

## Partner offer (competences/expertise)

**Title:** IASI Expertise in Energy

**Description:** IASI research activities in the Energy field covers the following subtopics:

### **Efficiency in Power production:**

IASI has expertise in the modeling of industrial process of power generation companies, in the design and development of algorithms to solve optimization problems in the short-term management of power generation plants (Unit Commitment), in the design of transmission networks with attention to the system security, reserve management, and intelligent dynamic management (Optimal Transmission Switching), in the modeling of market energy management, in models and algorithms for the design of bidding strategies in power energy markets for generation companies, in the management of the above problems also in the presence of uncertainty through stochastic programming and robust optimization.

### **Energy efficiency for Telecommunication Networks:**

IASI has expertise in energy efficiency for cloud computing systems and dynamic management of telecommunication networks.

### **Gas and Oil Supply:**

IASI has expertise in gas and oil supply by means of pipelines and ships. This includes design and development of algorithms for the short-term management of pipeline and handling of different supply contracts. Moreover, this also includes the design and development of algorithms for the supply by means of ships, the handling of different renting contracts, management of port infrastructures.

## Topics

EE-07-2016-2017:

Behavioural change toward energy efficiency through ICT

LCE-01-2016-2017:

Next generation innovative technologies enabling smart grids, storage and energy system integration with increasing share of renewables: distribution network

LCE-05-2017.:

Tools and technologies for coordination and integration of the European energy system

## **Contact**

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Organisation: Research Organization