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Jens Leth Hougaard, Dorte Kronborg, Aleksandrs Smilgins

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# Fair division of costs in green energy markets

**Jens Leth Hougaard**

Department of Food and Resource Economics  
University of Copenhagen,

**Dorte Kronborg**

Center for Statistics, Department of Finance  
Copenhagen Business School,  
and

**Aleksandrs Smilgins**

Department of Economics  
Copenhagen Business School.

## **Abstract**

This paper considers cost allocation in networks where agents are characterized by stochastic demand and supply of a non-storable good, e.g. green energy. The grid itself creates possibilities of exchanging energy between agents and we propose to allocate common costs in proportion to the economic gain of being part of the grid. Our model includes a set of fundamental requirements for the associated trading platform. In particular, it is argued that a suitable mechanism deviates from a traditional market. The approach is illustrated by simulations.

**Keywords:** Cost allocation, Networks, Gains, Electricity, Smart Grids.

**JEL-codes:** C63, D47, D63, L94

**Correspondence:** Aleksandrs Smilgins, ECON, Copenhagen Business School, Porcelaen-shaven 16 A, 2000 Frederiksberg, Denmark.

E-mail: ams.om@cbs.dk

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