

## CASE STUDY

## INDUSTRIAL INSTALLATION

As a boatie, Rob Neely is more than familiar with the extreme elements that can confront you on the water. In over 40 years, he has endured the best and the worst of what mother nature can muster. He's seen first hand the power of the rain, the wind and the sun.

"I love boats and I'm fortunate enough to make my living from them too," says Rob, who owns full service boating business. All Marineworx in Chelsea Heights, Victoria. It's a result of this mix of business and pleasure that Rob first considered the viability of Solar. "For years I've been exposed to the strength of the sun and in business, I've been exposed to the ever increasing costs of power. Last year, it was time to do the numbers to see if Solar stacked up."

Rob engaged the services of leading Solar professionals, Solar + Solutions to determine whether his business would benefit from a commercial solar installation. "My accountant was sceptical to say the least," says Rob "but when the Solar + Solutions guys presented the projections based on their thorough understanding of our scenario, it was a no brainer."

Claude Picinali, General Manager of Solar + Solutions explains what they were faced with. "For a business the size of All Marineworx, they experienced reasonably high power costs but with no real discounts or tariff relief. Monthly electricity bills were averaging \$1,200 and we knew we could provide a solution that would positively impact on the profitability of Rob's business."

With mid to long term savings in mind, Solar + Solutions designed and supplied a system that in Rob's words, "is awesome."

Eighty 250 watt Suntech monocrystalline panels were installed on the roof, capable of generating an impressive total of 20 kilowatts of power. These panels were then mounted to a medium tilt frame with a NNW aspect allowing for maximum yield. "We chose the Suntech panels for good reason," says Claude. "They have exceptional low light performance which makes them perfect for Victoria's sometimes fickle weather. They also have an extremely narrow metal finger width, which increases the active and usable cell area of each panel. It's all about maximising efficiencies."

Two 10kw SMA inverters are used to channel the power of the sun and convert the direct current into alternating current for use within the business. These German made inverters employ cutting edge technology and research to ensure maximum yields yet have simple to use controls for operator convenience. All data is captured by Bluetooth via a wireless desktop device that allows Rob to monitor key information such as energy yield in dollar terms and CO2 savings. "It's almost addictive," says Rob. "To have factual detail on how the system is operating and in turn what that means for the business is fantastic."

With the system some six months into operation, Rob has seen an average of \$1,000 a month saved in power costs. Based on these figures Claude expects the total system outlay to have paid for itself inside four years. "Remember that we've yet to go through Summer with this particular installation so Rob will be seeing some terrific data in the coming six months."

Surveying the impressive power plant on his roof, Rob poses the question – "Why give my money to electricity companies when my business can harness its own power? That doesn't make good business sense to me."

Hmm.....that's food for thought Rob.

