

Abstract- COGENERATION

Introduction to the topic

Combined production of electricity and heat has become generally accepted as a possibility for savings in primary energy production and for reducing the environmental burden. Currently there are industry power plants used which are often old and technologically not updated systems and therefore produce a lot of heat as waste product. Cogeneration offers a possibility to reuse this heat on a small and a large scale.

Motivation

The motivation behind this topic is that the authors of the paper think that cogeneration units are the future technology for heating up buildings with less emissions and therefore less impact on the environment. Since cogeneration enables you to produce heat and electricity simultaneously, this technology is really efficient. Even when the electricity produced is not used, it is possible to sell the surplus and enables households to act independent to the local energy grid.

Problem statement

With this paper the writers want to summarize why cogeneration is used, the existing types of this technology and all the advantages/disadvantages resulting by using it. The different forms of technologies mentioned will be supported with state of the art examples.

Approach

The paper will be supported with empirical data from some existing examples and both technical and economical resources from scientific papers. The results will be examined from an economical point of view.