

FROM THEORY TO PRACTICE: REAL WORLD DEMONSTRATORS FOR SMART GRID APPLICATIONS

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A smart grid is an electrical grid that uses information and communications technology to gather and act on information, such as information about the behaviors of suppliers and consumers, in an automated fashion to improve the efficiency, reliability, economics, and sustainability of the production and distribution of electricity. In order to evaluate new methods and to prove the efficiency of different algorithms it is necessary to set up a demonstration site that allows the integration of local energy providers (LEP) and energy- using products (EuP) under real world conditions. The presentation will show with a specific focus on energy management optimization strategies and the verification of the optimized results, how this goal was addressed at the demonstration sites at Almersberg and Buchberg in Austria.