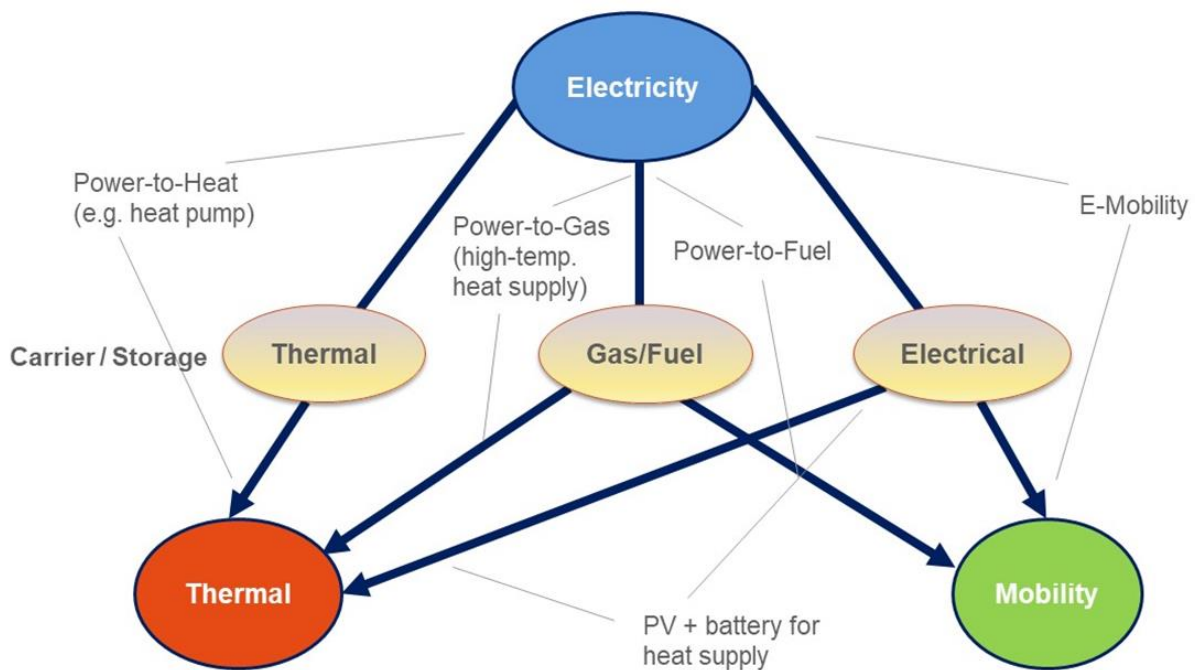


IEA Energy Storage Stakeholder dialogue on Flexible Sector Coupling

The International Energy Agency's Technology Collaboration Programme on Energy Storage presently runs an international project on the topic of Flexible Sector Coupling (FSC). You are here cordially invited to a stakeholder dialogue with the aim of hearing your view – opportunities and challenges related to large-scale deployment of FSC.

What is FSC and why is it needed?

Flexible Sector Coupling is about connecting a multitude of “consuming” sectors to the increasing share of fluctuating renewable electricity generation and using energy storage to provide robustness and flexibility. With “consuming sectors” we here mean the thermal sector, addressing demands of heating and cooling, and the mobility sector, including all modes of transportation. In an increasingly electrified society, most of the energy input comes from electricity, regardless of sector, and with energy storage we get a time-independent, flexible connection between variable renewable electricity production and any demand for energy services. With a holistic approach, energy storage in its many forms - not only batteries, but also more affordable alternatives like hot water storage, underground thermal storage, and more advanced concepts of storing heating and cold, as well as hydrogen storage and any form of synthetic fuels derived from H₂ for the mobility sector - can service the overall system in a cost-optimal and functional way.



In this stakeholder dialogue, we call for your input. While technical opportunities are clearly described, cost-benefits mapped out for a number of applications, and some real installations documented to inspire further development, we really need to define opportunities AND challenges with the concept from the perspective of actors involved in the sectors – planners, policy makers, utilities, developers of mobility solutions and low-carbon housing and industry.

For the dialogue, you can expect the following:

- A brief introduction to Flexible Sector Coupling, with techno-economic insights on the concept for the case of Germany.
- A guided opportunity to dialogue with the FSC team, to brainstorm around, and eventually conclude on important aspects related to the feasibility of the concept.
- A review of inspiring case applications to bring with you as further food-for-thought.