# CLEAN TECHNOLOGIES IN ACTION



# **EMRO PRODUCTS PTY LTD**

Showcasing Emro Products, Industrial Ave, Caloundra as part of a series of case studies that have been developed to illustrate best practice Clean Technology solutions.

The Clean Technology industry has been identified as one of seven high value industry sectors for the Sunshine Coast region as defined in the Sunshine Coast Council's Regional Economic Development Strategy 2013-2033.

Emro Products is a leading Australian manufacturer of hardware, bathroom, marine and telecommunication accessories. The company specialises in zinc die-cast, machining, polishing, electroplating and plastic injection moulding.

Emro has a long standing commitment to reducing its impact on the environment through the implementation of process improvements and eco-efficiency measures. Over the long term the company aspires to become carbon neutral.

## Clean Technology Solutions at Emro:

- 2 x 15 kW solar PV system
- Real time solar generation monitoring
- Consolidation and installation of energy efficient lighting throughout premises
- Rainwater supply supplementing 60% of requirements
- · Recycling of metal 'polishing' water to reduce wastewater

## **BENEFITS:**

- Renewable energy supplying 23% of entire load
- Savings of over \$20,000 p.a. in energy costs
- Savings of around \$2000 p.a. in water and wastewater costs
- Reduction in carbon emissions of 30%



The Clean Technology industry on the Sunshine Coast generates \$214 million in economic activity, employs 1,770 people and has become a model for sustainability in Australia\*.

Please contact us to provide you with a list of regional solution providers.









# What is Clean Technology?





Economically viable products, services and processes that harness renewable materials and energy sources, dramatically reduce the use of natural resources and cut or eliminate emissions and wastes.



# Renewable Energy and **Energy Efficiency**

**Emro Products partnered with** Sunshine Coast company 'The Sun Works' to install solar PV systems on their manufacturing and distribution facilities.

Emro was successful in obtaining a Clean Technologies Foundry Invest Program Grant which contributed 50% of installation costs. A cloud based solar log monitoring system provides real time monitoring of the system and delivers regular reports on solar PV generation.

Lighting was consolidated by Lance Milne Electrical which included the installation of 54 watt high efficiency LED lights (4 per fitting) which replaced the 400 watt high bay mercury vapour lights. Also replacement of various other bulbs with more efficient T5 fluorescents and LEDs.

#### **FEATURES:**

- 2 x 15 kW solar system on two buildings
- · Real time monitoring of solar power generation
- · Energy efficient lighting throughout premises



## **BENEFITS:**

- Solar PV provides 23% of electricity requirements and savings of around \$15,800 p.a (64,700 kWh)
- Lighting electricity reduced by 21,200 kWh and \$5,000 p.a.
- Carbon emissions reduced by 30%



# Water Supply and Wastewater Management

Rainwater tanks with 70,000 litre capacity supplement supply to the manufacturing plant which is used in the plating baths and other areas. The system was designed and installed by Emro.

Water is mixed with fibre-glass stone in the polishing machines to polish the various fittings.

Wastewater from the process flows into two settling tanks where sediment is separated from the metal polishing water so it can be recycled back though the process.

## **FEATURES:**

- 7 x 10,000 litre rainwater tanks
- Settling tanks to separate and recycle wastewater

**66** We are always looking for ways to build a more sustainable business and we are proud of what we do. The use of clean technologies has helped us take further steps towards our long term goal of being carbon neutral. "" Martin Roth



#### **BENEFITS:**

- Rainwater provides around 1000 kL p.a. or 60% of water needs
- Reduction in water and wastewater volume and savings of around \$2,000 p.a.

<sup>1</sup>Data referenced in the Regional Economic Development Strategy (2013 - 2033).

The future is here

### FOR MORE INFORMATION

Go to www.invest.sunshinecoast.qld.gov.au or email invest@sunshinecoast.qld.gov.au or call the Coordinator - High Value Industries on +617 5475 9932.

