

EUFORES AHLEC 2017

Technical and Economic Added Value of Local RES Deployment

Institute for Applied Material Flow Management (IfaS)

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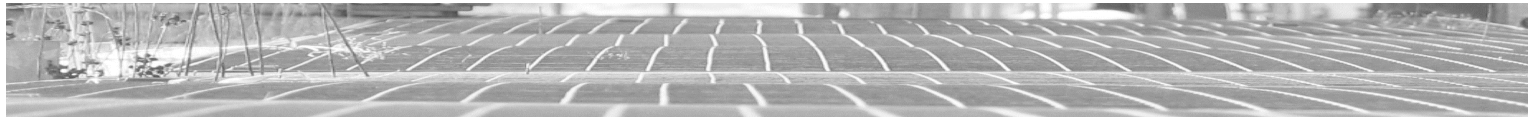
17. October 2017

Hochschule Trier / Umwelt-Campus Birkenfeld
Institut für angewandtes Stoffstrommanagement (IfaS)

Internet: <http://www.stoffstrom.org>

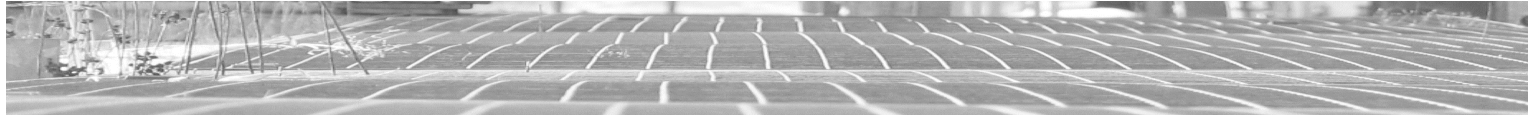


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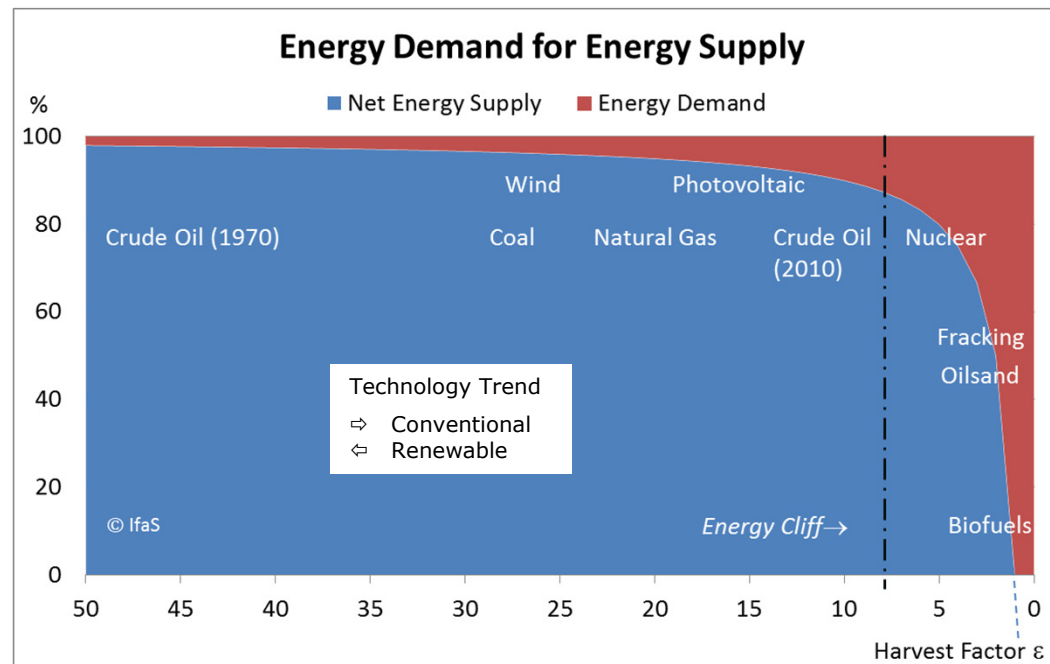
Zero Emission Campus



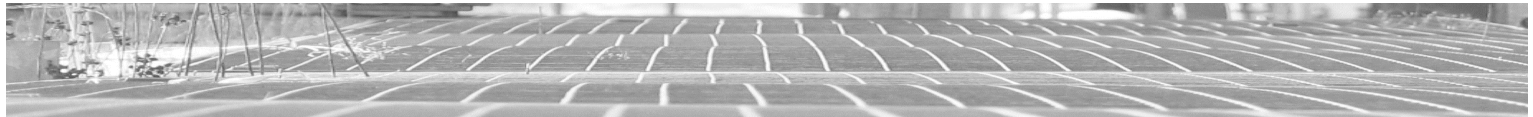


Technical Aspects

- Energy Efficiency
 - Demand side
 - energy required for a **service / production**
 - Supply side
 - energy required to **operate the supply system**

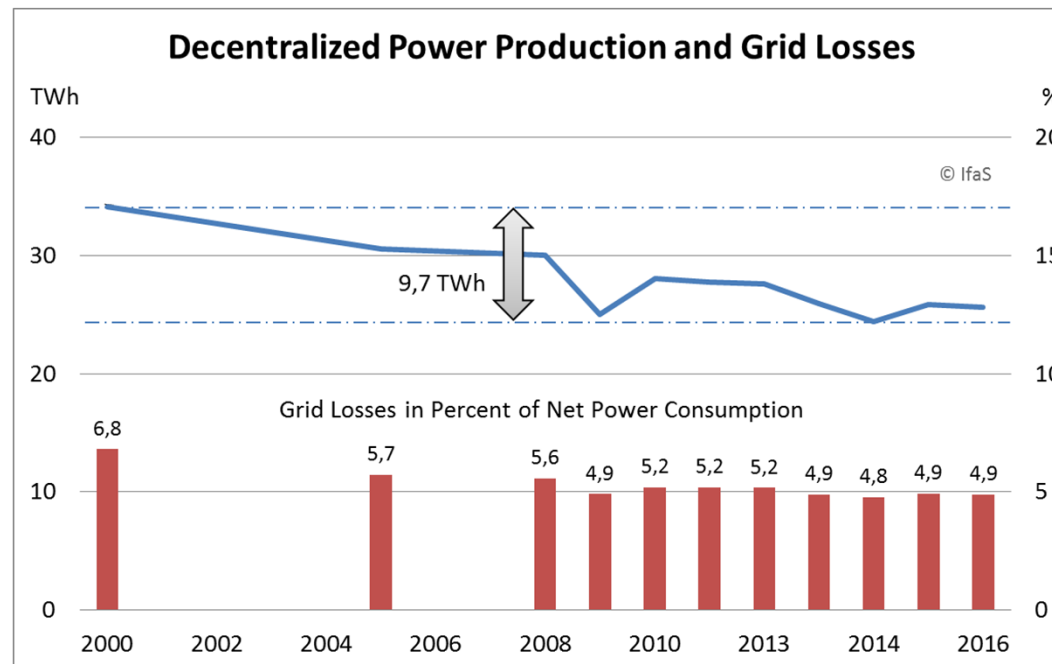


Data: Energy Matters, Nate Hagens

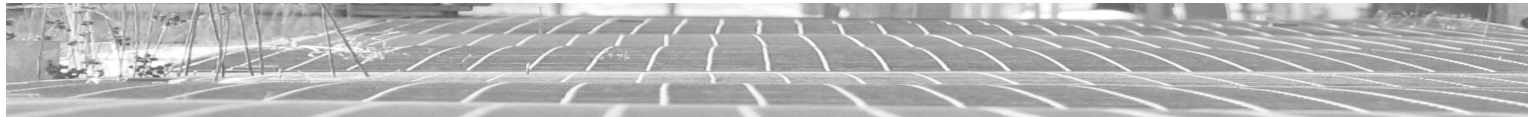


Technical Aspects

- Less Grid Losses
 - Decentralised power production, close to the demand
 - **Savings equal to the annual production of a large nuclear power plant**

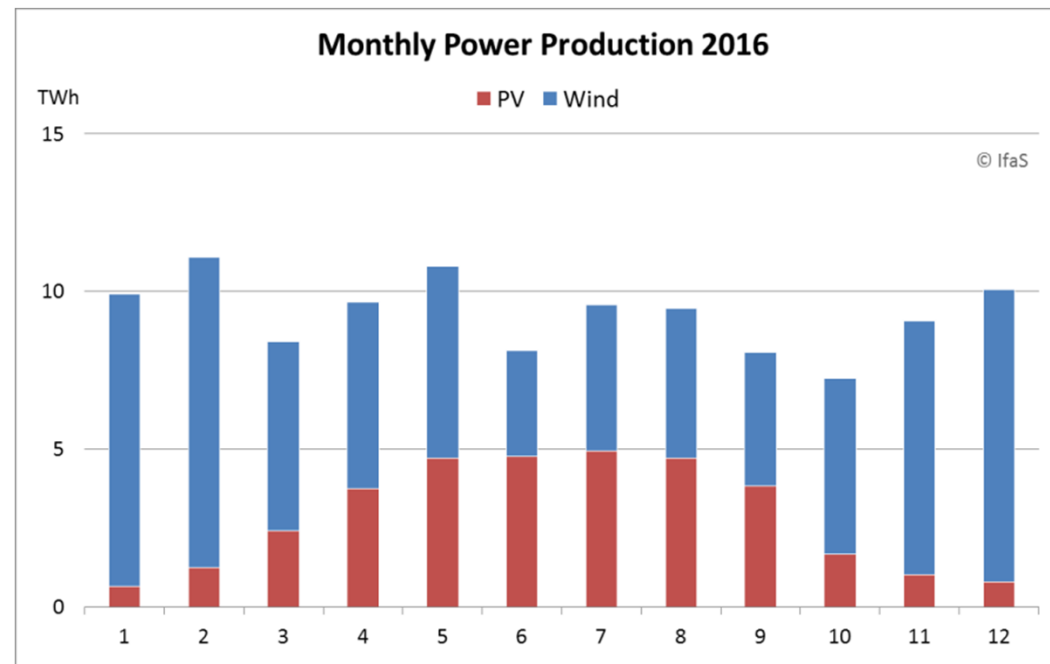


Data: AGEB

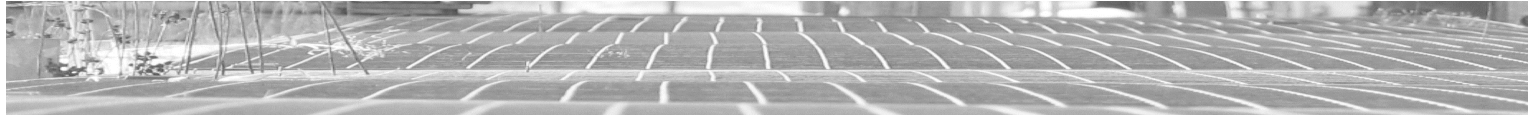


Economic Aspects

- Systemic Approach
 - **Decentralised energy mix** versus energy-only market
 - Less infrastructure cost for grid operation
 - Less transportation
 - Less need for ancillary services

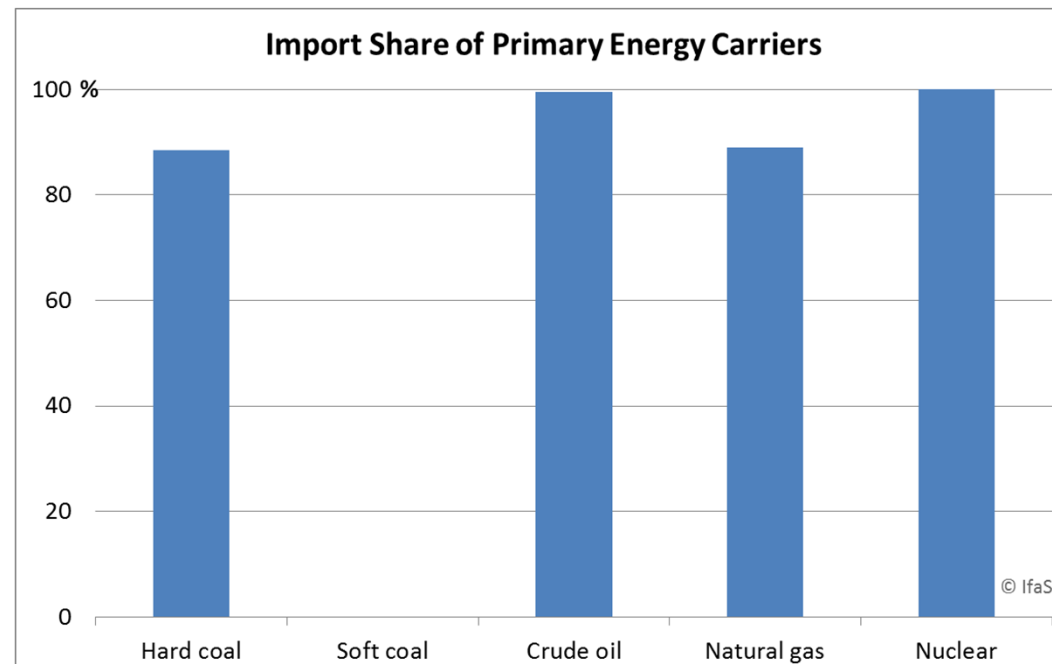


Data: 50hertz, Amprion, Tennet,
TransnetBW

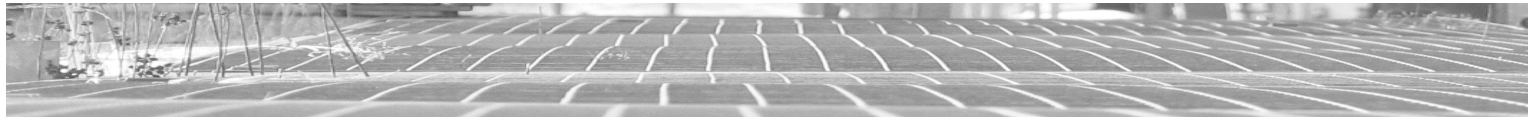


Economic Aspects

- Less Dependency on Imports
 - Exchange rate fluctuations
 - Gross economic backlash
 - Political aspects

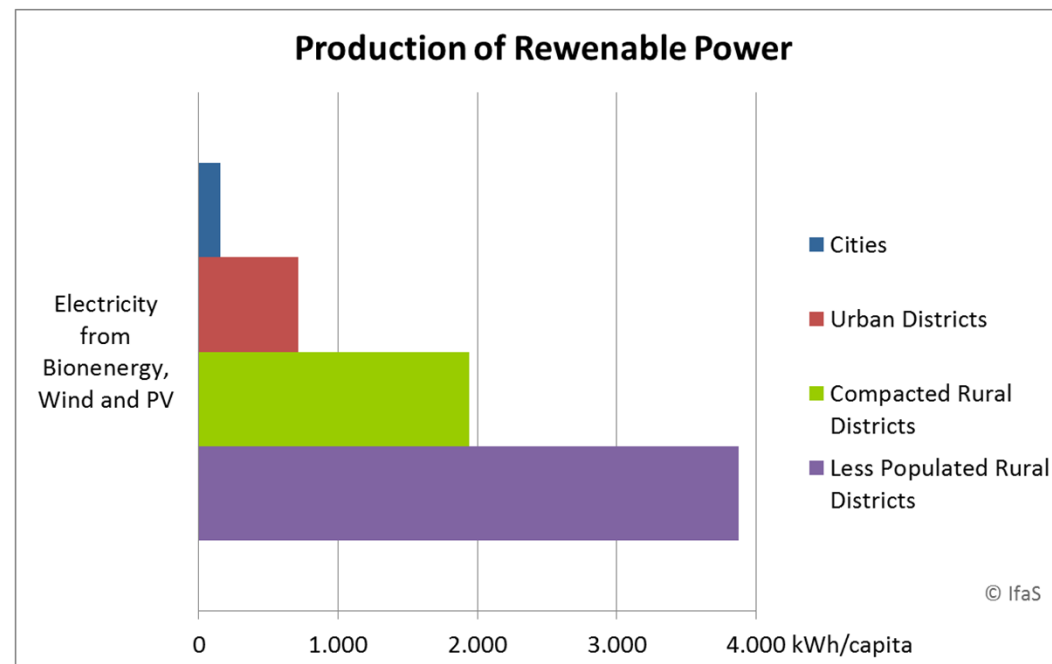


Data: AGEB/BMWi

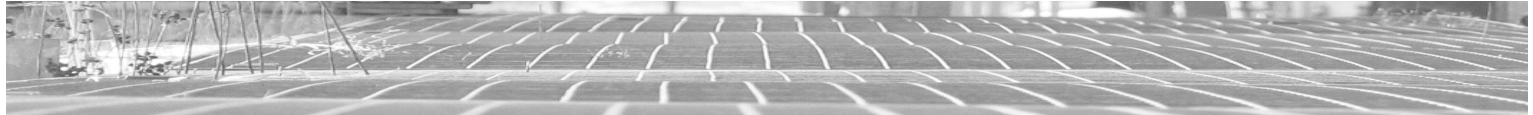


Social Aspects

- Economic Development
 - In particular benefits for rural regions
 - Countryside supplies energy to urban areas

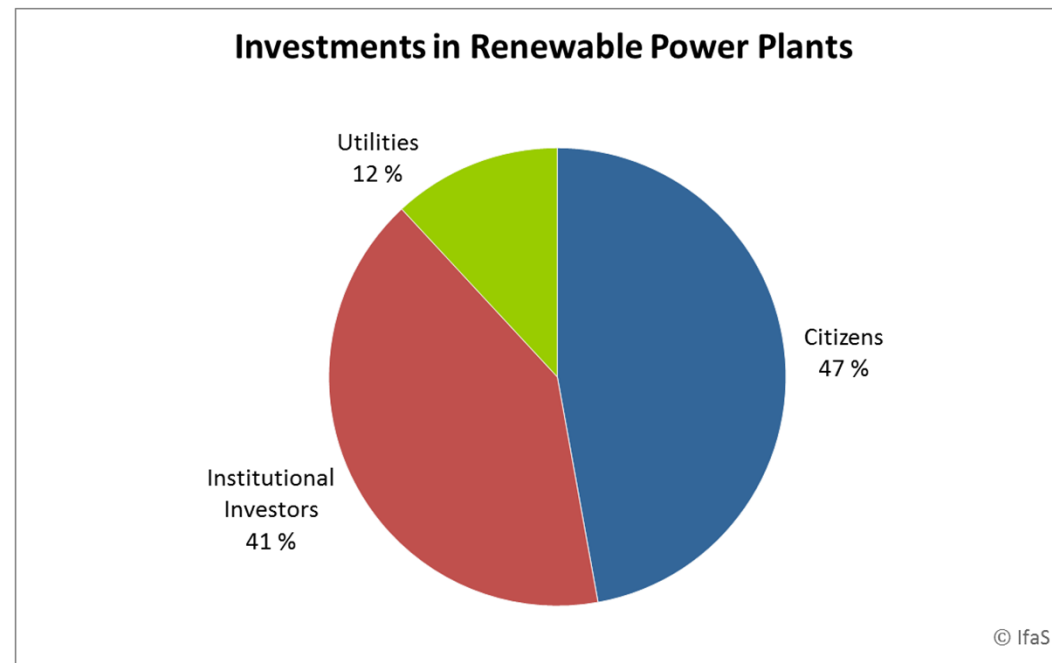


Data: Thünen-Institute

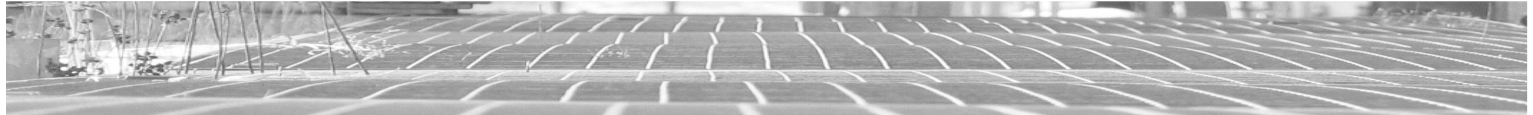


Social Aspects

- Participation
 - Regional value added
 - Acceptance for a system transition



Data: trend research



Thank You

Zero Emission

**A Question of Global Thinking
and Local Action**



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