



APPLICATION HYBRID VEGETABLE OIL/DIESEL with GENSYS 2.0 & Additional extensions



FRENCH POLYNESIA

The world of energy is constantly changing and requiring more economical and ecological solution; Renewable energy such as vegetal oils rises new challenges in terms of genset control innovation and adaptation.

The use of vegetal copra oils, palm oils or colza oils now produce a profitable energy by limiting emissions of Nox. The engines using these technologies require complex fuel managements according to:

- The required power,
- Ambient temperatures
- Temperature of the fluid,
- The operating status (group on load, synchronization, in default ...)

All these challenges have been met by CRE TECHNOLOGY through GENSYS2.0. This case study highlights GENSYS 2.0 installed on a 6 generators power plant functioning with copra oil on an island in French Polynesia.

Features specific to this project are:

- Management of oil heaters
- Management of diesel pumps and oil pump for fuel switching circuits
- Automatic switching operation for diesel or oil running, based on complex probes analyze following: The engine temperature, the system temperature, vegetal oil temperature, the power require on the plant
- Engine cleaning with diesel before stopping.
- Protection of oil temperature and oil pressure to maintain liquid state.
- Synchronization and paralleling of engine with diesel for better stability

CRE TECHNOLOGY equipment used for each generator:

- GENSYS2.0
- Additional extensions (48 digital inputs - 48 digital outputs - 16 analog input - 4 analog outputs)





EXPERT IN GENERATOR SOLUTIONS

CRE TECHNOLOGY

130 allée Charles-Victor Naudin - Les templiers - Sophia Antipolis
06410 BIOT / FRANCE
Tél: +33 (0) 492 38 86 82
Fax: +33 (0) 492 38 86 83
info@cretechnology.com



www.cretechnology.com