



Frabelle MicroCSP Process Heat Project

Project Overview

The MicroCSP system will provide industrial process heat for Frabelle's tuna canning facility. The Papua New Guinea-based facility processes tuna for export mainly to Asia and the European Union, as well as canned local and export markets.

The MicroCSP system is designed to provide hot water at 98 °C for can washing during the tuna packing process. This step allows the obtaining of clean, high quality tuna steak, in which hot water is used to kill all forms of life, including transmissible agents (i.e. fungi, bacteria, viruses) present on can surfaces. The hot water also serves to pre-heat boiler make-up water for generating steam used for kettles and pre-cookers, and finally, thawing.

Headquartered in the Phillipines with operations across the globe, Frabelle-Frescomar, Corp (FFM) specializes in deep-sea fishing, processing, packing and shipping of fresh and frozen high quality fish products. The company's activities are mainly concentrated in Lae City, Morobe Province, Papua New Guinea – the site of its multi-million dollar production plant.

Environmental Impact*

The 1MW output of the MicroCSP process heat system at Frabelle will reduce CO₂ emissions by **14,760** metric tons over the lifetime of the product. For perspective, the system's impact is equivalent to:

- Eliminating **34,450** barrels of oil consumed
- Removing **2,910** cars off the road
- Reducing **208,731** cubic feet (Mcf) of natural gas

*Source: EPA Greenhouse Gas Equivalencies Calculator
<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

APPLICATION

1MW Process Heat for thawing, pre-cooking, can washing, and boiler feed

LOCATION

Lae City, Morobe Province, Papua New Guinea

PROJECT COMPLETION

Construction in progress

THERMAL CAPACITY

1,196kW

FOOTPRINT

48,960 sq. ft. / 4,549 m²

PRODUCTS

- 480 SopoNova® parabolic trough collectors
- SopoTracker™ Field Controls

HEAT TRANSFER FLUID

Water

ESTIMATED ANNUAL SOLAR PRODUCTION

- 8,216 MMBTU
- 2,409,700 kW of thermal

OPERATING TEMPERATURE RANGE

Inlet - 89.3°F / 31 °C

Outlet - 208.4°F / 97 °C

