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SYDNEY



## Electricity Market for Future Active Distribution Network

**The development of new market-oriented energy systems and mechanisms for future active distribution systems, to respond to the needs and requirements that the increased penetration of distributed energy resources place on the distribution network.**

### Competitive advantage

- Expertise in facilitating peer-to-peer electricity trading among energy prosumers in the distribution network
- Collaborative filtering technique-based electricity retail plan recommendation system for smart grid end users

### Impact

- The creation of a decentralized, secure, and efficient electricity trading mechanism in the distribution side that will enhance the experience of sharing for end users.

### Successful applications

- Multi-agent based electricity trading negotiation framework for prosumers
- Decentralized electricity trading system based on multi-agent intelligence and Blockchain
- The electricity retail plan recommendation system has been tested on the real “Power-to-Choose” retail plan set and Australian “Smart Grid, Smart City” dataset. The testing results prove the efficiency of the system

### Capabilities and facilities

- Java Agent Development Environment (JADE)
- PLEXOS, PSS/SINCAL, and Matlab Simulators

### More Information

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