Masterthesis

Title: An economic evaluation on hydrogen production technologies and hydrogen applications

Task description:

The use of hydrogen on large scale may be one of the ways to realize a future carbon-neutral and carbon-free energy society, gaining nowadays in momentum, backed strongly by government financial support and regulations. The conversion of electricity into hydrogen is a process of storage and valorization of excess electricity (as this is many times the case for renewables). In the next two decades the cost of renewable hydrogen is expected to successively break even those of low-carbon and gray hydrogen. The hydrogen may become in the mid-term future the most competitive low-carbon solution for many end applications, including commercial vehicles, trains, aviation and shipping. One should remind here also the paramount importance of hydrogen use in P2G and P2X technologies, and refinery, fertilizer and steel productions.

Tasks of the thesis:
- Literature review
- Explore the hydrogen supply sources and the hydrogen applications
- Economic evaluations
- Conclusions and recommendations

Begin of the thesis
ASAP

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