

The energy transition and its challenges

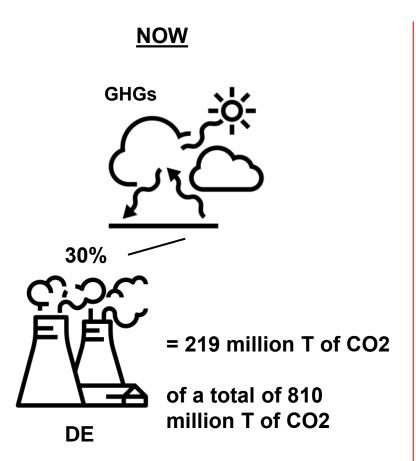




### **Energy transition**

<u>AIM</u>

DE 2045



#### **Challenges**



**Grid stability** 



**Storage Technologies** 



**Extend power lines** 



**Digitalisation** 

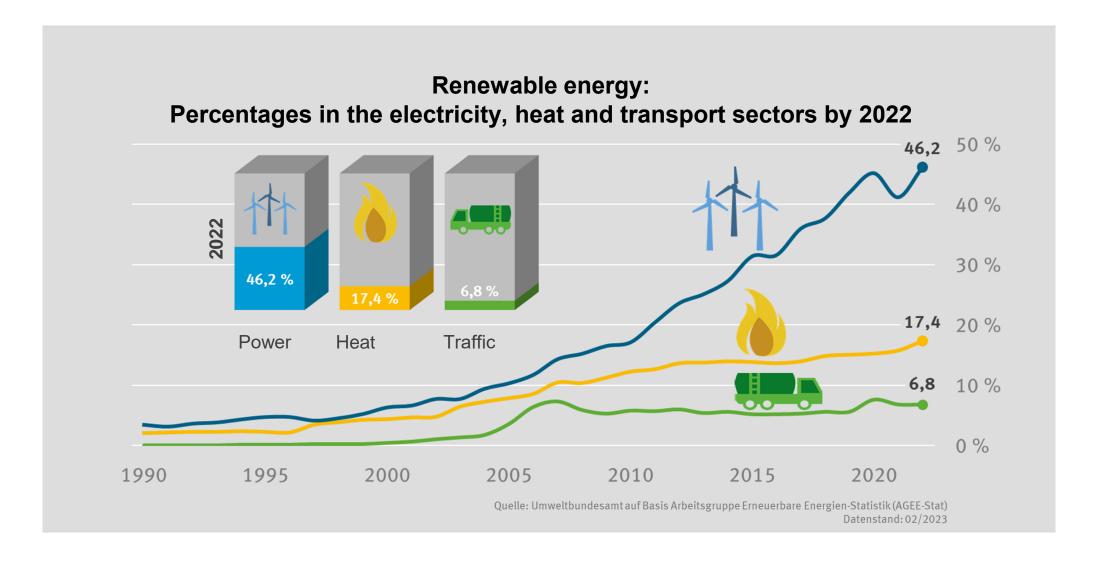


**Affordability** 





#### Renewables not only in the power sector

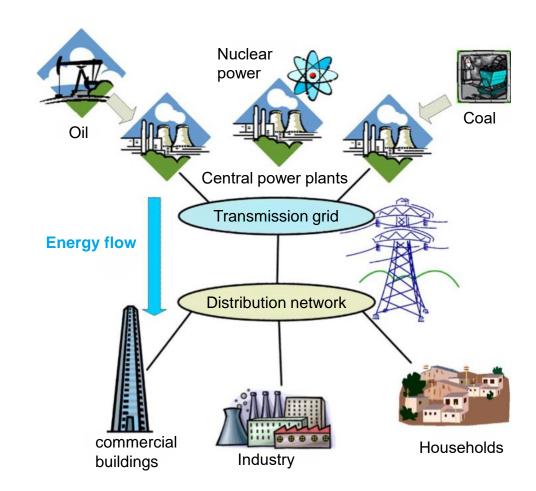






#### **Energy grid in the past**

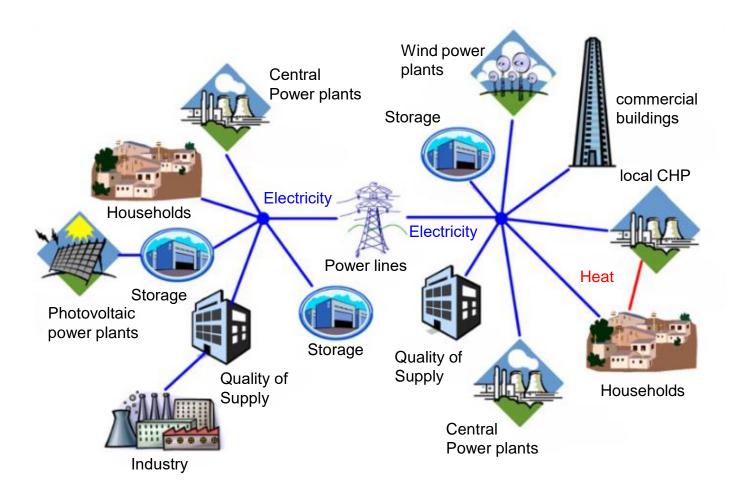
- Power generation is controlled/scheduled
- One-way" current flow
- Passive system
- Load controlled system







### **Energy network in the future**

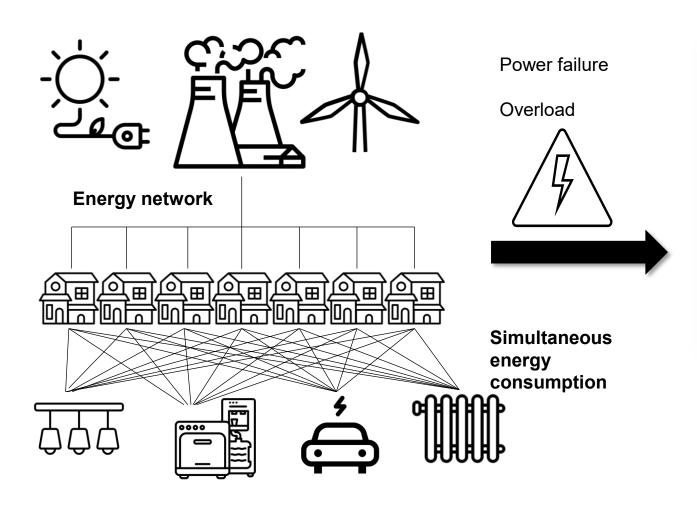


- More distributed generation
- Electricity feed-in at different levels
- Unpredictable renewables
- Generation controlled system





## Why does the energy network need to be regulated?











# **NOW IT'S YOUR TIME TO CONTROL!!**

# LITTLE MISS ENGINEER







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