



APPLICATION HYBRID VEGETABLE OIL/DIESEL

with GENSYS 2.0 & Additional extensions

FRENCH POLYNESIA

The world of energy is constantly changing and requiring more economical & 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 **GENSYS 2.0**. This case study highlights the **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
- Temperature vegetal oil
- 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:

- **GENSYS 2.0**
- Additional extensions (48 digital inputs - 48 digital outputs - 16 analog input - 4 analog outputs)

APPLICATION



GENSYS 2.0 on panels



Application hybrid vegetable oil/diesel with GENSYS 2.0 & Additional extensions

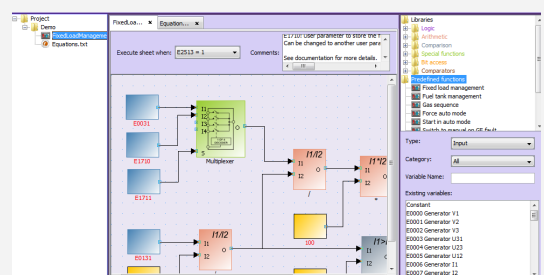
PROGRAMMING

EASY PLC

Program and customize your internal logical sequences

CRE TECHNOLOGY's Easy PLC is a logic editor which provides graphical interface to create PLC instructions for GENSYS2.0.

Easy PLC simplifies the process of proprietary writing instructions thanks to a user-friendly graphic environment. That includes many sheets in which the user create instructions through «operators».





EXPERT IN GENERATOR SOLUTION

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

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