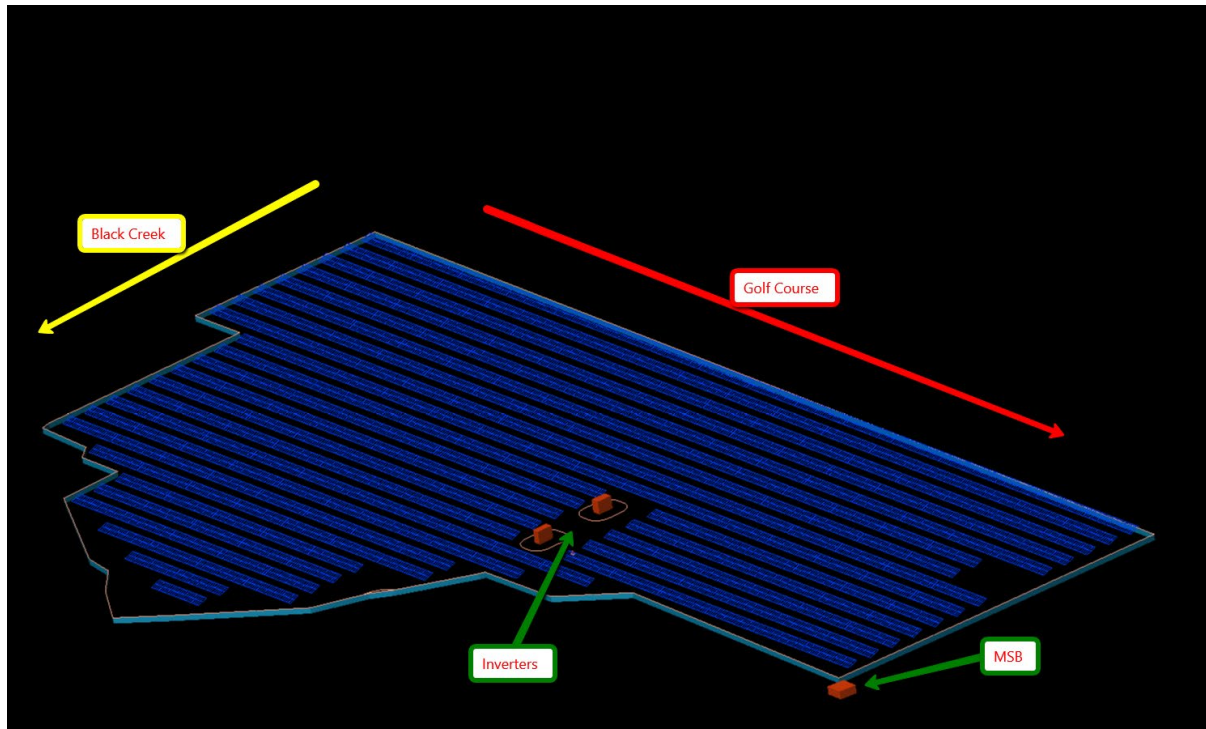
Moreover, the power not only supplies the hotel, and its facilities, but also provides the energy for the manufacturing of beer (Sydney Brewery) and Cider, and Whiskey (Two Doctors Whiskey), and the packaging process. The hotel bottles its own water in glass bottles.



A SINGLE LINE DIAGRAM OF THE INSTALLATION



HELIOSCOPE 3D MODEL



ENVIRONMENTAL BENEFITS

- Approximately 7,811,000 kg of CO₂ per annum saved.
 - Approximately 4,336 vehicles removed from the road per annum.
 - kWh of electricity produced = a 1.07 kg reduction in CO₂ Pollution, source: savepower.nsw.gov.au
- $120.1\text{g/km} \times 15,000\text{km} = 1,801,500\text{g} / 1000 = 1,801.5\text{kg/pa}$

SOLAR FARM No. 2 (5MW)

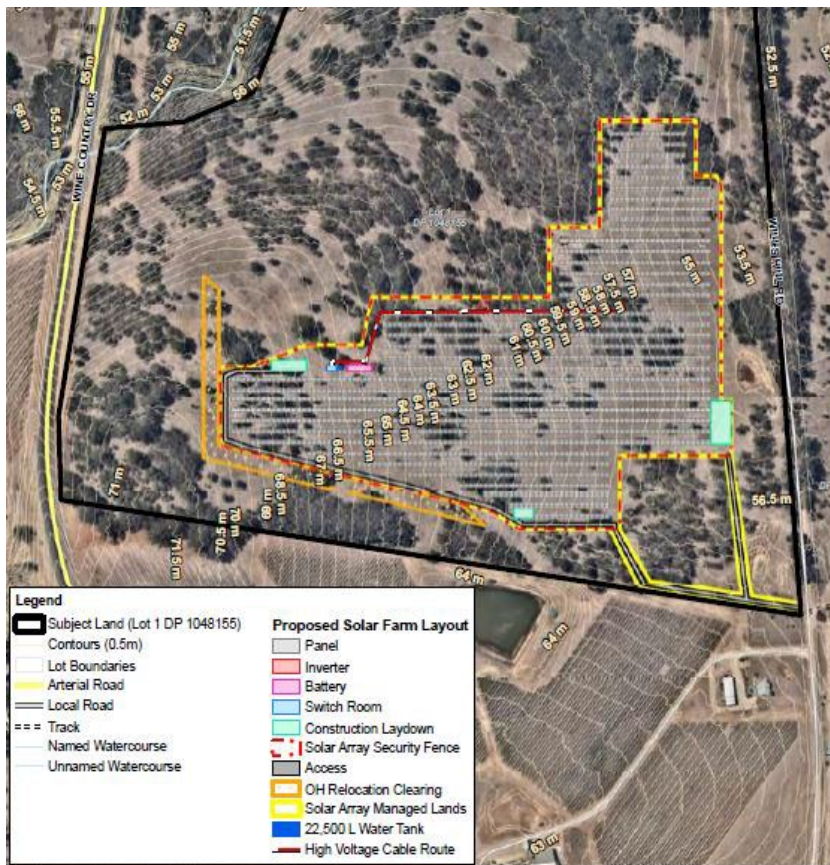
The Crowne Plaza Hunter Valley has also commenced on the next solar farm No 2.

Solar farm No 2 is also 5MW – AC / 6.5DC which was designed to fit into the footprint of the property. It is located across the road from the Resort and golf course and will supply North Rothbury Substation: with Solar Farm No 1 supplying Nulkaba substation. This means that the Crowne Plaza Hunter Valley can supply the Northern part of the Hunter Valley and the Southern part of the Hunter valley with renewable and sustainable “Green Power”.

With technology changing in the solar space, we need to move forward with changes to sustainability technology by implementing new strategies and new innovative infrastructure to become more sustainable!

Due to the new technology of solar panels, with Solar Farm No 2, there would be approximately, 11,000 solar Bi Facial solar Panels, two 2.5MW SMA inverters and Schletter racking.

Just as for Solar Farm No 1, the design documents included the same list of requirements as shown on page 1. Of this submission. It also took 2 years to obtain council approval, has now commenced, and will be operational in December 2023.



SUSTAINABLE CHILDRENS WATER PARK

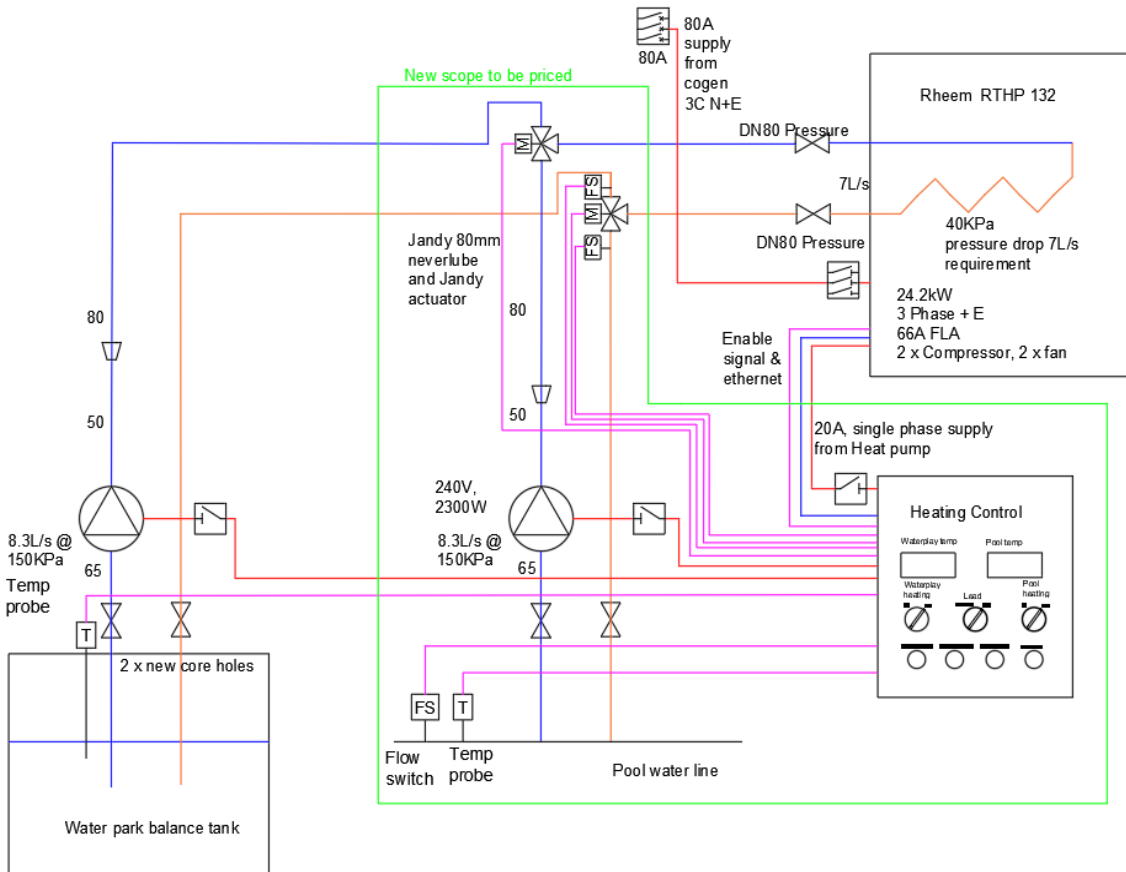
The Crowne Plaza Hunter Valley has installed a Sustainable children's water park. An electric heat pump has been installed as part as of the heating system with the introduction of smarts to make the water park 100% renewable. The energy to power the electric heat pump for the water park comes from the solar modules installed on the roof of the hotel, which makes the children's water park 100% sustainable throughout the day.

The current cogeneration unit waste heat also allows heating of the resorts large swimming pool throughout the day, and at night when the cogeneration is not operational, the children's water park heat pump supplies heat to the large resort pool so no gas is used. Not only is this project sustainable, but it also ticks the boxes being innovative and renewable with the smarts that have been introduced...

We believe that it is the only heated outdoor waterpark in Australia.



Diagram showing powering up of the heating of the water park:



ELECTRIC VEHICLE SUSTAINABLE CHARGING STATIONS.

The Crowne Plaza Hunter Valley was the first Resort/ Hotel to install EV Charging stations in Australia. We have now three EV stations with a powerful reporting tool with visual data presentation that allows for running reports on a variety of metrics such as energy (kWh), revenue, users' behaviour, etc.

The Analytics tool allows you to compare data from different periods, filter by criteria (e.g. type of charge point), the location, and more.





CROWNE PLAZA HUNTER VALLEY HOSPITALITY BOTTLED WATER FROM A SUSTAINABLE SOURCE.

Dam water is received via the Hunter Wine Country Private Irrigation District pipeline (PID) The PID is a community-initiated pipeline that is connected to a large upper hunter dam and supplies 450 vineyards, golf courses and tourism facilities in the Hunter district. The Crowne Plaza Hunter Valley has a water licence to receive the water via the pipeline for their process of manufacturing pure sustainable bottled water called “Devine Water”.

The dam water received is filtered to its highest level (see below) by many stages and is tested in the laboratory for the final bottling stage in the Lovedale brewery bottling line.

The process has been underway for over 12 months supplying the Schwartz Family Hotels and Resorts with **pure sustainable water** in a recycled glass bottle which is also sponsors World Vision. (With their logo on the cap, and on our label).

