Lehrstuhl für Wirtschaftliche Staatswissenschaften, insbesondere Energiewirtschaftslehre

Staatswissenschaftliches Seminar
Mikroökonomik, Institutionen und Märkte

Masterarbeit zum Thema

Future Electricity Demand – Structural Breaks and Changing Patterns

Decarbonizing the energy consumption according to the Paris Climate agreement necessitates not only a changing future energy supply, but also a change in energy demand. Sector coupling, i.e. the electrification of the building and mobility sector, as a decarbonization strategy changes the future electricity demand. Thereby not only the total amount of consumed electricity may increase, but also changing demand patterns are most likely to occur. Yet it is unclear what structural breaks and which consumption patterns could evolve and which requirements these changes would impose for electricity generation. Therefore, this thesis should research the projection of future electricity demand patterns and what impact these new patterns would have a future electricity system.

Einstiegsliteratur

Boßmann, T., & Staffell, I. (2015). The shape of future electricity demand: exploring load curves in 2050s Germany and Britain. Energy, 90, 1317-1333.

Yamagata, Y., Murakami, D., & Seya, H. (2015). A comparison of grid-level residential electricity demand scenarios in Japan for 2050. Applied energy, 158, 255-262.

Schweizer, V. J., & Morgan, M. G. (2016). Bounding US electricity demand in 2050. Technological Forecasting and Social Change, 105, 215-223.

Ansprechpartner

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