

Invited Lecture

Transition to net zero - Strategies of energy companies facing climate change challenges on the example of the Energa Group

Krzysztof Borkowski, Energa

The world is on the path to decarbonization in every part of the economy. The energy sector is on the forefront of that change with many companies aligning their strategies to the new climate policy goals. The European Union long term objective is to be climate-neutral by 2050. This goal poses a great challenge for every country and especially Poland, relying heavily on coal to produce both heat and power.

Investment in the domestic energy sector is shifting strongly towards renewables, grid infrastructure and CCGT's for flexibility provision and securing the uninterrupted operation of the power system. However in order to reach a net-zero economy advancement in new technologies is required. Among those smart grids, energy storage and hydrogen production are posed to play the key role in shaping the future of energy system.

Energa Group is one of many companies facing climate policy challenges. After merger with PKN Orlen, largest oil and gas company in central and eastern Europe, new strategy was formulated with carbon neutrality as it's integral objective. The author will characterize major challenges of energy system transformation on the example of the Energa Group. In hope of building a rapport between business and academia, relevant technologies and key areas of R&D interest will be named and briefly discussed.