

Abstract

MAN Energy Solutions: Power to Gas - how to generate "X" for propulsion plant

Beginning with a short introduction of MAN Energy Solutions there is a description of the principle of Power to X and an overview of several Energy Storage technologies. The first, biggest and most famous Power to Methane plant (Werlte) is shown as well as the developments in Methanisation since commissioning this plant. The scale up to a 50 MW Power to Methane plant is summarized including the cost structure. Several use cases of Methane and Methanol in the propulsion of vessels show that Power to X is applicable to marine. At least the discussion of the production of SNG, Methanol and Fischer-Tropsch-Products on the base of CO₂ gives an idea how to generate "X" and what is the conclusion.