

ENERGY EFFICIENCY IN ENERGY SYSTEMS

A new generation Automation&Control in energy plants: the Expert Energy System.
System → Model → Prediction → Control

PURPOSE

- Energy Efficiency requires a new way in designing and managing energetic systems.
- ✓ Centralized and Controlled approach:
 - shorter Payback Time in Smart Grid App
 - ✓ System Automation and Control provides:
 - proper functioning
 - optimal performance over time.

APPROACH

- "The whole is more than the sum of its parts"
(Metaphysica, Aristotle), each component interfaces with the other ones creating new unexpected interactions.
- ✓ System engineering:
 - includes socio-economic aspects
 - environment

INNOVATION

- ✓ outline of the next day production
- ✓ a homogeneous model from heterogeneous components
- ✓ centralized operation, local&remote, towards all active elements
- ✓ mechanisms for maximizing Production, minimizing Consumption and preventing Critical Situations through a Closed-loop Control Plane in distributed systems.

