

TESTS & TRIALS

Develops asset management and maintenance activities, in order to increase safety, reduce failures and optimize maintenance and environmental costs.



ELECTRICAL AND ELECTROMECHANICAL TESTS:

- analysis of the performance of electrical and electromechanical systems
- health index determination of systems and electrical equipment
- type tests and routine tests
- maintenance engineering and fault diagnosis
- calibration of test and measurement equipment
- tests of live working tools.



INSULATING MATERIALS:

- preventive supervision and life expectancy determination of electrical equipment
- transformer insulating oils regeneration
- consultancy on online monitoring of transformers
- post-mortem analysis of transformers.



POWER GRID ASSET INSPECTION:

- overhead power line multi-sensorial inspection (helicopter and UAV): infrared thermography, visual, ultraviolet and LiDAR
- LiDAR processing: distance clearance on power line corridors, point cloud production, 3D digital models
- asset condition monitoring based on infrared thermography (substations, powerplants and other industrial installations).

ENERGY CONSULTING

Develops consultancy and innovation projects in the field of energy systems and conducts simulation studies on electrical power systems and equipment.



TECHNICAL STUDIES:

- expertise analytical and digital simulation studies:
 - renewable Energy Power Plants integration in the grid
 - insulation coordination
 - grounding systems evaluation and design
 - power quality and reliability
 - post-mortem incident analysis
 - overhead line and underground cable interference with buried pipelines
 - power systems dynamics and stability
 - electromagnetic field evaluation
 - power systems protection.



TECHNOLOGICAL CONSULTANCY:

- development and application of innovative technology solutions in power systems
- development of assets management projects (key equipment evaluation, preventive and corrective maintenance programming)
- development of energy efficiency studies
- project development in fields such as:
 - renewable energy
 - asset management
 - energy storage
 - electric mobility.



FABLAB EDP:

- digital fabrication and prototyping laboratory with digital tools and computer controlled machines based on a concept of free access tools and knowledge sharing to be able for anyone to make almost anything
- innovation and creativity enhancement; methodology learn by doing.