

A Design Perspective on Networked Business Models: A Study of Distributed Generation in the Power Industry Sector

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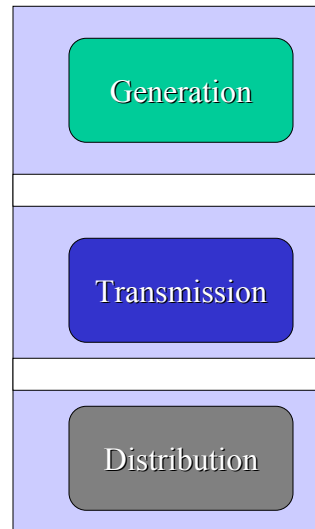
Approach

- Creation and analysis of new *networked business models* for the emerging case of **distributed** power **generation** in the electricity sector
- Design perspective: use *e⁻³value* modeling approach
 - *e⁻³value* developed and tested for e-commerce applications
 - **Discover and evaluate emerging networked business models with *e⁻³value***

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Trends in the electricity sector

- Reorganization forced by:
 - Technological advances: small-scale efficient generators are available on the market
 - Necessity: increase efficiency + reduce environmental emissions
- Characteristics:
 - > horizontally integrated market instead of a vertical monopolistic one
 - > new actors, value activities, and business scenarios emerge
 - > strong influence of regulation



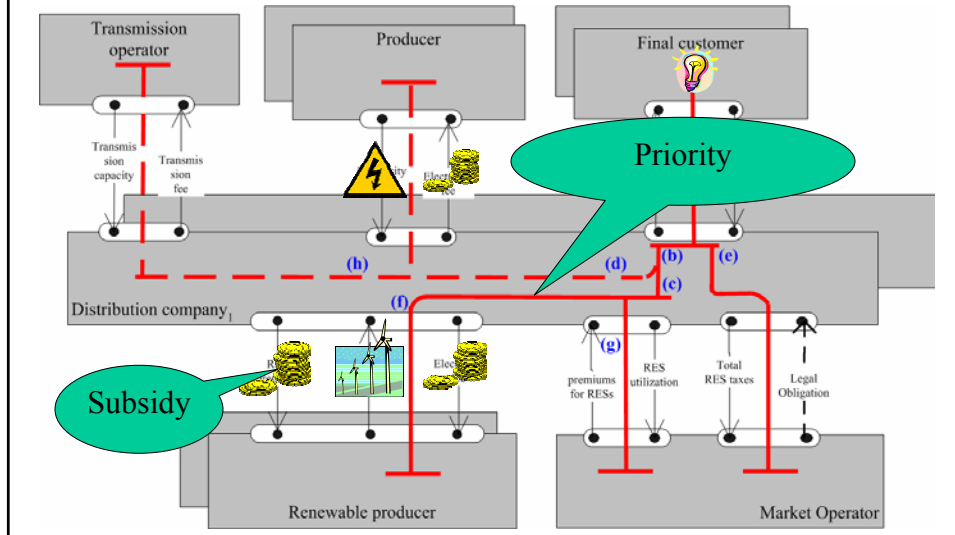
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New networked business models for the electricity sector

- Business model 1: **Renewable energy** in a highly regulated world
- Business model 2: Energy in a **deregulated** world
- Business model 3: Distributed generation to solve **shortage in distribution capacity**

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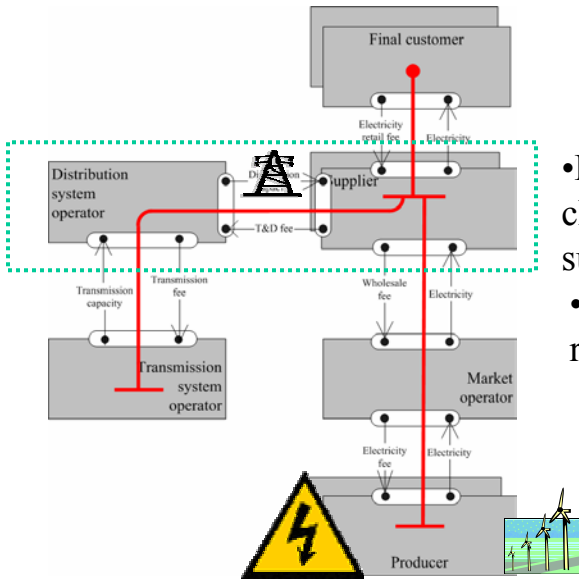
BM1: Renewable energy in a highly regulated world



BM1: Renewable energy in a highly regulated world

- Renewable energy: stimulated by subsidies and priority; Final customer is not stimulated to buy Renewable energy
- Advantage of distributed generation: does not require transmission
- Strong dependence on regulations: the model is not sustainable without regulation

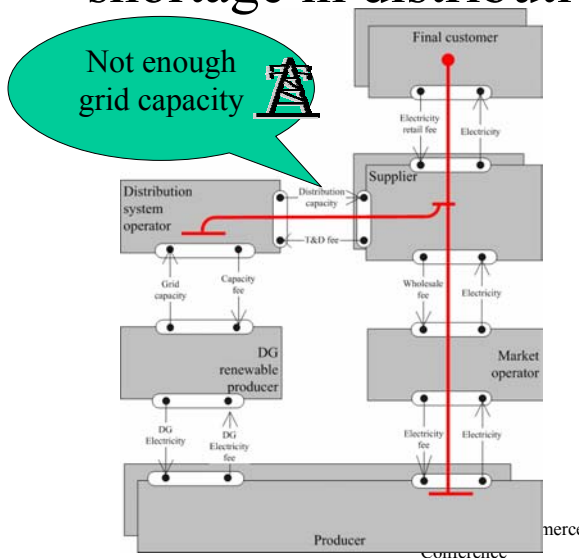
Energy in a deregulated world



- Final customers can choose an electricity supplier
- No exceptions for renewable energy ->

Alternative business models for renewables must be explored

Distributed generation to solve shortage in distribution capacity



Goal: To delay the upgrade of the distribution grid by providing additional (renewable) electricity generator

Situation 1: sufficient distribution grid capacity

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