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Operational structure

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MEDEE, French cluster specialized in Electrical Engineering, wishes to bring businesses closer to the research community. With an operational structure created in 2010, it aims to attract smaller local companies to collaborate in R&D projects.

At the heart of the innovation players network, the research cluster MEDEE, is a collaborative tool for companies, laboratories and the great Nord de France region.

INNOVATION ELECTRICAL ENGINEERING COLLABORATIVE R&D PROJECTS

Its ambitions:

- Emerge as a leading institution in the electrical efficiency of industrial processes and in electrical power generation efficiency.
- Establish itself as an ambassador of the Region abroad on such topics, and be recognized as a key player in the Third Industrial Revolution > decentralized energy systems, storage, smart grids...
- Bring together **industrial players**, **large companies and SME**, provide support for their innovation transfer and technological leap as well as contribute to their economic development.

Its areas:

MEDEE partners are committed to the development of technological innovations in the field of **high power components and electrical chains in order to increase their performance**:

- on machines themselves : eco design and maintenance, (motors, generators...)
- on their steering and regulation systems
- on the systems in which they are operated (grids, factories...)

MEDEE seeks to overcome hindrances by focusing on priority key technologies: highefficiency motor, variable speed drives, intelligent components...

TARGET MARKETS

- **Industry**, with the implementation of innovative solutions in energy efficiency (electrical)
- Electricity generation from renewable sources, especially wind energy and electrical distribution network management.
- Transportation (rail, air, marine, electrical vehicle...)

Its means:

The partner research laboratories, (private and public), have unique technological platforms: power networks simulation, modelling/multi-criteria optimisation, high power bench, eco design and reliability, thermal management...

Its national and European partnerships:

- → S2E2: Cluster for technologies of smart electricity and smart grids serving the energy efficiency. (Centre et Pays de la Loire Region).
- → Railenium: Technological Research Institute dedicated to railway transport. MEDEE leads its «Energy» working group. (Nord-Pas de Calais Region)
- → CEVEO: Wind expertise and recovery centre which gathers various academic skills (Normandie, Picardie et Nord-Pas de Calais regions).





