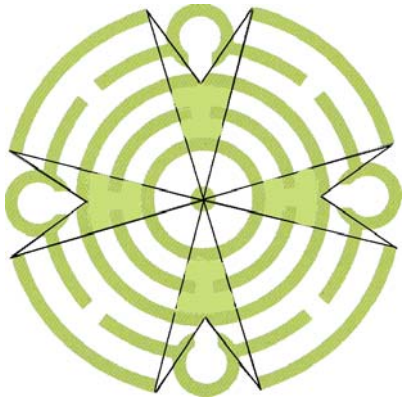

INRES

INsular regions cooperation for maximising the environmental and economic benefits from the research in Renewable Energy Sources

Presentation of R&D activities in Canary Islands

Julián Monedero (Dobon's Technology, S.L.)

BEST PRACTICES: RENEWABLE ENERGY ISLANDS

29/3/2012 - Canary Islands Government delegation in Brussels

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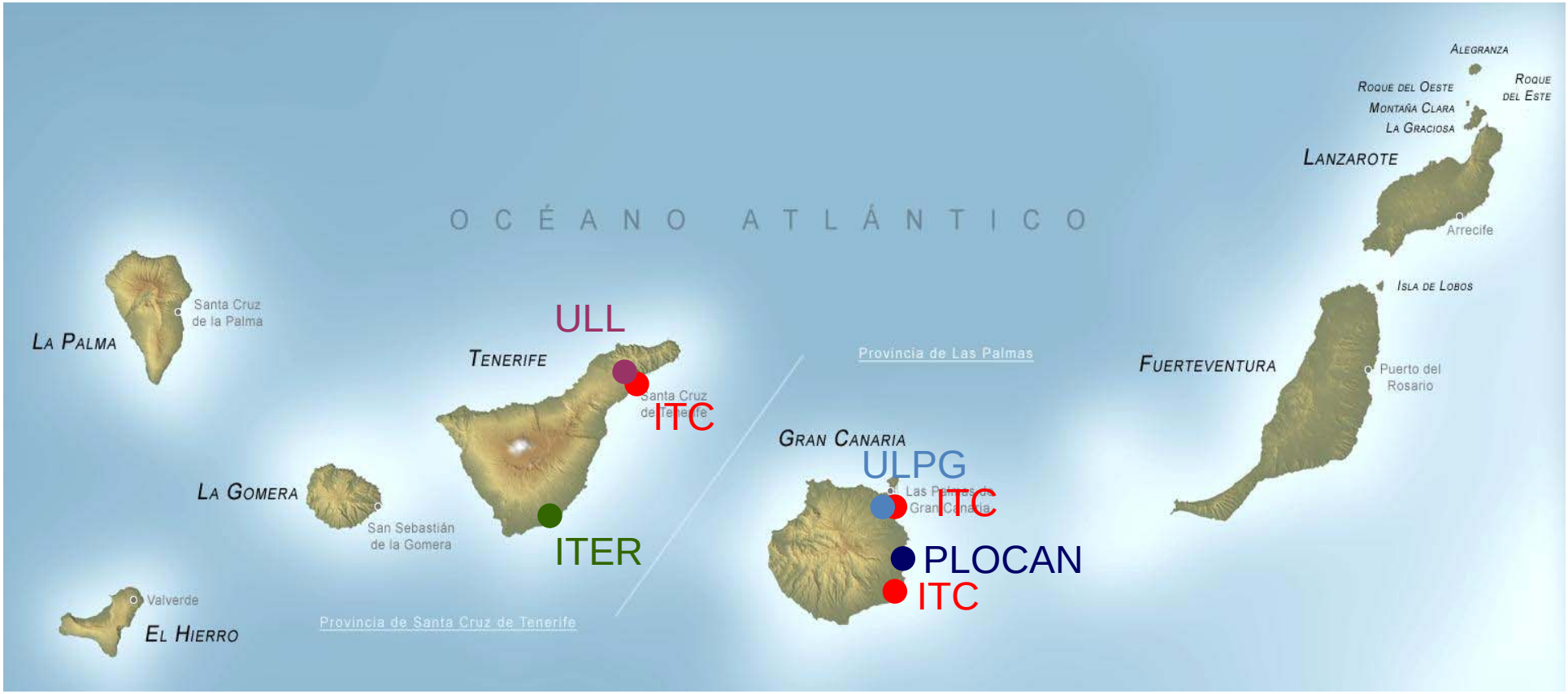
- **Instituto Tecnológico de Canarias (ITC)** → Regional Government Company.
- **Instituto Tecnológico y de Energías Renovables (ITER)** → Tenerife Island Government Company.
- **Plataforma Oceánica de Canarias (PLOCAN)** → National & Regional Government Institution.
- **Universidad de La Laguna (ULL)** → Tenerife Island University.
- **Universidad de Las Palmas de Gran Canaria** → Gran Canaria Island University.

Distribution of Research Centers



RENOW Project: Strategies on Use of Renewable Energy in West Africa

Objective:

Achieve that Public Bodies adapt its resources and capacities to global changes for becoming them capables in self-supplying electricity of the urban and rural areas.

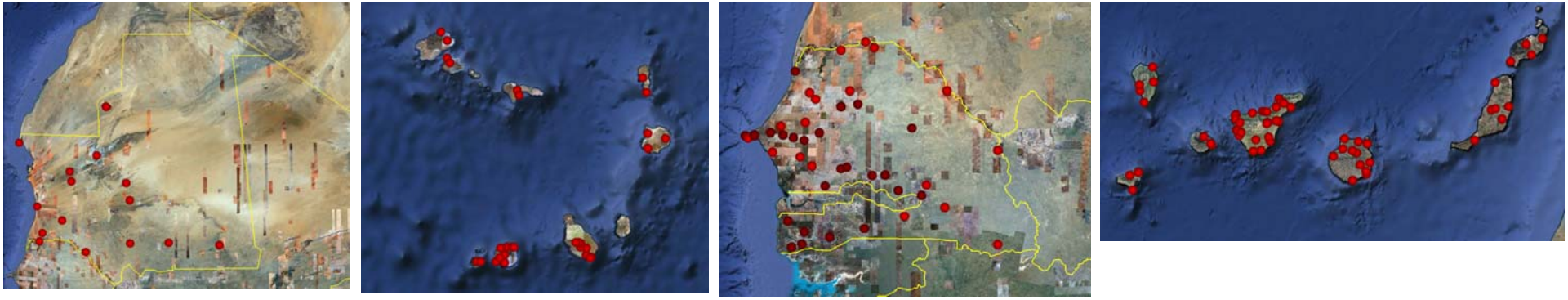
Involved Regions/Partners:

Government of Canary Islands (ITC), Government of Senegal, Government of Cape Verde, Government of Mauritania and RICAM Cluster

RENOW Project: Strategies on Use of Renewable Energy in West Africa

Research Activities:

Meteorological research for obtaining solar resource maps at the participating regions for Solar Energy Projects and development of a GIS web-based software platform.



Microgrid Rural Electrification (Vale da Custa - Cape Verde)

Objective:

Rural electrification using renewable energy (small wind and PV) of Vale da Custa, a small depress non-electrified village at the Santiago Island in Cape Verde.

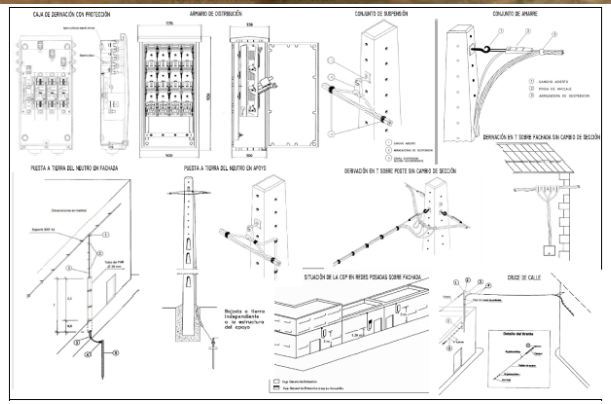
Involved Regions/Partners:

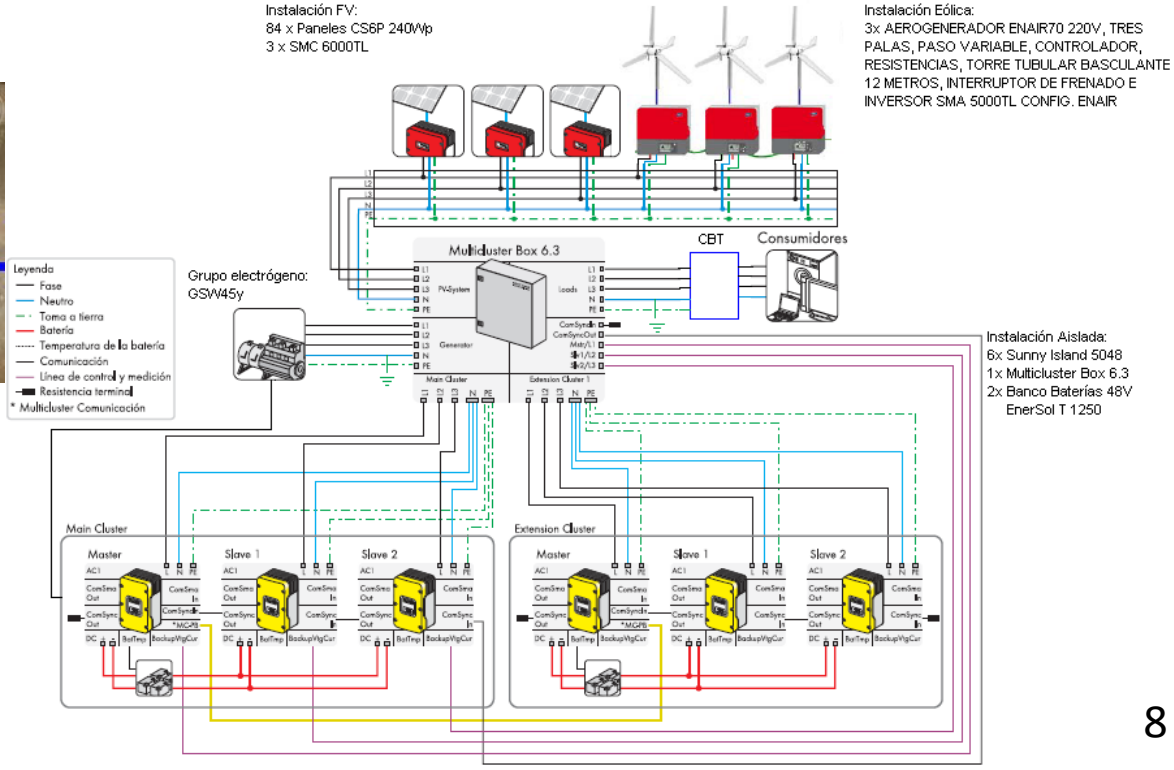
RICAM Cluster, Government of Canary Islands, Government of Cape Verde, Instituto Tecnológico de Canarias (ITC).

Microgrid Rural Electrification (Vale da Custa - Cape Verde)

Research Activities:

Research on energy management of an isolated micro-grid system.





Pilot Project on Energy Saving and Efficiency for Hotels

Objective:

Promote hotels Environmental Policies and management by using a TIC energy saving platform, involving hotel guests.

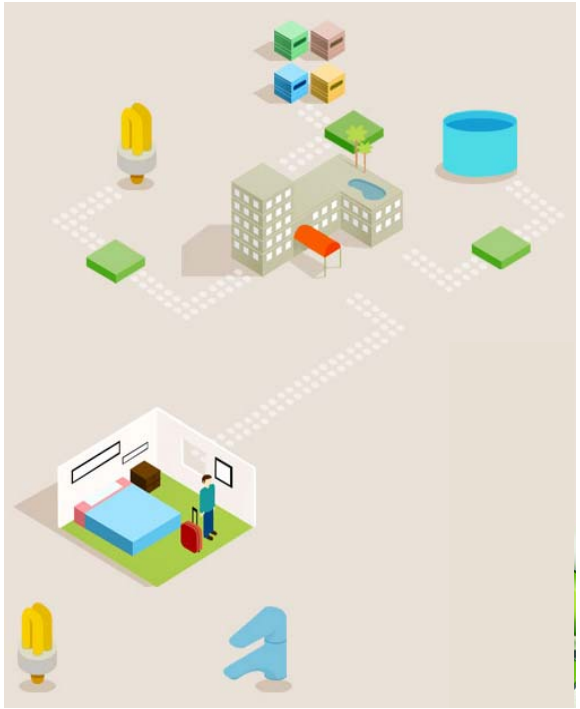
Involved Partners:

Turisfera Cluster (Tenerife Island Tourism Cluster), Insignia Cluster (TIC Cluster) and RICAM Cluster.

Pilot Project on Energy Saving and Efficiency for Hotels

Research Activities:

Development of a web-based TIC system and sensor network for monitoring and control energy, water and environmental parameters.



Jatrofa Project

Research Activities:

Technical and economical feasability study of jatrofa crops for biodiesel production at Fuerteventura island (low water resources, degradated soil and adverse weather).

Involved Partners:

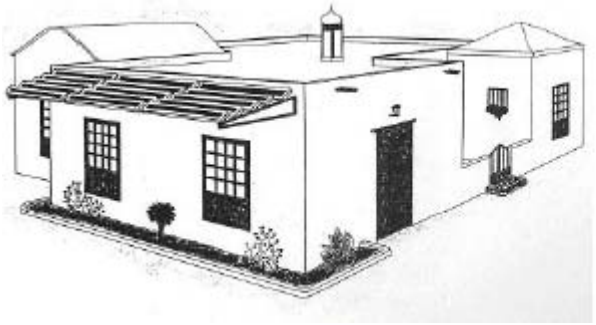
University of La Laguna, University of Las Palmas de Gran Canaria, Fuerteventura Island Government, Canary Islands Government.

Jatrofa Project

Solar Thermal Energy Products

Research Activities:

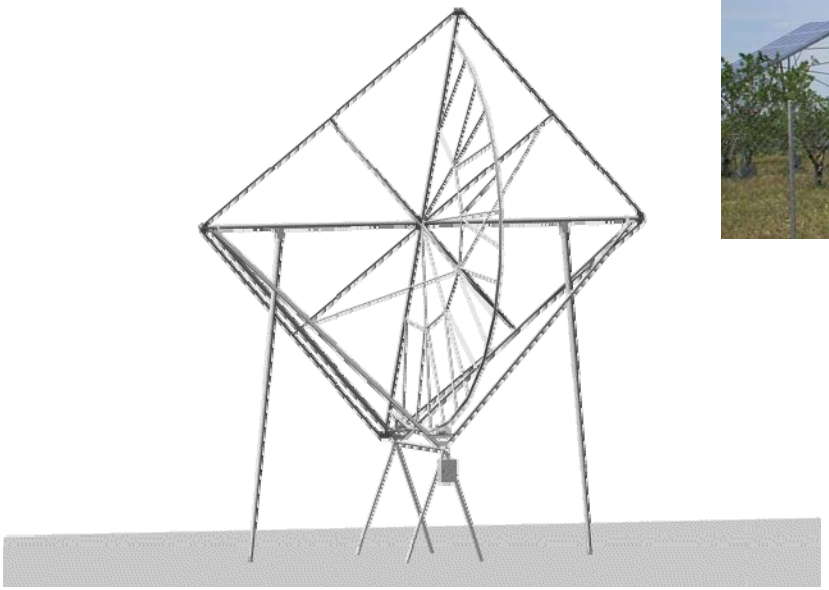
- Development of special Flat Plate Thermal Collectors for building integration.
- Doble Effect solar heat-exchange system for multi-dweling buildings family (35% more efficiency than conventional systems).

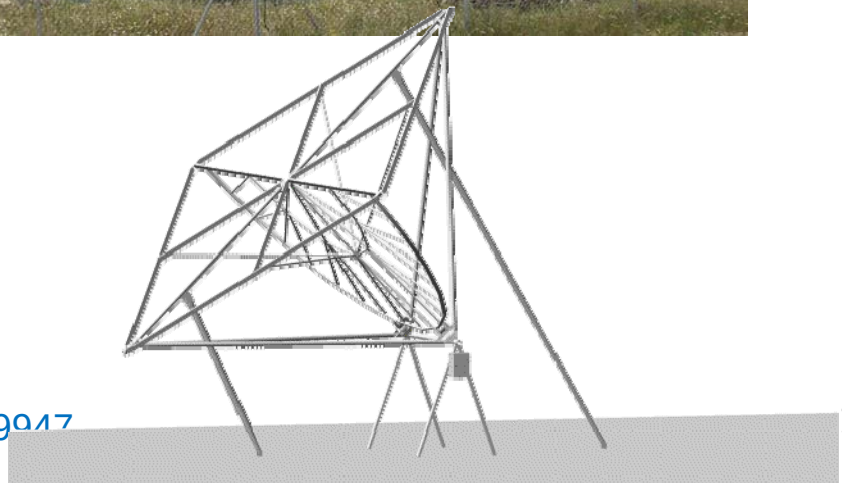


Two Axis Tracking System

Research Activities:

Development of a two-axis tracking system for PV applications.





PV Concentration Devices

Research Activities:

Development of low and medium PV concentration modules.

Involved Partners:

Abengoa (Spain), Ciemat (Spain), Solartec (Rep. Chech), Fachhochschule Gelsenkirchen (Germany)

PV Concentration Devices