SolarMax Pro Energy Storage Systems

# Solar irrigation system in Tajikistan

## Overview

Should irrigation pumps be limited in Tajikistan?

Agricultural water use in Tajikistan is largely based on mechanized irrigation pumps. The farming community cannot afford the cost of the energy used for pumping, resulting in large debts to the service provider. We propose limiting pumping facilities for five years in exchange for energy export to neighbouring countries.

Will the swim project improve water and irrigation management in Tajikistan?

This was followed by a two-day workshop in the Khatlon region, which took place on April 18-19. "We are excited to see the Government launch the SWIM Project in Tajikistan, which will improve water and irrigation management in the country," said William Young, World Bank Lead Water Resources Management Specialist.

How efficient is irrigation in Tajikistan?

The overall irrigation efficiency in Tajikistan is estimated at about 30% (i.e., only 30% of the withdrawn water reaches the plant roots), and the average annual abstraction for irrigation is over 15,000 m 3 per hectare (World Bank, 2017).

How much solar energy does Tajikistan have?

According to meteorological services, Tajikistan has between 260 and 300 sunny days a year and enormous solar energy potential. According to preliminary estimates by the Ministry of Energy, the annual potential for solar energy use is 3103 billion kWh.

Is solar energy a good investment in Tajikistan?

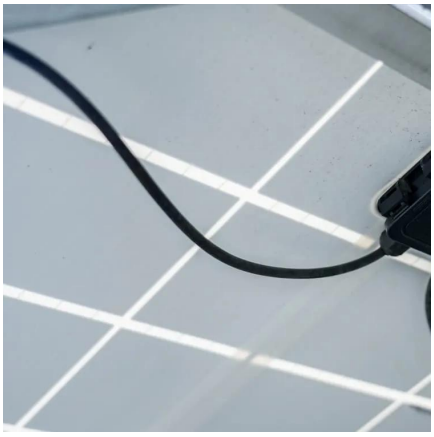
In Tajikistan, there are no favourable conditions for the widespread use of solar energy or for attracting investment in this sector. This is happening amid constant energy shortages and a crisis in the country’s electric power system.

Solar panels in Dushanbe. Photo: CABAR.asia Tajikistan is one of the most vulnerable to climate change countries.

What was the irrigation system like in Tajikistan in the Soviet era?

The irrigation network in Tajikistan was heavily expanded and mechanized in the Soviet period, mainly emphasizing cotton, and secondly wheat.

# Solar irrigation system in Tajikistan



## ITB: Procurement, delivery and installation of Solar Powered ...

The Food and Agriculture Organization of the United Nations (FAO) invites you to submit an offer for the procurement, delivery and installation of Solar Powered Irrigation Systems (SPIS) at ...

## Tajikistan: Solar Energy in Support of Hydropower Plants

In Tajikistan, there are no favourable conditions for the widespread use of solar energy or for attracting investment in this sector. This is happening amid constant energy ...

## Water and Irrigation Management Project Kicks Off in Tajikistan

In addition to supporting the ongoing reform process nationally and in the selected river basins, the project will modernize the national irrigation infrastructure and improve the ...

## Solar Powered Irrigation Systems Transforming ...

Indian agriculture largely depends on groundwater. With solar powered irrigation

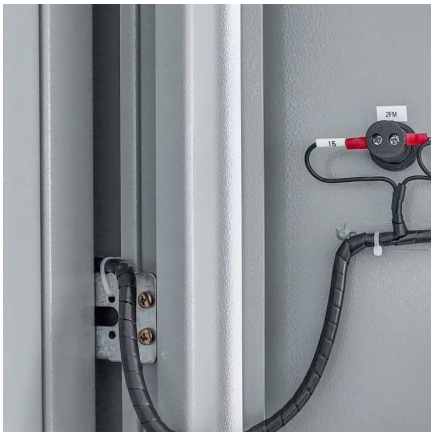
systems India can leverage surface water cost-effectively. It ...

## Effective management of combined renewable energy resources in Tajikistan

In this paper data on hydro and wind power resources of Tajikistan, Kyrgyzstan and Pakistan are presented. As an example, the project for control of water resources at mutual ...

## Exploring the multiple dimensions of solar irrigation in South ...

The review results indicate that capital subsidies, low operational costs, reliable water supply, and long life span influenced the adoption of solar irrigation systems in these countries. The major ...



## Green Technologies - Texnologiyaxoi Sabz

LLC Tekhnologiyahoi Sabz (Green Technologies) is an organization that works in the field of "green (renewable) energy" in Tajikistan. The organization is ...

## The Benefits and Risks of Solar Powered Irrigation

In 2015, the Food and Agriculture Organization of the United Nations (FAO) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH hosted an exploratory workshop ...

## SPIS Toolbox

Second, solar radiation is an abundant resource, especially in regions where rain water scarcity makes irrigation essential to food security and international trade. Finally, Solar Powered ...

## Solar-Powered Irrigation Systems for Efficient Water Use

Benefits of Solar-Powered Irrigation Efficiency in Water Use Solar-powered irrigation systems optimize water usage on farms. They utilize ...

## Tender - for the purchase and supply of Solar Pumping Stations ...

Bidders are invited to attend the opening of tender bids on 14 July 2025, at 16:00, in the AKF offices located at the addresses mentioned above in Dushanbe, Khorog, Khujand, ...

## Green Technologies - Texnologiyaxoi Sabz

LLC Tekhnologiyahoi Sabz (Green Technologies) is an organization that works in the field of "green (renewable) energy" in Tajikistan. The organization is registered as a commercial ...

## Agricultural water and energy management in Tajikistan: a new ...

We propose limiting pumping facilities for five years in exchange for energy export to neighbouring countries. The energy export could cover the annual pumping expenditures, ...

## A Solar-Powered Pumping System for Agricultural Irrigation: ...

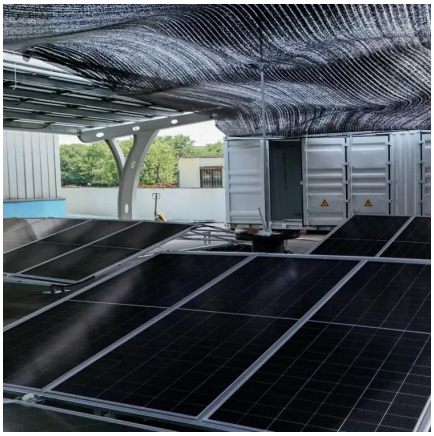
The solar-powered pumping system offers a practical and feasible technological solution. This paper proposes a design methodology for a solar-powered pumping irrigation ...


## Effective management of combined renewable energy resources ...

In this paper data on hydro and wind power resources of Tajikistan, Kyrgyzstan and Pakistan are presented. As an example, the project for control of water resources at mutual ...

## How to Build a Solar Powered Drip Irrigation System Easily and

Building a solar-powered drip irrigation system provides many benefits and is easy to design and install. We just installed a drip irrigation system this year into our garden, and it ...

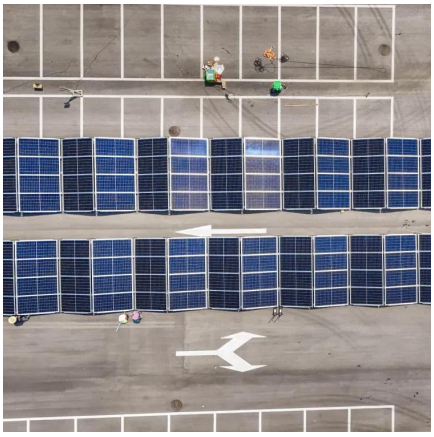


## Toolbox on Solar Powered Irrigation Systems (SPIS): ...

Solar pumps have become an economical, technically and environmentally viable alternative to conventional pumping systems powered ...

## Tajikistan: Solar Energy in Support of Hydropower Plants

In Tajikistan, there are no favourable conditions for the widespread use of solar energy or for attracting investment in this sector. This is ...



## Solar Irrigation Potential, Key Issues and Challenges ...

Therefore, a comprehensive review study is conducted to identify the potential for solar irrigation, key issues and challenges related to its ...

## Tajikistan at a crossroads: Invest in irrigation or face rural exodus

Projects supported by the World Bank, European Union, and Asian Development Bank include the installation of energy-efficient pumps, solar-powered irrigation systems, and ...


## Solar power prospect in Tajikistan - TAJHYDRO

Along with significant opportunities, Tajikistan is confronted with a number of obstacles that limit the growth of renewable energy, particularly utility-scale solar PV.

## ITB: Procurement, delivery and installation of Solar Powered Irrigation

The Food and Agriculture Organization of the United Nations (FAO) invites you to submit an offer for the procurement, delivery and installation of Solar Powered Irrigation Systems (SPIS) at ...

## Is Solar-Powered Smart Irrigation the Future of Farming?

1 day ago· SolarDrip: Water Efficient Sun-Powered Irrigation In the face of climate instability, climate change poses significant threats to food security and economic stability, especially in ...

## Solar Powered Irrigation Systems , Solar Powered ...

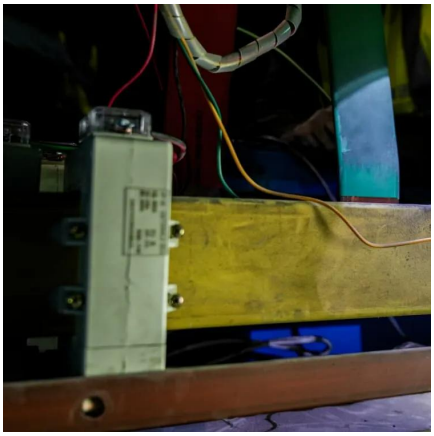
The SPIS WEB-App for Farmers This SPIS Web-App allows for the calculation of pumping head, the pump size in kW and the required solar PV module ...


## Expansion of Renewable Energy Solutions in Agriculture

Established in 2016, the company 'Tekhnologiyahoi Sabz' (Green Technologies) installs solar-powered pumps and irrigation systems to overcome water shortages, frequent ...

### 7 Solar Irrigation Solutions for Small-Scale Farmers That Boost ...

Discover affordable solar irrigation systems transforming small-scale farming with 40-60% cost savings, improved yields, and climate resilience--no electricity or fuel required.



### IOP Conference Series: Earth and Environmental Science

Faizal, Ahmad, Kunaifi,, Miefthawati, Nanda Putri, Ullah, Aulia, Anjarjati, Wahyu (2021) Design and Analysis of a Solar-Powered DC Irrigation System: A Case Study of a Shrimp Pond.

## Contact Us

For catalog requests, pricing, or partnerships, please visit: https://bringmethehorizon.eu