

Turku University of Applied Sciences

New Energy

Research group leader

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New Energy

Energy transition is ongoing and World needs clean renewable energy production and electrical transportation. For the renewable energy it is characteristic that production is fluctuating strongly. This and emerging electrification of the mobility will rise new opportunities and challenges for the electrical infrastructure. It will create need for smarter energy production and use.

Responding to these challenges is a key objective of the New Energy research group. The goal requires the future smart energy systems research with a focus on decentralized energy production (solar photovoltaic, wind power and bio energy), RES network integration, integration of the EV charging infrastructure, new converter technology, electrical storages and energy management systems. Electrification of the mobility will also rise need to solve the Last Mile Problem.

Research group will use latest digital tools such as Hardware-In-the-Loop simulation and Rapid Controller Prototyping environments to facilitate fast, safe and efficient development.