

Brief study

# Electricity storages in Germany

## Markets, Opportunities and Challenges

- Which factors impact the increasing utilization of energy storages in Germany?
- Which storage capacities will be needed in the future?

One of the major challenges of the “energy transition” decided in summer 2011 and of the related increasing current entry from solar and wind energy is the storage of energy. A public funding proposed by German Environment Minister Altmaier at the beginning of 2013 directly addresses the end-users: 50 Million Euros are provided for the installation of battery storages. This funding does not only provide opportunities for the producers of battery storages, also utilities can open up new business areas by offering services in the storage market.

In the course of the energy transition major parts of the hitherto existing business models of the utilities (municipal and big groups) are put into question. New areas which are gaining ground in the future strategic alignment are:

- the increased importance of renewable energies
- the related development towards a fluctuating electricity feed-in
- the increasing necessity to store the current (with different storage technologies)

Therefore the question is how utilities as well as grid and plant operators can react to the changing frame conditions on the market, as for example regarding the decreasing full load hours of fossil power stations.

In this regard the storage of electricity is a major factor which will gain in importance in the long-run. Pumped storage plants, battery storages and Power-to-Gas have a particular relevance in this context.

On the basis of current developments and discussions, the planned study demonstrates and analyses the specific situation based on 100 expert interviews and answers the following questions:

- Which technical and economical potential do the different storage technologies offer?
- Which trends for energy storages should be observed?
- Are there new applications?
- How will the storage capacities develop until 2030? Which technologies will become established?
- How will the market volumes in the single sub-markets develop?

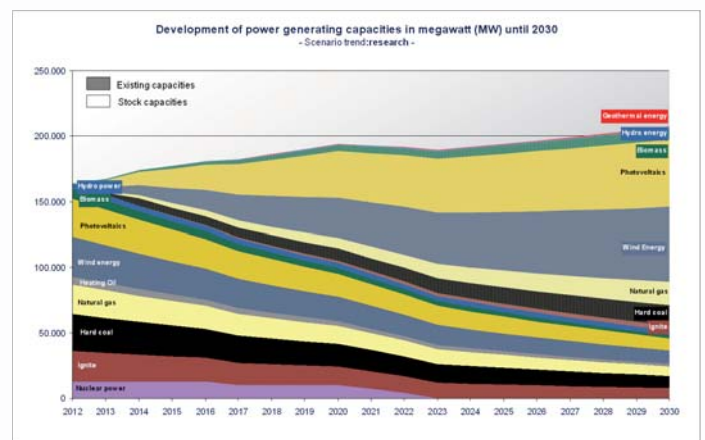


Figure 1: Development of installed power generating capacities by 2030 (source: trend:research)

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The Study will have about 300 pages.

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