

## عنوان مقاله:

Simulation and evaluation of solar photovoltaicsystem for a university

## محل انتشار:

چهارمین کنفرانس بین المللی دوسالانه نفت، گاز و پتروشیمی (سال: 1401)

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## نویسندگان:

Yaser Karimi - Bachelor of Energy Engineering, Qom University of Technology, Qom, Iran

Majid Mohammadi - Assistant Professor, Department of Energy Engineering, Qom University of Technology, Qom, Iran

## خلاصه مقاله:

The reduction of fuel resources and the increase in the harmful effects of greenhouse gases (GHG), have doubled the importance of exploit renewable energy sources. One of the most affordable of these energies in many parts of the world, including Iran, is solar energy. Iran is located in a high-irradiance region and possesses excellent potential to harvest solar energy. This paper reports the design and economic analysis of an on-grid solar system at the University of Abhar, Iran. The proposed system was simulated in PVsyst by inspecting the case study region and calculating the energy losses, output power, power injection into the grid, and output power reduction. It was found that the proposed system had an annual output energy of ۴۱۱.۵ MWh. In addition, the proposed photovoltaic (PV) system could reduce CO<sub>2</sub> emissions by ۱۹۳ tons per year.

## کلمات کلیدی:

Photovoltaic, PVsyst, CO<sub>2</sub> emission, Renewable energy

## لینک ثابت مقاله در پایگاه سیویلیکا:

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