

Heat Pumps Operational Analysis. Preliminary Aspects in the WEDISTRIC Project

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Abstract

Heat pumps are of major importance for the roadmap of making green heating and cooling. A high number of studies show that the subject needs careful analysis of its performance and that it is possible to achieve energy efficiency through various measures, customized for each particular use case. Scholar work presents as well specific field measurements which are analyzed from different perspectives. District heating and ways to make it green is one of such directions. The paper presents a solution of “green” district heating, by using both PV systems to produce green electricity as well as heat pumps to heat a target building and to contribute to a community heating system and analyses basic KPIs and system parameters evolution during a day. Conclusions and future work are also presented.

Keywords: heat pumps, green buildings, district heating, energy measurement

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