

EL PELICANO SOLAR COMPANY CASE STUDY

NOVEMBER 2022

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El Pelicano Solar Company – otherwise known as Pelicano – is a renewable energy provider that owns a 110-megawatt solar plant in the Atacama region of Chile. The facility is expected to deliver 300 gigawatt (GW) hours per year of electricity to the Santiago Metro, the metropolitan railway which is a global leader in renewable energy use and whose network covers the city of Santiago.

300 GIGAWATT (GW) HOURS PER YEAR OF ELECTRICITY TO THE SANTIAGO METRO

Chile is probably one of the most suitable countries in the world when it comes to the development and usage of solar power. While fossil fuels are relatively scarce, the [Inter-American Development Bank](#) points out that the Atacama Desert is the driest place on the planet, as well as having higher solar radiation than anywhere else on earth. Meanwhile Santiago's metro network was the first public transportation system in the world to run on renewable energy. It expects to meet around 60% of its energy needs from solar or wind power.

Actis acquired the plant in December 2017, shortly after the facility began full commercial operations. We built a high-quality management team, and implemented a robust Board governance structure which combines extensive professional experience with significant local relationships. We also implemented a number of important cost saving initiatives and technical performance improvements. These included using remote monitoring and control systems based on advanced data analytics and the Internet of Things, as well as automation and process enhancements. Real-time information enables Pelicano's team, alongside Actis, to respond quickly to any operational matters requiring attention. Such data collection also enables trend analysis, which may lead to further operational improvements in the future. We have also embraced drones to improve the plant's operations: in 2020, Pelicano started running infrared imaging surveys using drones that provide data which helps the management team identify losses driven by hot spots, shading and other causes.

PELICANO'S POWER ACCOUNTS FOR 40% OF THE SANTIAGO METRO ENERGY NEEDS

SANTIAGO'S METRO NETWORK WAS THE FIRST PUBLIC TRANSPORTATION SYSTEM IN THE WORLD TO RUN ON RENEWABLE ENERGY. IT EXPECTS TO MEET AROUND 60% OF ITS ENERGY NEEDS FROM SOLAR OR WIND POWER.

All of Pelicano's power goes to the Santiago metro system, accounting for 40% of the network's energy needs. Santiago's metro system demonstrates the extent of the ambition of Chile's renewable energy programmes. Thanks to the solar energy provided by Pelicano, it will continue to offer a powerful example to other countries' transport systems of the opportunities that green energy can bring.