

WHAT IS THE SOLAR ENERGY AND WHY UKRAINE NEED IT TODAY

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Abstract

The suggestions for improving Ukrainian energy resources usage, based on the renewable sources of energy, that is photovoltaic power plants and stations, were represented in this article.

Keywords: sun, energy, photovoltaic cells, renewable sources of energy.

Introduction

Solar energy is still a wonder in Ukraine, solar panels are not often found in the streets, at businesses or public institutions. Nevertheless, Ukrainians are beginning to use the energy of the Sun, and solar batteries gradually penetrate our market. Modern development of the global economy is closely linked with the growth rate of energy production.

Purpose of this work is to analyze the prospects of renewable electricity, from the side of photovoltaic electricity, in Ukraine.

Research results

Thus, the energy production grows faster than the population. Modern power engineering faces a lot of problems, and the most urgent problem is the new energy sources. At present, 6 billion people on the Earth consume more than 12 billion kWh of energy per year, i.e., an average of 2 kWh per person. This energy is obtained from coal (26%), oil (42%), gas (20%), hydro power (4%), nuclear power (5%), and 3% comes from other sources. That is, about 90% of the energy we get by fossil fuels - oil, coal and gas, their rate of accumulation in the bowels of the Earth is much smaller than the speed of their consumption (approximately 106 times), that's why we look aside of renewable sources of energy, especially photovoltaic energy.

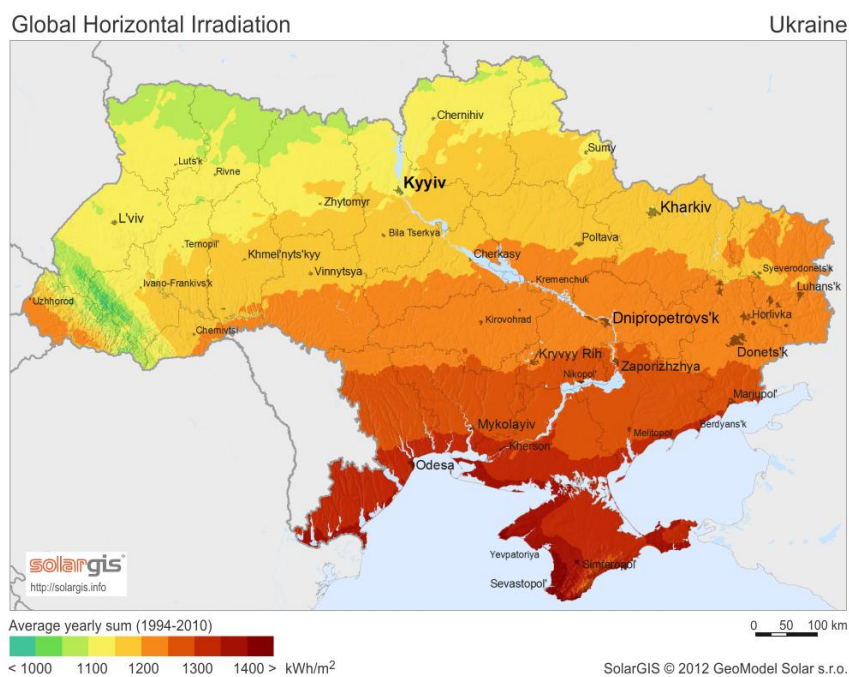


Illustration 1. Year solar activity on the territory of Ukraine

What is done in the field of solar energy in Ukraine? In many regions of Ukraine, people are used to short-term power outages or to poor lighting in the streets of their cities and villages. Solar energy could partly solve the energy problems in Ukraine, especially what concerns the energy supply in remote areas, and in conditions of unstable power supply. In agriculture, especially farm, greenhouse industries, solar panels could provide the energy for water supply pumps in arid areas. Solar systems with chemical batteries are almost the only economically suitable solution for power equipment in the absence of central power supply network, in the many territories of our country.

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Conclusions

Understanding of the need for state support for solar energy will gradually dawn at the authorities. Otherwise, in the near future, along with foreign cars, appliances and junk consumer goods, Ukraine will be flooded with solar panels from overseas.

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