



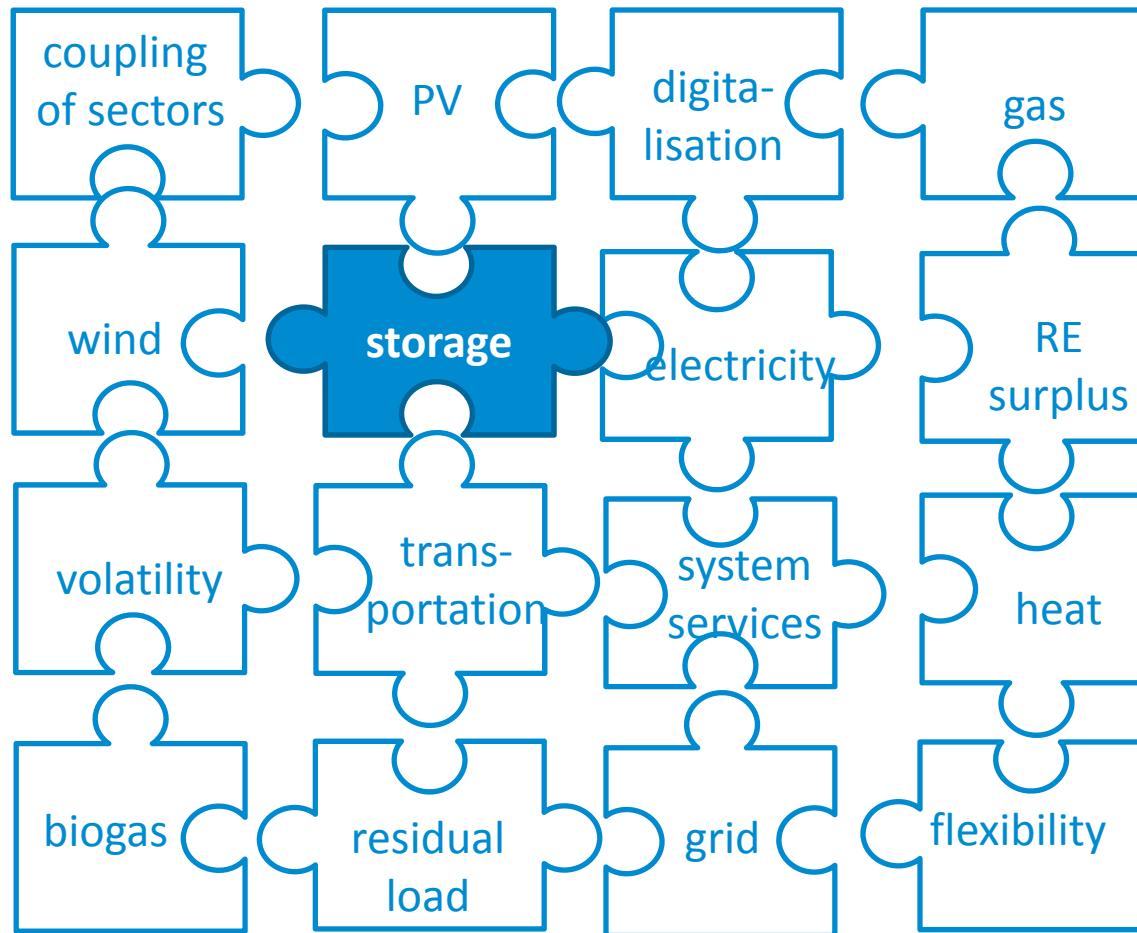
» THE MISSING LINK OF FLEXIBILITY (DEMAND RESPONSE & ENERGY STORAGE): SILVER BULLETS OR GOLD-PLATED PROMISES ?

Michael Wübbels
Brüssel, 18.10.2016

> BUILDING BLOCKS FOR THE ENERGY MARKET 2.0

Energy storage

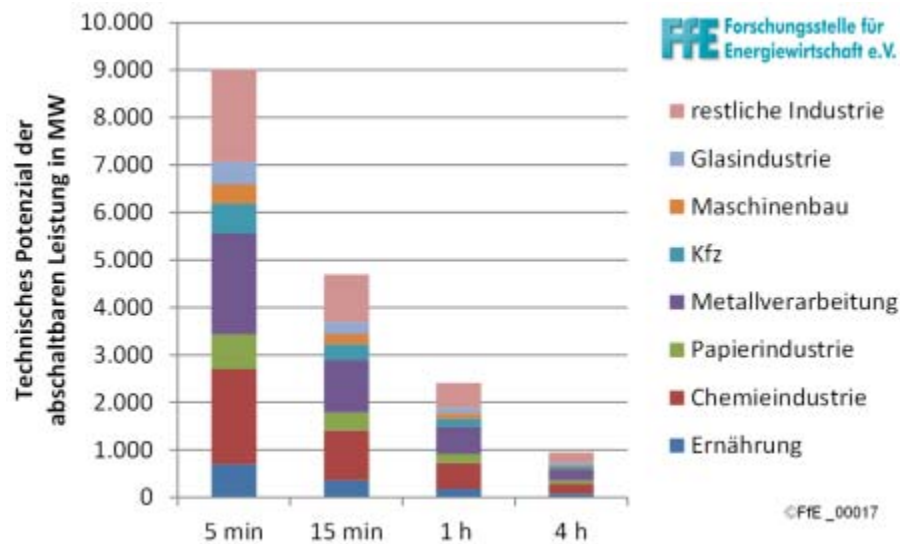
Missing link and building block?



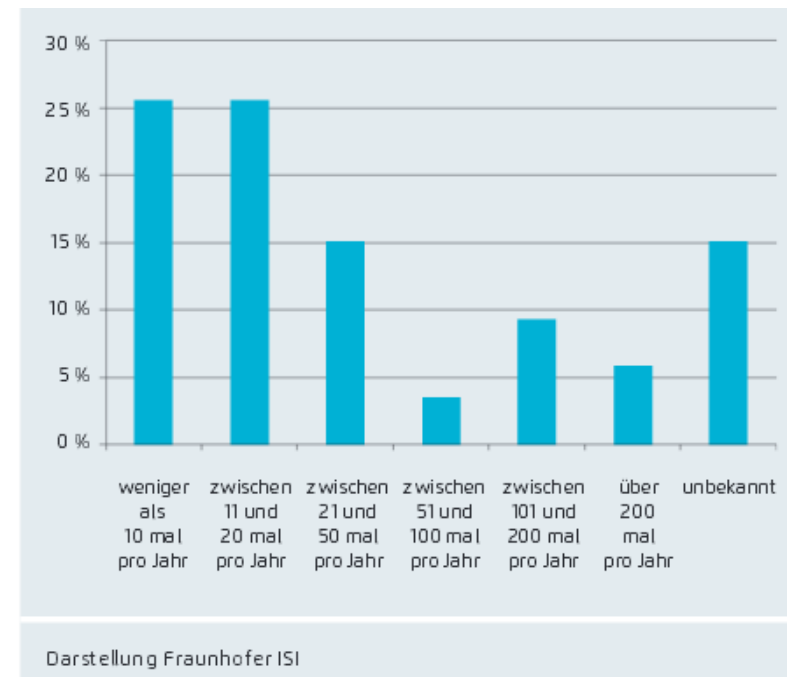
Demand Response

Demand flexibility – promising but limited?

- The potential for demand response decreases



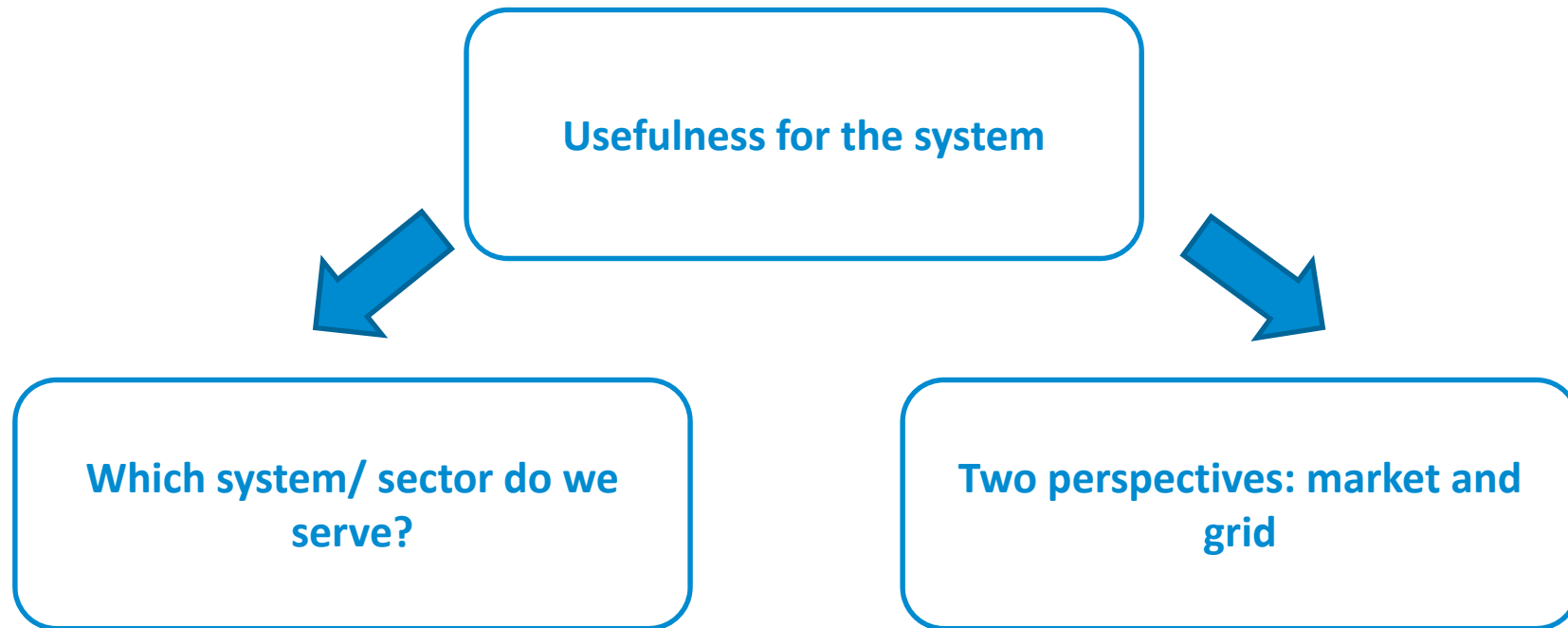
- Demand can not be reduced unlimited.



› QUESTIONS ABOUT THE COMPLETE PICTURE

Usefulness for the system

What means „useful for the system“?



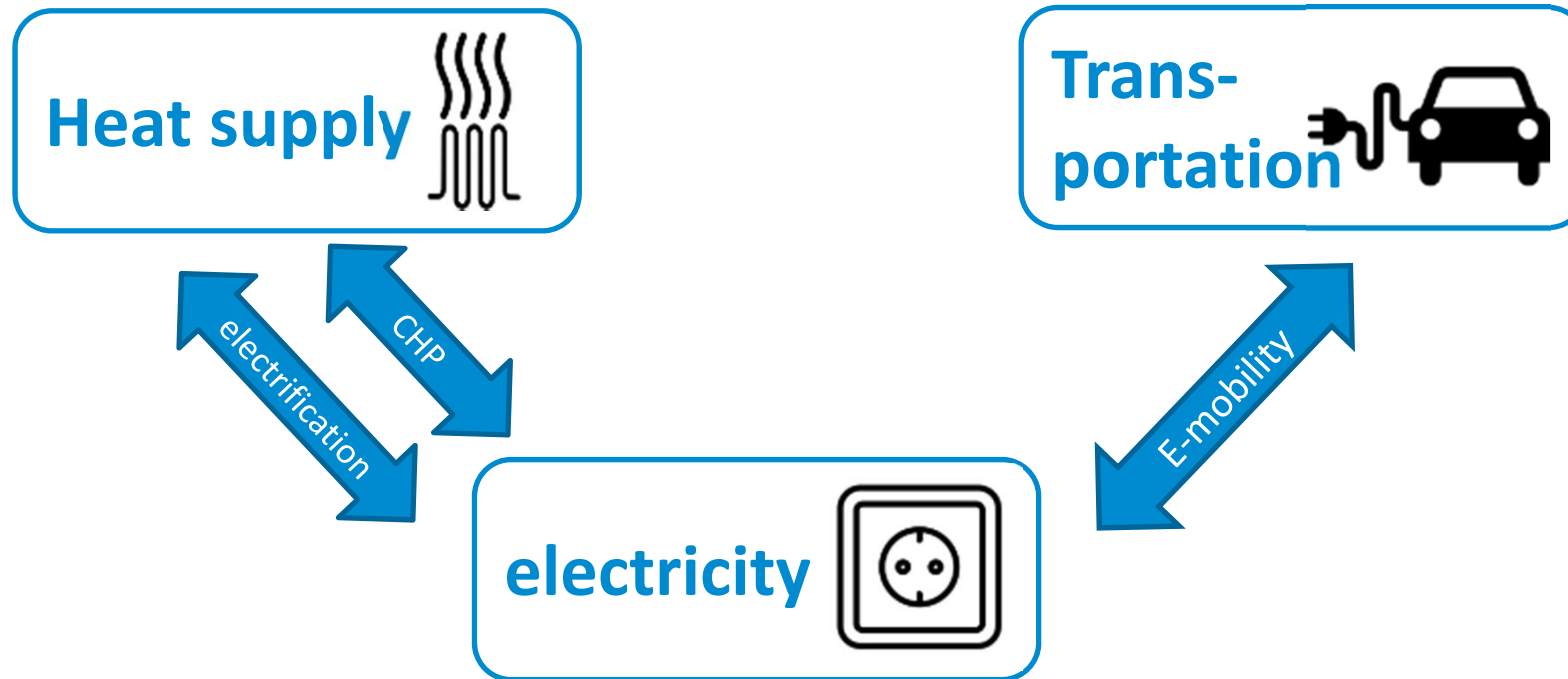
Coupling of sectors

Starting position – 3 separate sectors



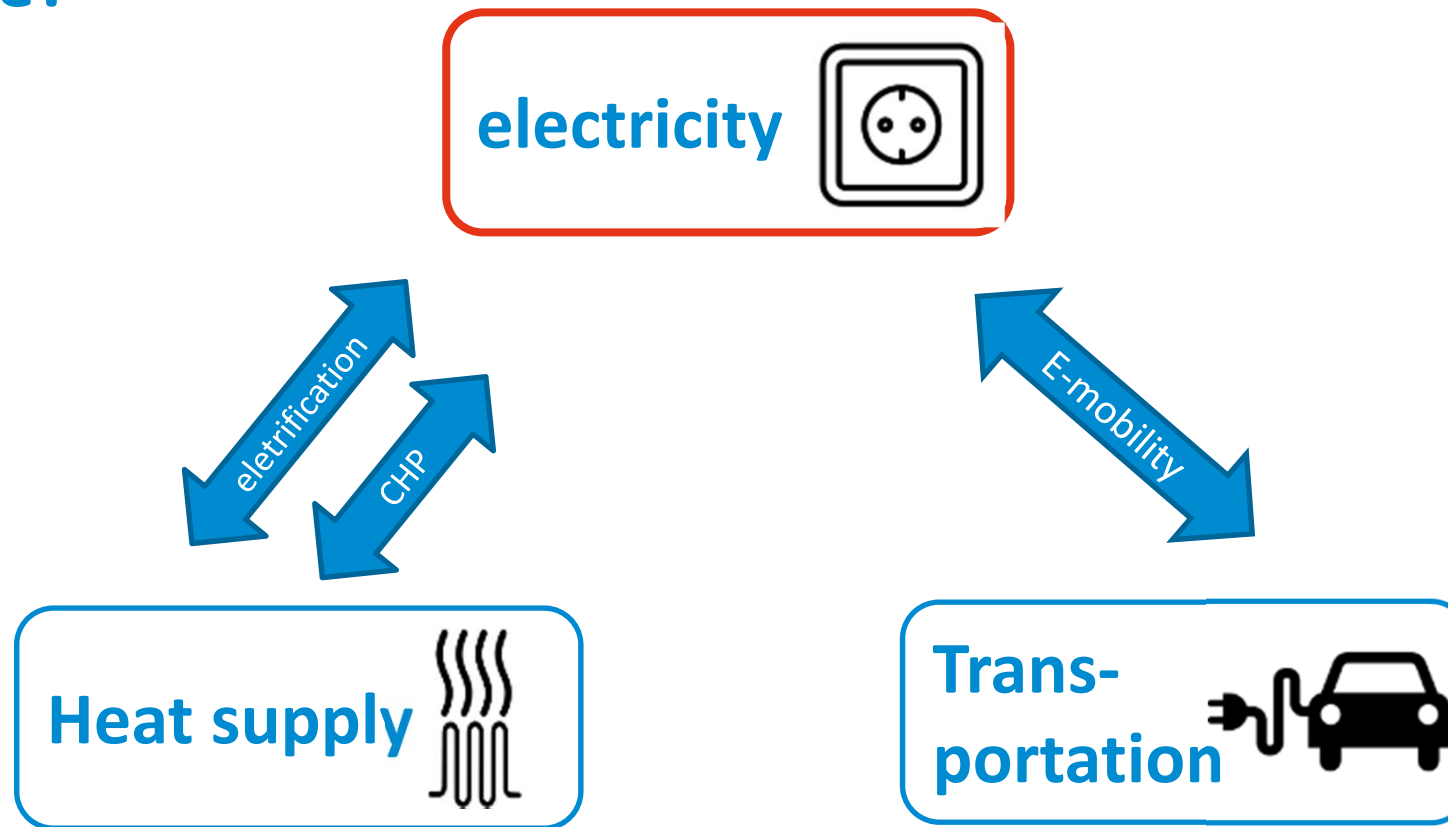
Coupling of sectors

Electrification – coupling of sectors – new relationships



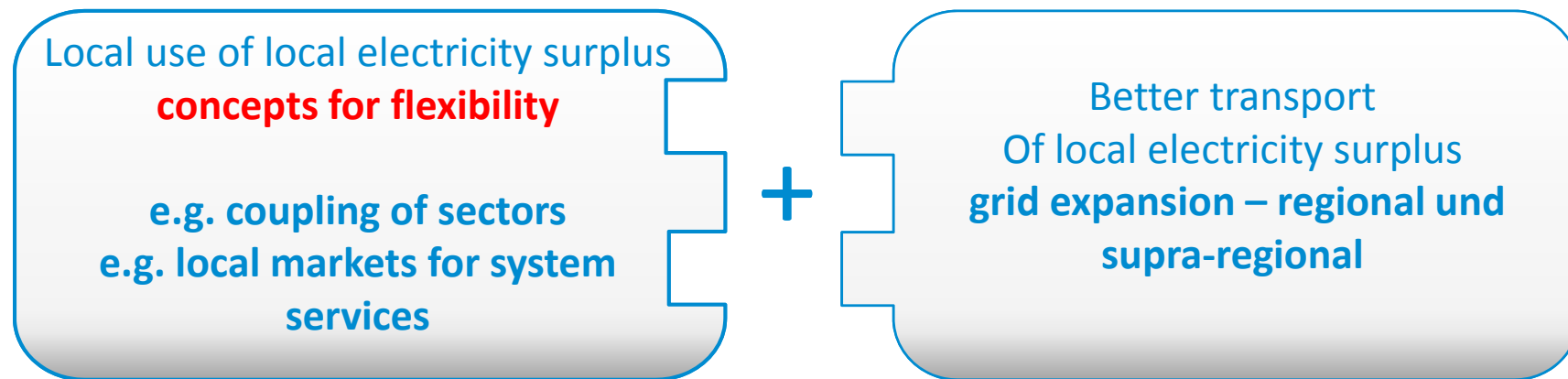
Coupling of sectors

What is the “main” system? – Which system do we serve?



And what about the grid?

The decentral approach as an opportunity.



- Better coordination between transportation grid and distribution grid
- Avoid grid congestion and improve managing of the grid
- → reduction of feed-in management
- → reduction of redispatch
- → reduction of expansion of the transportation grid

