# Abstract

Solar electricity can become a main contributor of electricity to the energy system in the future, but solar technology needs support to find the way to the market. Regarding the fact that PV-electricity still causes much highre costs than electricity from other sources leads to a striking question: how to reach competitiveness? There are different strategies for promoting PV genereted electricity applied trough the world. In this work we carried out the design and simulation of a photovoltaic plant injected 40 kWp power network while evaluating the incident energy, the energy produced by the panels and the energy injected to the network saw the converter energy. This to judge whether the installation is cost effective; technical and economic side