

Risk and sustainability analysis of complex hydrogen infrastructures - DTU Orbit (09/11/2017)

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Building a network of hydrogen refuelling stations is essential to develop the hydrogen economy within transport. Additional, hydrogen is regarded a likely key component to store and convert back excess electrical power to secure future energy supply and to improve the quality of biomass-based fuels. Therefore, future hydrogen supply and distribution chains will have to address several objectives. Such a complexity is a challenge for risk assessment and risk management of these chains because of the increasing interactions. Improved methods are needed to assess the supply chain as a whole. The method of "Functional modelling" is discussed in this paper. It will be shown how it could be a basis for other decision support methods for comprehensive risk and sustainability assessments.

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Authors: Markert, F. (Intern), Marangon, A. (Ekstern), Carcassi, M. (Ekstern), Duijm, N. J. (Intern)

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