

Marine Mobile Multi-Energy Network Towards Carbon Neutrality

Abstract-To develop smart connection between mobile microgrid and seaport microgrid paves a significant way to promote the maritime power. However, the comprehensive energy utilization of ships and seaports are restricted by the lack of the relevant theories and methodologies. Accordingly, many countries make the best effort to introduce the advanced energy technology into marine power systems to reduce fuel cost and carbon emissions. In this presentation, with the focus on marine mobile multi-energy network, I will mainly introduce three part that are 1) maritime renewable energy forecasting; 2) optimal allocation of multi-energy seaport microgrid, and 3) energy management of marine transportation and power network with renewables.