

The National Renewable Energy Centre of Spain -CENER- is a technology centre specialized in applied research and development as well as the promotion of renewable energies. CENER is divided into six departments: Wind Energy, Photovoltaic Solar Energy, Solar Thermal Energy, Biomass Energy, Bioclimatic Architecture and Renewable Energy Grid Integration.

More info: www.cener.com



ENERGY STORAGE FOR RENEWABLE ENERGIES INTEGRATION



- CENER aims to the improvement of renewable energies integration in the energy market by means of using energy storage systems, like hydrogen, flow batteries, etc.
- IRE (Renewable Energies Grid Integration Department) has developed different softwares to study the integration of hydrogen in the energy sector:
 - Our WindHyGen® tool, allows to carry out technical-economic and management studies of a wind farm including hydrogen technologies and taking into account the energy sales.
 - Hyntegra® 1.0 carries out technical-economic studies of residential fuel cell systems.
- Our RES-H2 laboratory allows the evaluation of the performance of renewable energy systems connected to hydrogen technologies (RES-H2 systems).
- In the electrochemical laboratory we offer the possibility to design and test any electrochemical prototype.
- Moreover, using different kinds of software, our department can develop a wide range of models (from micro to macro level) to help in the design or optimisation of electrochemical devices.

